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Parental Controls of Children Online

Bachelor's project in Digital Infrastructure and Cyber Security Supervisor: Erjon Zoto

May 2021



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Department of Information Security and Communication Technology CC-BY 2020/05/20

Abstract

The main task of this thesis is to conduct a systematic review and analysis of existing parental controls on gaming and streaming platforms. In addition, a survey of elementary and middle school parents was conducted to better understand to what extent the different parental controls are being used and what parents think about them. The thesis starts with reviewing relevant background information about parental controls and used this to formulate a hypothesis. Further on, the different platforms included in the analysis are reviewed about their parental control functionalities, as well as their security. The thesis continues by explaining the survey we conducted and the survey results. The results of both the survey and parental control review are used to create a parental control guide that is meant to give parents the information they need to understand and set up the different parental controls. Both the results from the review of the different platforms and the survey are discussed. In the discussion, the results from the survey are compared against the hypotheses. The thesis concludes that most platforms have some parental controls, but they vary in their functionality. Some platforms also have security holes that make it possible to bypass parental controls. According to the survey, parents who used parental controls felt their children were less safe on gaming and streaming platforms when not using parental controls, compared to the parents who did not use parental controls at all. Among those who used parental controls, more reported being happy with the streaming platforms than the gaming platforms.

Sammendrag

Oppgaven har som hovedmål å gjennomføre en systematisk gjennomgang og analyse av eksisterende foreldrekontroll på spill- og strømmingsplattformer. I tillegg har det blitt gjennomført en spørreundersøkelse av gunnskole foreldre for å forstå bedre i hvilken grad de forskjellige foreldrekontrollene blir brukt og hva foreldrene synes om dem. Oppgaven starter med å gjennomgå relevant bakgrunnsinformasjon om foreldrekontroll og dette brukes videre til å formulere en hypotese. Videre gjennomgås de forskjellige plattformene som inngår i analysen om deres foreldrekontrollfunksjoner, samt deres sikkerhet. Oppgaven fortsetter med å forklare spørreundersøkelsen og dets resultater. Resultatene fra både spørreundersøkelsen og foreldrekontrollgjennomgangen brukes til å lage en foreldrekontrollguide som er ment å gi foreldrene den informasjonen de trenger for å forstå og sette opp de ulike plattformenes foreldrekontroll. Både resultatene fra gjennomgangen av de forskjellige plattformene og spørreundersøkelsen blir diskutert. I diskusjonen sammenlignes resultatene fra undersøkelsen mot hypotesen. Oppgaven konkluderer med at de fleste plattformene har foreldrekontroll, men de varierer i funksjonalitet. Noen plattformer har sikkerhetshull som gjør det mulig å omgå foreldrekontrollene. Ifølge undersøkelsen følte foreldrene som brukte foreldrekontroll at barna deres var mer utrygge på spill- og strømmeplattformer når de ikke brukte foreldrekontroll, sammenlignet med foreldrene som ikke brukte foreldrekontroll i det hele tatt. Blant de som brukte foreldrekontroll, rapporterte flere at de var fornøyde med strømmingsplattformene enn spillplattformene.

Sammendrag iii

Preface

A special thank you to Ernst Gunnar Gran who gave us the task to research the interesting topic of parental control. His curiosity and insights on the topic helped us navigate throughout the project.

We also want to thank our supervisor Erjon Zoto who came with valuable feedback on our bachelor thesis. His feedback helped us improve the quality of our final product.

In addition, we want thank all the schools and parents who agreed to participate in our survey, as they gave us valuable insight into the current situation with parental control.

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Chapter 1

Introduction

In this chapter, we are introducing the problem and explaining what our goal is with this thesis. Limitations and target group are specified, who we are and what this thesis paper includes are introduced, and how we are going to conduct the project is briefly explained.

1.1 Background

The Internet offers us enormous opportunities. An ever-increasing number of online services provide people of all ages access to, among other things, various forms of entertainment such as literature, streaming of video and audio, games, etc., and a large selection of software/platforms for communication - with both known and unknown people. Children and young people grow up in a world where being "online" is taken for granted. The Internet is used in connection with both school and leisure, and new platforms are explored and used - perhaps not always as critically. At the same time, it is undoubtedly so that many of the services offered over the Internet, and information available out there, are not suitable for children. This gives parents a challenge: you want to give children and young people access to the resources and online entertainment intended for children and young people, but at the same time shield them from content and services intended for other age groups/adults. There is a need for a form of parental control of children online.

Different forms of parental control are all available for different platforms: Operating system vendors such as Windows and MacOS support various features of parental control, and to a certain extent, monitoring of what children/young people do online. Gaming platforms and networks such as Steam, Battlenet, Xbox Live, and PlayStation Network (PSN) allow parents to create accounts for children with restrictions related to e.g., age limits on games, how much you can play per day/week, whether it should be possible with online transactions, and who you should have the opportunity to communicate with via the gaming platform. It similarly is supported from streaming platforms such as Netflix registration of

accounts for children, where e.g., the age limit is entered as a limiting factor for what is available of movies and series.

In other words, there are a lot of different options for parental control, and therein lies a great deal of challenges: it is very demanding for parents to navigate this jungle of parental control opportunities - a jungle that is constantly changing as it evolves. The result is easily a form of resignation, where the opportunities for parental control existing out there are not being used.

Therefore, the overall goal for this bachelor thesis is to look closer at the current situation and the systems that exist and to identify/implement possible improvement to help parents achieve better parental control online - and thus contribute to a safer online experience for their children and youngsters.

1.1.1 Problem

The Internet today has grown exponentially, especially these last decades, with the introduction of smart devices, 3G, 4G, and now 5G networks. More and more children are now connected online at a young age. Whereas this has created a lot of opportunities, it also creates a lot of challenges for parents. According to a report on children and parents' media use [1], parents of children aged between 5 to 15 are more likely to have concerns about their children: giving out details to inappropriate people, their time spent online, seeing content which encourages them to harm themselves, their child damaging their reputation, online content and the possibility of their child being radicalized online. Another study on video gaming in school children [2] shows that the weekly time spent gaming by children is steadily associated with problems, peer conflicts, and reduced pro-social abilities. This was also found to be the case when the University of Bergen researched video game addiction among high school students in Hordaland, where there were found links between gaming addiction and male gender, depression, anxiety, loneliness, aggression, and smoking. [3]

1.1.2 Problem statement

Parents are worried about the amount of time their children spend online and the content they are exposed to. According to a report on children and parents' media use [1], most parents agree that the benefit of the Internet outweighs the risks, meaning pulling the plug is not the right way to prevent children from being exposed to inappropriate content. However, the need for parental control is persistent as the dangers children face online are many. Although many of the services children use offer parents different types of mechanisms for parental control, it can be challenging to navigate through all the services as new technologies are being introduced frequently. The children are getting access to more and more content and becoming more knowledgeable. According to the same report, one

in five parents believes their 5 - 15 year-old child can bypass network-level filtering. Most parents use a combination of different approaches to manage the use of the Internet among their children, including talking about safety online, using technical tools, supervising, and setting rules. However, the same study on parental concerns on children's internet use reveals that parents find it challenging to discuss, be involved with, set up rules and restrictions when their children know more about the Internet and how to use it than they do themselves. It is possible that even parents with technical knowledge find it challenging to deal with their children's internet use.

More dilemmas will arise when children in the same class are restricted very differently, as some parents are less restrictive while others are more restrictive. Children being restricted might feel that this is unfair and start feeling isolated, which may cause the outnumbered parents to give in to not using parental control to ensure that their child does not get left behind. If the majority start using parental control, this dilemma might turn around and make those who do not use parental controls start using it.

1.2 Problem formulation

The goal of our bachelor thesis is to help parents gain more knowledge about parental controls and help them manage the internet use of their children better. To better understand, we will start by doing a systematic review and analysis of some online platforms and the parental controls they offer. By examining the existing parental control mechanisms on different platforms and listening to parents' experiences with parental control, we can create a parental control guide. This will help us achieve the goal of this bachelor thesis. By doing this, we believe we can bridge the gap between the parents, technology, parental control, and the youngest in our population. In this report we are going to be achieving the following:

- Conduct a systematic review and analysis of existing parental controls on some online streaming and gaming platforms
- Conduct a survey to understand the relationship parents have with parental control
- Create a parental control guide

1.2.1 hypothesis

Parents' level of concern correlates with their use of parental control.
 We believe that parents who use parental controls are more concerned about their child's safety online and that those who do not use parental control are significantly less concerned about their child's safety online comparatively. Therefore, through the survey, we will examine how the parents' level of concerns correlate with their use of parental control.

Parents sense that parental control on streaming and gaming platforms improves the safety of children.

We believe that the parents concerned with their child's safety on streaming and gaming platforms will feel the benefit of an increased sense of safety due to parental control. Thus, we believe parents who use parental control are convinced they are creating a safer environment for their children on streaming and gaming platforms with the aid of parental control. Through the survey, we will examine how the sense of safety may vary with or without parental control among those parents who use it.

1.3 Limitations

We have defined parental controls as any feature of a product used to restrict access to content and/or features not suitable for children and monitor a child's usage of a service. Parental controls in this study will be divided into three main categories based on their functionality: content filtering, usage controls, and monitoring [4]. Parental controls can also include computer usage management, which is enforcing certain types of software for controlling. However, we have excluded this form of parental control as it is not relevant to our thesis. We are limiting our task to research parental control functionalities already existing on the gaming and streaming platforms. In other words, no third-party applications meant for controlling will be included in this research.

In this study, we will limit ourselves to video streaming and gaming platforms. Other parental controls available, e.g., those for social media or at the browser or operating system level, will not be a part of this study. Furthermore, due to practical reasons, we will only be researching platforms available in Norway; platforms that cannot be accessed with a Norwegian IP address will not be part of this study.

Due to the high cost of equipment, we will not be investigating gaming consoles in the same way as other platforms. We will, however, use information collected online about their parental controls to reach the best possible understanding of their parental controls as compared to the other gaming and streaming platforms.

This project is limited to data collected during the research period from February to April 2021, meaning we will only be analyzing the data within this time frame. Whatever was before and is to come after this time frame is not considered in our final report. We are limiting the age group of children in our research to elementary and middle school level meaning the ages: 6-15.

1.4 Target group

This thesis report might be relevant for researchers, other students, parents, and media representatives interested in existing parental controls and those who wish to understand Norwegian parents' current perspectives on parental control. The platforms tested and included in the parental control guide might also be in the target group. The parental control guide created during this thesis is created for the average parents.

1.5 Own background and competence

All three group members conducting this thesis work have a background and competence from the former field of study IT-Operations and Information Security [5], which is now renamed Digital Infrastructure and Cyber Security. [6]

Further, we must acquire more knowledge about the existing parental control functionalities on our ongoing work with our thesis.

1.6 Responsibilities and roles

Ernst Gunnar Gran: Task-giver/client

Erjon Zoto: Supervisor

Sander Arntzen Hauknes: Latex, and other document responsible

Abirami Kugathasan: Communications and attendance responsible, secretary

Ian Shammah: Group leader and writing meeting notes

1.7 Framework

1.7.1 Implementation and working methods

The group will have a status meeting every weekday to discuss the challenges we have faced while solving the tasks and assigning assignments to be solved before the next status meeting. Additionally, another meeting will be held once a week with the supervisor to get weekly feedback. We will schedule a meeting with the task giver whenever needed and possible.

As related to the problem formulation 1.2, the group will be creating online accounts on some gaming and streaming platforms. The group itself will finance the online subscriptions. Furthermore, a survey will be conducted on parents to get feedback from parents.

1.7.2 Report structure

The Report will include seven chapters. Below is a short description of what each chapter will contain.

Chapter 1 - Introduction:

This chapter includes the background of the thesis and a discussion around the problem, the issue, a concrete problem formulation, and hypotheses on parental controls. In this chapter, we also discuss the limitations in solving the problem, our target group, a bit about the background of the group members, and the structure used in the thesis.

Chapter 2 - Background Information:

This chapter contains a review of relevant concepts to our report. This will include discussing other relevant research around the parental control topic. We will also be defining parental controls and comparing them with other parental control definitions available. After defining parental control, we will be able to define the categories of parental control further. These parental control categories will be used to guide us through testing the platforms and analyzing them in later chapters. Finally, we will explain the relevant rating systems for streaming and gaming platforms and controversies that might exist in this field.

Chapter 3 - Methodology:

This chapter includes what we did to answer our objectives. We collected background and platform information, analyzed the existing parental controls on the platforms, what kind of sources and tools we used, how the survey was planned, and finally, how the parental control guide was designed.

Chapter 4 - Platform information collection:

This chapter collects the information acquired on the existing parental controls implemented on the streaming and gaming platforms.

Chapter 5 - Survey:

This chapter explains how the survey was conducted. It also contains a list of the questions asked in the survey and explanations of the choice of questions.

Chapter 6 - Parental control Guide:

This chapter is an introduction and explanation of the parental guide. It includes reasoning for why parental control guide is created, a list of included platforms in the guide, how the parental control guide is organized and its main content, and examples to illustrate what it contains.

Chapter 7 - Discussion and Analysis:

This chapter includes an analysis and discussion of the information collected while testing the streaming and gaming platforms and the survey results.

Chapter 8 - Conclusion: This is the conclusion of the findings in this research. It also contains reflections around our work, future work, and a more detailed explanation of challenges faced during the conduction of the survey.

1.7.3 Progress plan

Based on the goals formulated in 1.2, we created a progress plan which helps us to structure our work throughout the project. This plan was created before starting the actual work and was diligently followed in implementing the report. Table 1.1 illustrates the progress plan.

Time frame	Tasks
February - March (Week 5 - Week	Collect information about the different platforms and their
9)	parental controls
March - April (week 11 - week 16)	Design the parental control guide.
March - April (Week 9 - Week 17)	Contact schools and conduct the survey.
April (Week 13 - 17)	Analyse the different platforms parental controls and discuss
	the survey results. Finish the parental control guide.
February - 20/May (Week 5 - Week	Write final report.
20)	

Table 1.1: The thesis project plan

Chapter 2

Background information Collection

Background information collection includes relevant resources that can contribute to the problem statement. This chapter includes the literature review, which reviews the findings of the linked studies. Our literature review spanned a whole range of studies from the last decade touching on parental controls. In this chapter, we also define what parental control is generally, but also what parental control means to us. Further, we define and explain what the different categories of parental control mean in this thesis. Conclusively, we will explain the relevant rating systems used in some of the parental controls we are going to be testing.

2.1 Literature review

The thesis started with a literature review of academic papers with topics related to parental control on online platforms the topics were:

- The relationship between restriction and supervision as parental control methods.
- Parents concerns about their teenage children's internet use with the aims
 to investigate what parents worry about as well as the connection between
 worry and the parents' characteristics, Internet skills and attitudes, the teenagers' Internet usage, and the parents' trust in their teenagers' offline and
 online activities.
- Risks faced by children on the internet and whether users take time to read the terms and conditions when making online accounts.
- Whether users take time to read the terms and conditions when making online accounts.

These topics helped in the analysis and discussion of the survey results, such as parents' use of supervision versus restriction. Also, due to the findings in the paper on whether users read the terms and conditions, we found it necessary to include

something that might help solve this problem in the parental control guide. In general, these topics were found to be of help in the solving of section 1.2.

2.1.1 Discussion of findings

The internet influences children both positively and negatively. Parents take different approaches to reduce the online risks the children are facing. A study [7] studied the relationship between two types of parental control: restriction and supervision. Their study suggested that high-risk behavior on the Internet had a stronger relationship to supervision than to restriction. This may indicate that control is more effective if the behavior of the youngsters is restricted and monitored instead of just announcing a restriction. However, our thesis is focused on the age group 6-15, compared to this study which is limited to adolescents. Although there are differences in age groups of interest, this study emphasizes the importance of restricting and monitoring the Internet use of the younger population. This suggests that supervision as a form of control may not be adequate or sufficient to reduce online risks. In other words, there is a need for restrictive parental controls.

A study [8] surveyed children from fourth to ninth grade to understand for whom restrictive parental mediation is effective. By analyzing the obtained data, he concluded that there were certain significant predictors of restrictive mediation. The predictors were: the age of the child, the parental perception of the negative influences of the Internet, the parental perception of the low self-control of the child, and the Internet skills of the parent. This study emphasizes that Internet skills are required for parents to implement various mediation strategies. The study also suggests that the parents implement restrictive strategies more frequently when their child is younger. It is being discussed that parental perception of the negative influences of the Internet is related to more restrictive mediation, which may suggest that awareness of online risks among parents will increase the use of restrictive mediation.

Another interesting finding of Shook-Jung Lee's study is that there was a significant association between restrictive mediation and reduced online risks and reduced time spent online. Especially, were these effects of restrictive mediation more significant for the children with low self-control. This suggests that restrictive mediations are indeed effective in reducing the online risks and time spent online, which reinforces the findings of the study [7]. Limiting the amount of a child's viewing time and forbidding a child to watch certain programs is what Lee refers to as restrictive mediation. In our task, we refer to restrictive mediation as content filtering and usage controls, which are both categories of parental control. Limiting time spent online is a form of usage control and forbidding certain programs for a child is a form of content filtering. Further explanations of these categories will come later in this chapter.

Another study [9] conducted on parents' concerns about their teenage chil-

dren's internet use with the aims to investigate what parents worry about as well as the connection between worry and the parents' characteristics, Internet skills and attitudes, the teenagers' Internet usage, and the parents' trust in their teenagers' offline and online activities. Through a survey, the study was able to find a correlation between the parent's internet usage and perceived skills and the level of concern they have for their children online. The survey discovered that the more knowledge the parents consider themselves to possess and the more the parents use the Internet themselves, the less concerned they are in general about their children having negative experiences. However, The study concluded that parents who have the most worries about their children's internet experience are those who consider that the advantages of the Internet outweigh its disadvantages, that the Internet is essential for their children development, that they consider themselves as not being skilled Internet users, and that they do not use the Internet as frequently as others. This showed that a combination of lack of information about the Internet and parental controls and the attitude that the Internet is important causes greater worry for parents. This may indicate that parents who know how to use parental controls may find that they effectively reduce their concerns.

Furthermore, a survey conducted in the USA in 2017 [10] indicated that younger parents are more likely to say that they are more aware of what their teens are doing online. 65% of parents between ages 18 to 34 say they are "extremely" or "very aware" of what their teens are doing online, while less than half of parents older than 55 say the same. This correlates with the study on parent's concerns about their children's internet use since younger parents are usually more conversant with the Internet and may therefore have some knowledge of existing parental controls.

These topics helped in the analysis and discussion of the survey results, such as parents' use of supervision versus restriction. Also, due to the findings in the paper on whether users read the terms and conditions, we found it necessary to include something that might help solve this problem in the parental control guide. In general, these topics were found to be of help in the solving of section 1.2.

In 2010 The London School of Economics [11] conducted a study of the risks faced on the Internet by children aged 9-16 in 25 European countries. According to the study, 93% of children go on the Internet at least weekly and 60% every or almost every day. The study said that the most common risky activity children engaged in was communicating with someone they had not met face to face, with 30% of the children in the study admitting having done so in the past. The second most common risk is exposure to harmful user-generated content. 21% of children in the age-group 11-16 in the study have been exposed to one or more types of potentially harmful content. According to the study, 23% have seen sexual or pornographic content, with older teenagers being four times more likely than younger children to have done so.

In 2020 the London School of Economics studied the risks faced by 25,101 children aged 9-16 in 19 European countries. [12] About 25% of the kids in the study had reported a negative experience online in the past year. It was slightly

higher for girls, with 26% of girls reporting a negative experience vs. 23% for boys. Older children reported more negative experiences online, with 34% of children aged 15-16 having a negative experience online. The report also discussed their findings about Norway; about 96% of Norwegian children have access to a mobile phone. 32% of those aged 11-17 had received sexual messages in the last year.

On to another topic, a study [13] was conducted to see if users take time to read carefully through the terms and conditions. The study found out that users often skip reading them and are unaware of how their information is used and how they can control how it is collected, stored, or shared—the study experimented by providing the privacy policy by default and not by default. Of the 64 participants in the non-default experiment group, only 13% clicked on the link that led to the policy. Participants who were provided with the privacy policy by default spent on average close to 1 minute reading a 451-word document slightly better than participants whom the survey did not provide with the terms and conditions/privacy policy. Even though there was a difference between these two groups, the statistics still look discouraging. Users usually consent to the terms and conditions without reading or by just skimming through the document and, therefore, legally allowing the platforms to use their information.

2.2 Defining parental control

Parental control is defined in our task as any feature that allows parents to either restrict access to content, restrict usage or monitor the child's usage of a platform. Therefore, parental control in our task is naturally divided into three main categories: content filtering, usage controls, and monitoring. These three categories will be the foundation when testing the existing parental control functions the platforms offer. Another important topic to examine when testing the platforms is security. Security is necessary to understand the effectiveness of the controls within the three main categories.

2.2.1 Other types and definitions of parental control

Our survey revealed that some parents consider having an open and daily dialogue with their children as a form of parental control. It also revealed that having complete control of all user accounts the children use by having access to the children's login credentials is considered parental control by some parents. We are aware that this is a way of controlling. A study discussed earlier in the literature review is also considering supervision as a form of parental control. As mentioned earlier [7], this study concluded that this form of parental control was considered to have a stronger relationship to high-risk behavior in adolescents than restriction. On the other hand, we understand that open communication is an essential element of controlling children's online behavior. However, in this thesis, supervision and open communication will only be considered supporting

forms of parental control, which we do not research. In other words, this type of parental control will not be a part of our study as we are to test the built-in parental control functionalities in the systems already.

Parental control is defined by parentinfo.org [14] as software and tools that allow parents to set controls on their children's Internet use. They are presenting three types of control: Network-level control, device-level control, and application control. The third type of parental control is the one we will be researching in our thesis, and it is application control. This refers to controls that are set on platforms or applications being used by children. However, it is necessary to explain the other types of parental control before we go further.

Network-level control refers to restrictions set on, e.g., a router. As an example, Telenor offers parental control on their routers. Here a parent can create parental control rules that, e.g., restrict time based on time intervals. Applying a rule to restrict time intervals can prevent the children from accessing the Internet after certain hours decided by parents. The parents can decide which devices that are connected to the home network the rule is to be applied on, either it is smartphones, tablets, or computers[15].

The second type of parental control is device control set on a specific device and intends to restrict the device regardless of how and where the device is connected to the Internet. For example, the operating systems Windows and MacOS offer parents different types of parental controls on their children's devices. E.g., Windows offers parents to monitor their children's activity by presenting an activity report. This activity report allows the parents to see what websites the children visit, what terms they search for, and what apps and games they use[16]. Device control can also be done on smartphones.

Parental controls can be further divided into three categories, and they are content filtering, usage control, and monitoring, which will be explained further.

2.2.2 The three categories of parental control

Parental controls can be distinguished by recognizing what technologies and methodologies each control works with. Channel blockers and other content filtering functionalities were presented early with the cable televisions. Other parental control functionalities work as directors to guide the children or to monitor their activity. Content filtering, usage controls, and monitoring are the categories of parental control we will inspect when testing the platforms further on in the task. These three categories are specifically related to parental control, as all three of them include functionalities to restrict or observe the child. [4]

The last topic is security which is not a category of parental control. However, inspecting this aspect is relevant as security is needed to ensure parental con-

trol functionalities within the three categories are working correctly. Below are descriptions of these categories.

Content filtering

Content filtering is the practice of blocking access to content deemed offensive, inappropriate or dangerous. Relating to parental control, this can be a valuable practice to navigate the children away from mature content. This practice is often done through filtering content based on age ratings or manually picking and choosing content to be allowed and disallowed for the children.

Usage controls

Usage controlling allows the parent to constrain the child's usage of certain services and products. Forbidding certain functions entirely within a service is also a form of usage control. This practice can reduce the amount of time a child spends online by setting time limits. It can also be helpful to prevent the child from accessing sites and services meant for adults, such as settings, payment sites, or adult profiles on platforms that offer separate adult and kid profiles.

Monitoring

Monitoring allows the parent to observe the child's usage of platforms. Some platforms offer the parent, e.g., a report or a watch-list. This may include information about how much time the child spent on a platform, when it was accessed, and what content the child is being entertained by. Such information can be useful for parents as it can help them understand the child's online habits, which can further be useful to discuss with the child and restrict further if necessary.

2.2.3 Security as an aspect

Security will also be a topic to inspect when testing the different gaming and streaming platforms. Although it is not a parental control function by itself, it is necessary to test the security around the other parental control functionalities to understand how effective the parental controls offered by a platform are. E.g., a platform offers a PIN code for the parent to restrict the child's usage of a service. However, the child learns to get around the PIN code prompts by deleting cookies on the platform's website. The child can now use the platform freely without any restrictions, and the security of the parental control function can be concluded as weak. Due to the lack of security, the parental control is easily bypassed by the child. In other words, the level of security will directly affect the parental controls and their effectiveness in keeping the child protected and restricted. It is, therefore, necessary to test the security to understand the effectiveness of the parental control functionalities the different platforms offer.

2.3 Rating systems

Rating systems[17] are systems of classifying according to quality or merit, or amount. In this case, the rating systems apply to content restrictions based on age. Rating systems vary from country to country and are different for gaming platforms versus streaming platforms.

2.3.1 Gaming ratings

The gaming rating systems are continental, whereby, for example, all European games are rated uniformly. In this study, the focus will be on the North American and European rating systems. The North American rating system is included due to many platforms being American, while the European rating system is included since the study is done in Norway, which falls under the European rating system. The rating system used in Europe is the Pan European Game Information, while the Entertainment Software Rating Board assigns the rating systems in North America.

The Pan European Game Information, PEGI

Pan European Game Information (PEGI) [18] is the game rating system used in Europe. PEGI was created by the Interactive Software Federation of Europe, also known as ISFE[19] in April 2003. ISFE members include, among others, many of the largest gaming companies such as Epic Games and Sony(Playstation). This rating system helps European Game consumers to buy appropriate games based on their age. Table 2.1 shows its rating scale and a description of each rating:

Rating	Description
Scale	
PEGI 3	The content of games with a PEGI 3 rating is considered suitable for all age groups. The game does not contain any sounds or pictures that are likely to frighten young children. A very mild form of violence in a comical context or a childlike setting is acceptable. No bad language is expected.
PEGI 7	Game content with scenes or sounds that can possibly be frightening to younger children falls in this category. Very mild forms of violence implied, non-detailed, or non-realistic violence are acceptable for a game with a PEGI 7 rating.
PEGI 12	Video games that show violence of a slightly more graphic nature towards fantasy characters or non-realistic violence towards human-like characters would fall in this age category. Sexual innuendo or sexual posturing can be present, while any bad language in this category is mild.
PEGI 16	This rating is applied once the depiction of violence or sexual activity reaches a stage that looks the same as would be expected in real life. The use of bad language in games with a PEGI 16 rating can be more extreme, while the use of tobacco, alcohol, or illegal drugs can also be present.
PEGI 18	The adult classification is applied when the level of violence reaches a stage where it becomes a depiction of gross violence, apparently motiveless killing, or violence towards defenseless characters. The glamorization of the use of illegal drugs and the simulation of gambling and explicit sexual activity also fall into this age category.

 Table 2.1: The Pan European Game Information Rating System

Entertainment Software Rating Board, ESRB

Entertainment Software Rating Board (ESRB) [20] is an American self-regulatory organization that assigns age and content ratings to consumer video games. The board assigns ratings to games based on their content in order for game consumers to buy the right games based on their age. Table 2.2 shows its ratings scale and a description of each rating:

Rating Scale	Description
E -Everyone	Content is generally suitable for all age groups. It may contain minimal
	cartoon, fantasy, or mild violence and/or infrequent use of mild language.
E 10+	Content is generally suitable for ages ten and up. It may contain more
	cartoon, fantasy or mild violence, mild language, and minimal suggestive
	themes.
T -Teen	Content is generally suitable for ages 13 and up. It may contain violence,
	suggestive themes, crude humor, minimal blood, simulated gambling, and
	infrequent use of strong language.
M -Mature	Content is generally suitable for ages 17 and up. It may contain intense
17+	violence, blood and gore, sexual content, and strong language.
A0 -Adults	Content is generally suitable for ages 18 and up. It may contain prolonged
Only 18+	scenes of intense violence, graphic sexual content, and gambling with real
	currency.
RP -Rating	Not yet assigned a final ESRB rating. Appears only in advertising, marketing
Pending	and promotional materials related to physical (e.g., boxed) video game that
	is expected to carry an ESRB rating, and should be replaced by a game's
	rating once assigned.

Table 2.2: Entertainment Software Rating Board (ESRB) Rating System

2.3.2 Streaming ratings

Most countries have some form of a rating system. Since the study is conducted in Norway and most of the popular streaming platforms that the study will be testing are from the United States, we will focus on the American and Norwegian rating systems. The American rating systems are the Motion Picture Association Film Rating system (MPA) and The TV parental Guidelines. The Norwegian rating system that the Norwegian Media Authority creates. (Medietilsynet).

The Norwegian rating system

The Norwegian Media Authority, better known as Mediatilsynet [21] is the organization under the Norwegian Ministry of Culture and Church Affairs charged with various tasks relating to broadcasting, newspapers, and films. The Norwegian Media Authority is responsible for rating Norwegian movies. Table 2.3 shows its ratings scale and a description of each rating.

Rating	Description
Scale	
A, All	Films that are allowed for everyone must have a subdued sound and effect use. They should not contain any disturbing or dramatic scenes, but the films can have some scary elements if they are short-lived and take place within a safe framework. This can also apply to scenes with violent effects if they are short-lived and take place in a humorous setting.
6, Over 6	Movies with a 6-year limit can contain single scenes that are dark or threatening or scenes with dramatic sound and powerful effects. Short spooky elements are allowed within the framework of "the good horror" and mild elements of violence if they are humorous and exaggerated. Themes that can initially be difficult and painful can have a 6-year limit, but only if they have a subdued expression and are adapted to children.
9, Over 9	Films that contain short-lived and unapproachable elements of violence can have a 9-year limit. This also applies to films with more extended parts with a dark, intense, or insecure atmosphere. Scary figures and dangerous situations can be found in this age limit. Scenes with accidents, operations, or deaths can be disturbing for children under nine years of age. The same applies to depictions of insecure family relationships, bullying, and people and suffering animals.
12, Over 12	Films with a 12-year age limit can contain disturbing themes related to the "adult sphere." Examples may be marital conflicts, sexual acts, or strong emotional outbursts. Acts of violence or shorter elements with horror elements can also have a 12-year limit in an unrealistic context. This is especially true of films based on well-known stories, books, comics, or films where the action is added to a precise fantasy universe or in a comic setting. More realistic violence or frightening elements can also be permitted if they are short-lived and not portrayed in detail. Movies and programs can also have a 12-year limit if they have a generally rough dialogue and humor.
	Movies that reach the age of 15 can contain realistic, authentic, or close-up depictions of war, disasters, and terrorist acts. Films with close sexual depictions or that are consistently sexualized in the expression will have a 15-year limit. The same applies to films containing large amounts of action violence or approaching, cynical and detailed acts of violence. Other examples of 15-year-old content are scenes with gross neglect, close-up depictions of abuse, and an anxious mood.
18, Over 18	In some cases, films have an 18-year age limit. These are mainly films with, particularly violent content. There can be large amounts of gross, cynical, and detailed acts of violence - often in combination with an anxious expression. Movies that contain extensive, explicit, and intimate sexual depictions will have an 18-year age limit. This also applies to isolated depictions of more peculiar forms of sex or a combination of violence and sex. Films that the Norwegian Media Authority has not assessed must be shown with an 18-year age limit in cinemas.

 Table 2.3: The Norwegian Rating System

The American Rating system

Introduced in 1968,[22] MPA is one of the commonly used rating systems in the USA. For example, MPA is responsible for rating films. It is administered by the Classification and Ratings Administration [23], an independent division of the MPA. Table 2.4 shows its ratings scale and a description of each rating:

Rating Scale	Description
G, General Audience	All persons of all age groups can watch this content.
PG, Parental Guid-	The content might not be suitable for children. The parent is
ance Encouraged	encouraged to give parental guidance.
PG-13 – Parents	Some content might be for children under the age of 13, but
Strongly Cautioned	the parent is urged to be cautious as some of the content might
	not be suitable for under 13-year-old children.
R – Restricted	The content also may include adult material, and therefore,
	parents are cautioned to learn more about the content before
	allowing the child to watch it.
NC-17 – Adults Only	The content is for adults, and therefore no one under 17 years
	of age can watch this content.
NR, Not Rated or	This content has not been submitted for rating, and therefore
UR, Unrated	parents are urged to be careful as the content might be for
	adult only.

Table 2.4: Motion Picture Association film rating system

The TV Parental Guidelines

Another relevant rating system that is used in the USA is the TV Parental Guidelines [24]. Introduced in 1996 this rating system is applied to most television series, television films and edited broadcast or basic cable versions of theatrically released films. Table 2.5 shows its ratings scale and a description of each rating:

Rating	Description
	Description
Scale	
TV-Y	All persons of all age groups are allowed to watch this content. This content is
	typically meant for children at a young age, around 2-6 years.
TV G	this content is suitable for all ages. This rating does not signify that the content
	is made specifically for children, but most parents would find it acceptable for
	children to watch.
TV-Y7	The content is suitable for children from 7 and above.
TV-Y7-FV	Mainly targeted towards children above seven years of age, and the parents are
	urged to be cautious since the content includes fantasy violence that may be more
	intense or more combative.
TV-PG	The content has material that parents may find unsuitable for younger children as
	it might contain sexual content, inappropriate language, or mild violence. Parental
	guidance is advised.
TV-14	This content may not be suitable for children under the age of 14. Parental guidance
	is strongly advised since the content might contain drug or alcohol use, inappropri-
	ate language, strong violence, sex, and moderate suggestive themes or dialogue.
TV-MA	This content is only suitable for adults and may not be suitable for children under
	17 years of age. Content with this rating usually include profanity, intense violence,
	dark humor and or strong sexual themes.

Table 2.5: TV Parental Guidelines

2.3.3 Rating system controversy

Since rating systems vary from country to country, especially for streaming, the rigidity of these systems could confuse the parents. This was the case when a cinema manager in Fredrikstad [25] sent a complaint to Mediatilsynet about the movie "Hunger Games," which got a rating of PG13 in the USA. In contrast, it got a rating of 12 which means nine-year-old children could watch this movie with the supervision of the parents. Various entities administer rating systems of different countries, and their systems do not match. This, therefore, should be taken into consideration when letting a child watch or game. The point here is that rating systems could sometimes be inappropriate, and parents have a right to send a complaint if they feel that the ratings need to be changed.

Chapter 3

Methodology

This chapter is about the planned activities to carry out this research, and which sources were used in the information collection. We also explain which methodology was used to do the survey and which requirements were used to carry out a systematic analysis of existing parental controls. This chapter also explains how the parental control guide was designed.

3.1 Thesis progress

The thesis was divided into five phases: Background information collection, Platform information collection, Survey, Parental control guide creation, and Discussion and analysis. The background information collection phase included:

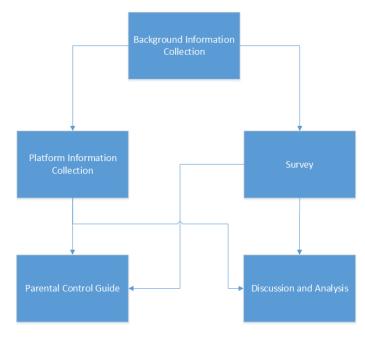


Figure 3.1: Flowchart

- The literature review.
- The definition of parental controls.
- Relevant age rating systems.

The platform information collection phase included:

- Gathering information about the functionality of the different parental controls available.
- Testing the gaming and streaming platforms.

The Survey phase included:

- The making of the survey.
- Getting in contact with elementary/middle schools in Norway.

The discussion and analysis phase included:

- A parental control comparison between streaming platforms using a score system.
- A parental control comparison between gaming platforms using a score system.
- Security on gaming and streaming platforms.
- A discussion on the streaming vs gaming platforms parental controls.
- The analysis and discussion of the survey results.

Parental control guide creation included:

• Guide on how to set up parental and an explanation of their functionalities.

As mentioned in section 2.1, the thesis started with a literature review of academic papers with topics related to parental control on online platforms. These topics were found to be relevant for the thesis and granted us a basis to, e.g., create the parental control guide. Additionally, since there are different definitions of parental controls, we searched the definitions that exist and defined what parental controls mean to us, which we used to break down parental controls into categories and requirements further, as shown in table 3.1. We also listed the relevant age rating systems used in the USA and Europe since all the gaming and streaming platforms we were to test are from the USA or Europe.

This parental control categorization was then used in the testing of gaming and streaming platforms. We tested how to configure parental controls on the chosen platforms and how and what parental control features the different platforms have implemented their functionality and whether they implement the different parental control categories.

We then used information on how to configure the parental controls to create a parental control guide, which included step-by-step instructions and screenshots to show the parents how to configure parental controls and their options. Additionally, we used the data acquired from testing the platforms to analyze the parental controls provided by the different platforms and then compared them to each other in chapter 7.

While the analysis of the parental control implemented on the tested platforms

was being carried out, we surveyed to get some feedback from the parents who have children aged between 6-15. This survey was conducted in parallel with the analysis of the parental controls. Some of the questions that we posed in the survey were inspired by our definition of parental control, while the group made other questions to achieve the goal set in section 1.2. After the survey was concluded, the group analyzed the survey results and discussed the trends.

The results of both the survey and the platform information collection phase were analyzed and discussed in the discussion and analysis part.

3.2 The information collection phase

Information collected in this thesis was carried out using resources online. As part of background information, we used outside sources for the literature review, and these resources primarily were research journals and academic articles.

As mentioned in the limitations chapter, the research focuses on gaming and streaming platforms; we used these platforms' official websites and applications to systematically review and analyze their parental controls. On these platforms, we made accounts to investigate which parental controls they offer and how they work.

Additionally, we examined the security of the platforms by testing if it is possible and how easy it is for a potential child to get around the parental control mechanisms. The information collected about the platforms was also used to form a parental control guide. The parental control guide was made by collecting screenshots of the parental control configuration process and explaining them. Additionally, the survey results gave us an insight into what parents might struggle with when setting up parental controls, which again was helpful to know when creating the parental control guide. The information and feedback acquired through the survey are explained in better detail in a later section.

3.3 Tools

As mentioned in the above paragraph, information collected was from the websites or the applications of the platforms to be tested. The report was written using the Latex editor, and the parental control guide was written using Google Docs but was later included in the appendix of this report. The survey was done on Google Form. Creating of tables is mainly done through Google sheets. Connection with outside parties will be made using the official NTNU student email of the communications responsible for the group. Google scholar and Oria was used to find relevant papers. For gaming consoles like PlayStation, Xbox and Nintendo Switch, their websites were used to acquire information.

3.4 The requirements to parental control

The group will analyze the parental control's effectiveness based on their functionality with regards to content filtering, usage controls, and monitoring. As there was little source material available for this, the group worked out the requirements through a quick rundown of the platforms and our previous knowledge on the subject. The number of requirements increased when new parental control functionalities were found on the different platforms. In addition, we will go over the security of each platform relating to how easy/hard it is for a child to bypass the controls. Table 3.1 shows the collection of the requirements for all platforms. However, not all of these requirements are relevant for all platforms.

Туре	Category	Requirements
Parental control	Content filtering	Restrict content by age rating
		Restrict content manually
		Restrict access to multiplayer
	Usage controls	Purchasing restrictions
		Restrictions to comment/communicate
		Restrict web browsing
		Setting time limits
		Separate kid profile
		Restrict access to settings
	Monitoring	Purchase monitoring
		Monitor content played/watched
Other	Security	Ability to prevent by-pass parental controls

Table 3.1: Requirements to parental control and other requirements

3.5 The survey

As part of the research, we planned to survey parents of Norwegian elementary and middle school children, the focus group was the first to tenth grade since the children that are in these grades fit the age group specified in the limitations. The survey included one section with general questions to all the participants and two additional sections; One with questions for participants that use parental controls and the second one for participants who do not use parental controls. Our primary goal with the conduction of the survey was to get feedback on the parents' views on existing parental controls from a minimum of 100 participants. The survey was written in Norwegian since the participants of the survey were meant to be Norwegian residents. The survey was carried out online using Google Form and communication with the schools was held using email, whereby the group would send information about the survey and the link to the survey through that. More information about how the survey was conducted is to be found in section 5.1.

3.6 The parental control guide

As part of the product of this research, a parental control guide was made to help parents that do not necessarily have enough information about existing parental controls or find it hard to set up parental controls on the platforms their children use. The parental control guide was written in Norwegian to target better readability for the Norwegian end-user. This guide included only the gaming and streaming platforms tested in the information collection phase of the research, rather than all the platforms included as options in the survey. This is because some of the platforms in the survey were out of our scope and the group could not make accounts and test the parental controls implemented on them, e.g., Play-Station, Xbox, and Nintendo Switch.

The guide mainly focuses on showing the parents step by step how to configure the available parental controls on each platform as well as explaining their functionalities. Additionally, information collected by the platforms is included as well to show parents what the different platforms collect about the user.

The guide was written as a separate document so that it would be more appropriate for a broader audience. However, an explanation of its structure and the reason for its creation is included in the report under chapter A.4. The parental control guide will be sent to the schools that participated in the survey.

Chapter 4

Platform Information collection

In the platform information collection chapter, we collect the data we get from testing the parental controls on the different streaming and gaming platforms. This chapter explains which platforms were tested, why the tested platforms were chosen for this thesis, and which platforms were excluded. The data collected will be categorized using the parental control requirement mentioned in the methodology chapter.

4.1 Platforms excluded

We have chosen to omit social media platforms. Although there are many children on social media, we have not chosen to investigate it as it is not meant for children under the age of 13 due to America's COPPA [26]. In other words, if we were to test social media, we would have to exclude most of the children in our original age group limitation of 6-15. Additionally, comparing streaming and gaming platforms with social media is not feasible as the content differs too much, and the scope will be too big to produce a practical guideline for parents. Moreover, social media applications do not offer parental controls, so parents would have to use third-party applications to use parental control, such as the Microsoft Family app [27].

Due to the ongoing pandemic, it would be challenging to arrange to test gaming consoles, as the restrictions to slow down the spread of the virus may not always allow it. As it requires specific physical hardware, not everyone in the bachelor group will be able to test the platform together while following the restrictions. In addition, consoles such as the PlayStation console are quite expensive, and the newest versions get sold out quickly, meaning it is not guaranteed that we get access to consoles in time to do testing [28]. Gaming consoles are an integral part of popular gaming platforms like PlayStation, Nintendo, and Xbox. It is, however, possible to find a way around gaming consoles by relying strictly on online resources alone for collecting information. This approach would not give us

the right picture of the entire platform, as we will not test and verify the quality of the parental control functionalities found through the online resources. However, since we see no better option, this will be our approach. This means that when uncertainty arises, we will conclude that some functionalities are unknown. Due to this limitation, our research will not fully cover gaming consoles, but only to a degree. Therefore, the security of the parental control functionalities will not be tested on gaming consoles. Despite these restrictions, we felt that it was essential to include the gaming consoles due to their widespread use.

Origin is another popular gaming platform that we considered, but it will not be a part of the research as the platform is being phased out. The company behind Origin Electronic Arts is replacing it with another service called EA, as this service is still in its beta phase, and we have therefore chosen not to use this platform either.

Ubisoft Connect was also researched during platform information collection. However, the platform is not providing parental control functionalities anymore. After clarifying with their support team, this was discovered after not being able to set up parental controls they claim they offer on their websites. It seems they have not updated their websites yet. The chat with customer support with this clarification will be found in the appendix. A.5.3

In addition, we have chosen to research the gaming and streaming platforms mainly to focus our scope to do a comprehensive and beneficial study given the time limit given to come with a done product/result. Further, we will explain why we have chosen the applications we have chosen.

4.2 Streaming platforms

The streaming platforms are listed in alphabetic order. More information on the tested streaming platforms can be found in the appendix A.5.1. These are the tested streaming platforms:

- Amazon Prime Video
- Disney+
- HBO Nordic
- Netflix
- NRK TV
- TV2 Sumo
- Viaplay
- YouTube Kids

4.2.1 Amazon Prime Video

Amazon Prime Video is a streaming service provided by American technology multinational Amazon. Prime Video includes a mix of licensed TV shows and movies,

as well as original content created by Amazon-branded as "Prime Originals" for TV shows and "Amazon Originals" for movies [29]. The US Prime Video is included in the more general Amazon Prime subscription, which 82% of American households have. [30]

Parental control functions

• Content filtering

Amazon Prime Video allows you to restrict content based on the age rating. An interesting feature with Amazon Prime Video is the ability to make these restrictions device-specific. For example, you can turn on the age rating restrictions on your IPad app, but not in the browser.

Usage controls

There are no usage controls available for Prime Video.

Monitoring

Amazon Prime Video allows you to see which movies/TV series have been watched on your account.

• Security

When you configure parental controls, you have to type in a 5-Digit PIN code. With this PIN code, you can watch content above the designated age rating. A big problem with Amazon Prime Video is that it allows users to enter the account settings page to turn off content restrictions without knowing the PIN code. Therefore, any child who knows their way around the platform could turn off the parental controls.

4.2.2 Disney+

Disney+ is a streaming platform owned by the Walt Disney company. This platform is relatively new since it was launched on 12th November 2019. However, its late creation has not affected its user registration numbers, with it amassing up to 100 million users as of March 2021 [31]. This is due to the service offering five famous franchises: Disney, Pixar, Marvel, Star Wars, and National Geographic. No R-rated movies and shows appear on this site; instead, they are on HULU [32]. Movies, cartoons and TV shows that feature smoking, swear words, violence, and stereotypical depictions of minority groups come with warnings. The Disney brand is known for attracting kids and having little to no R-rated movies; it is expected that many users are kids, which gave us a basis to test it. Even though Disney+says that it has no R-rated content, it is very important to investigate the platform's parental controls as a parent before allowing the child to use it.

Parental control functions

• Content filtering

Parental controls on Disney+ allows on to filter content based on age rating. The user can restrict content through the "Kids profile." In the Kids profile,

content is restricted to the under 13 age rating. Disney + does not offer the ability to edit the parental controls manually, and therefore, content filtering can only be activated with this functionality.

Usage controls

Kids Profiles offer an easy-to-navigate Disney+ interface that only features content friendly for all viewers and is restricted to content that's rated either G or PG. When a user is in the Kids profile, they will not have access to settings, and they would have to exit this profile to access settings.

Monitoring

There is no specific functionality for monitoring the child's activity on the profile. However, one can see the last watched content displayed on the home page automatically, which cannot be deleted.

Security

Disney+ provides a "Kid-proof Exit" functionality. This feature is designed to make it harder for the child to exit the platform by requiring the completion of a challenge, this challenge help stopping very young children from bypassing the parental controls. For older children who can complete the challenge, a normal PIN code can be configured.

4.2.3 HBO Nordic

HBO owns and operates HBO Nordic, a streaming platform that offers different types of entertainment such as movies, series, documentaries, and even material for children. A lot of the content on HBO Nordic is classified as mature such as the series Game of Thrones, Euphoria, and Westworld. The viewers of these classified mature content are offered everything from nudity, severe sexual content, drug and alcohol usage, severe violence, including blood content and obscene language. This content is not meant for younger viewers. However, HBO Nordic does offer entertainment for children, such as Pingu, Tom, Jerry, Sesame Street, etc. Therefore, parents should be free to feel confident in letting their children watch the appropriate content without fearing they will trip over the mature subsection. Parental control is what the parents need to feel confident in letting their children stream HBO Nordic freely.

Parental control functions

Content filtering

HBO Nordic offers a way to filter content by setting a PIN code to restrict access to the mature material found outside of the "KIDS" subsection. There are different subsections and among those is "HOME," "WATCHLIST," and "KIDS." The subsection for kids has age-appropriate material picked out by HBO Nordic. Although the Kids subsection does not have an age limitation, it is mostly suitable for children up to and including 12 years of age. One cannot manually pick and choose what the children can watch.

Usage controls

There is no functionality to limit the time spent on HBO Nordic. The account owner must be at least 18 years old, and there is no separate account function. Children will use the same account as the parent. However, the "Kids" section can be locked with a code, so the child cannot access material outside of this section. This separate section functionality works to a somewhat degree as a separate profile due to the code restriction.

Monitoring

There are no functionalities to monitor what the children are watching. However, due to HBO Nordic's privacy statement, one can request access to information gathered on an account. In other words, a report with an overview of what has been watched on an account can be retrieved. Although it is not a monitoring functionality, it can reveal what all the account users are watching, including children.

• Security

Parents are offered a way to restrict access by creating a 4-digit PIN code which must be typed before accessing any non-Kids content outside of the Kids subsection. The "Kids" subsection offers the functionality of locking. When locked, the Kids will not be able to access any other subsections nor the settings. To unlock and leave the Kids subsection, one must type in the 4-digit-PIN code.

4.2.4 Netflix

Netflix is the most popular subscription-based streaming service [33]. Netflix has a vast library of third-party shows and movies and is investing in creating their original content. Netflix offers many profiles to one subscription, making it possible for kids to have their own profile on Netflix. Since Netflix is so widely used, we are choosing to test the parental controls they offer.

Parental control functions

• Content filtering

Netflix has a "View Restriction" functionality that filters content. With this option, one can choose to restrict content by age rating. With the child profile, Netflix provides an option to only display titles for children that Netflix sorts. One can also manually restrict specific titles regardless of their maturity ratings on Netflix.

Usage controls

On Netflix, one can also activate "Netflix Kids experience," which gives the child a simplified interface and prevents the child's access to settings requiring the account's password to change the content on the profile.

Monitoring

Netflix provides functionality for monitoring the child's activity whereby one can see the recently watched content of every profile. It is also possible to hide the history, which means that within 24 hours, these titles will no longer be used to give you recommendations and will no longer appear as seen on Netflix unless you play the title again. The home tab also gives the user suggestions based on the content that they have watched. This can be used as a way to monitor the child's choice of content. The child profile does not have access to this functionality.

• Security

Netflix provides functionality to choose a 4-digit PIN code that authenticates entering the profile that it is applied on. However, the PIN does not prevent exiting the profile that it is applied on. Netflix Kids also limits the users' access to unprotected adult profiles that have access to advanced settings like membership and billing information so that the child does not potentially misuse such sensitive data.

4.2.5 NRK TV

Norsk rikskringkasting AS, in everyday speech and marketing best known as NRK, is a Norwegian state-owned broadcasting company that offers media content on radio, TV, streaming service, and the Internet. NRK TV is NRK's video streaming service for the broadcaster's TV broadcasts and TV series. NRK TV has a wide range of content, some mature and some for children. They, therefore, also offer a form of parental control through restricting material based on age limits.

Parental control functions

• Content filtering

NRK allows content restricting based on age limitations. The age control functionality offers the parent to choose between the age categories 6+, 9+, 12+, 15+, and 18+ 2.3.2. The restrictions are secured with a code or password.

Usage controls

Anyone can search through all the content on NRK TV, but to watch material over the set age limit, the user will first have to type in the aforementioned code. There are no other usage controls on NRK TV.

Monitoring

There are no monitoring functionalities on NRK TV, but one can monitor the watch history. However, the watch history can easily be deleted by any user.

Security

To turn off the age control, one has to type in the code, which has to be a minimum of 4 characters. However, if you forget the code, there is no way to restore it, e.g., confirming identity through e-mail. Instead, NRK TV guides users from different devices step by step on how to repeal the age control entirely. E.g., to repeal age control on the web browser, one has to delete cookies. Therefore, children might be able to bypass parental control by following the same steps to delete the age control functionality.

4.2.6 TV2 Sumo

On TV 2 Sumo, one can watch all TV 2's channels live, new episodes of famous programs, whole seasons of series, news, and the best of live sports every week. TV2 is a Norwegian channel that is financed by advertisements, unlike NRK. The channel is a commercial, public broadcaster that offers news, current affairs programs, sports, and entertainment. TV2 Sumo offers both domestic content and content from abroad. On TV2 Sumo, you can watch all TV2's channels directly in addition to recording broadcasts, TV series, and sports. C More is available through TV 2 Sumo and offers TV series, movies, and content aimed at children, young people, and adults. In addition, TV 2 Sumo offers content from SF Kids, which includes over 500 titles for children.

Parental control functions

• Content filtering

Parental Controls on TV2 Sumo allows one to filter and restrict access to content with an age rating. One can choose to set the age limit to 6, 9, 12, 15, or 18 years 2.3.2. One has, therefore, the opportunity to set age limits to filter age-inappropriate content. However, one cannot manually pick and choose content to allow and disallow.

Usage controls

There is no functionality to control how much time is spent on TV2 Sumo. Separate profiles can be set for the children and parents. Setting an age limit for each profile is therefore possible. The parental control functionality of the 4-digit-PIN code also restricts the child from purchasing.

Monitoring

TV2 Sumo offer the user to see their own history, which is an overview of what has been watched. The main profile can see what the child profile has been watching, which will work as a monitoring functionality.

Security

In order to purchase and view content that is protected by parental controls, one must enter a code of choice. Selecting a 4-digit PIN code activates parental control. The restrictions also take effect immediately on mobile and tablets connected to the account. Although the code works to prevent the children from accessing anything above the set age limit, there is no restriction to prevent the children from swapping from child account to parent account. However, if the parental control code is activated, the child can still not watch anything above the age limit set by the parent regardless of what profile they are using. In other words, TV2 Sumo is providing parents a 4-digit PIN code which ensures that children do not get access to age-inappropriate content. If the code is forgotten, the account owner will receive an e-mail with a link for confirmation to reset the code.

4.2.7 Viaplay

Viaplay is a streaming service that is exclusively available in the Nordic countries. We chose this to compare a regional platform to the international giants like Netflix and Disney+. Viaplay has a mix of both international and Nordic content on its platform.

Viaplay is a streaming service owned by the Swedish media and entertainment company NENT Group [34]. The service is only available in the Nordic countries of Norway, Sweden, Denmark, Finland, and Iceland. In addition to the usual focus on TV series and movies, Viaplay has an extensive sports library. With Viaplay, you can watch sports events such as Formula 1 or Champions League live through the Viaplay player.

Parental control functions

• Content filtering

Viaplay allows you to create profiles that are only allowed to view children's content. There is no possibility to filter based on a specific age rating other than what Viaplay considers to be "for children." Additionally, there is no possibility of manually filtering movies.

Usage controls

There is no mechanism to control how much the platform is being used.

• Monitoring

There is an activity list where you can see what content has been watched on a particular profile. However, it can be deleted.

Security

Viaplay has no security mechanism to stop a user on a children's profile from changing to a normal profile or create a new one. Furthermore, any logs containing the child's activity could be manually deleted as again; there is no security mechanism stopping this.

4.2.8 YouTube Kids

We chose YouTube because it is one of the most popular streaming platforms in the World and the main platform for uploading videos[35]. Although there are many educational and child-friendly entertainment videos to be found on YouTube, not everything on YouTube is meant for children. There is a need for parental control due to the many mature videos found on the platform. YouTube has considered their youngest users and their parents and has therefore created another version of the platform meant for kids called YouTube Kids. It offers videos exclusively for kids and offers the parents different types of parental control mechanisms. YouTube Kids can be downloaded as an application or navigated to by browser. The platform has several functions that serve to protect the kids from the dangers of the Internet.

Parental control functions

Content filtering

The parent can allow lots of videos or handpick their own. One can also block any videos and channels one disapproves of as a parent. In other words, there is an ability to restrict and allow content manually. YouTube Kids is giving the option of choosing between three age categories when creating children profiles: 4 and less, between 5 and 7, or between 8 and 12. If, for example, age category 5 to 7 is chosen, the kid will be able to search through and find music, animations, hobbies, and more that is relevant for a kid that is a maximum of 7 years old. However, not all videos are inspected manually, so the child might still find explicit content. The parent is told to block or report the material if inappropriate for the age group and assured that YouTube Kids would review the report as quickly as possible. The parent can choose to clear history and stop YouTube Kids from recommending videos based on history.

Usage controls

Further, the option of either turning on or turning off the search engine in the app is given. If turned off, the child will only have access to stream channels YouTube Kids recommend and believe is appropriate for the age. If turned on, the child can search through the millions of interesting videos available on YouTube Kids. Children cannot comment on videos, as there is no comment section available on YouTube Kids. Children are restricted access to settings.

Monitoring

YouTube Kids offers parents monitoring functionality. The parents can see the watch history of the child's profile; this watch history will include all videos the child watches. The history cannot be deleted by the child, only by the parent, which means that this works as a dedicated monitoring functionality.

Security

To access settings on a child profile, one must solve a mathematical problem unless the parent has chosen to set a 4-digit passcode instead. However, one must log in with the parent Google account to edit profile settings further. Whenever signing into a new device, the kids' profiles will be ready to go. When logging in with the Google account, the chosen parental controls and customized preferences associated with each child's profile in the app will be used on all devices.

4.3 Gaming platforms

The gaming platforms are listed in alphabetic order. More information on the tested gaming platforms can be found in the appendix A.5.2. These are the tested gaming platforms:

- Battlenet
- Epic games
- Roblox
- Steam

4.3.1 Battlenet

Battle.net is a storefront developed by the video game developer Blizzard to publish its own games and later those of Activation as well due to a merger of Blizzard and Activision into Activision-Blizzard. While the platform only publishes games from said company, Activision-Blizzard is the largest Western video game publisher, so it is still quite a popular platform.

Parental control functions

Content filtering

One can limit the child's account from appearing on "Friend of Friend Suggestions." Battlenet also censors the battle tag of the child by not allowing offensive usernames. Battlenet also Restricts access to multiplayer.

Usage controls

Battlenet parental controls also give the user the ability to set time limits for how long your child can play daily, weekly basis, or both. One can also set custom schedules. When the preset time limit is reached, access to the game will be revoked [36]. Play-time limits work on all the game characters that are used by the child's account. Battlenet parental controls also allow the parent to mute the account, which prevents the child from viewing or participating in player-to-player communication. Muting automatically restricts text and voice chat and turns off the Real ID. Battlenet also provides flexibility in that one can manage player-to-player voice chat in-game separately by completely switching it off or allowing listening and speaking, or limiting the child to listening only. One can also limit sending and receiving player-to-player text messages to a friend only or allow everybody to contact the child through text messages. By turning off the Real ID, one disables all advanced social features like chatting across different games, and the real first and last name associated with this account becomes invisible to users. One can also deactivate Blizzard Groups that restrict access to groups, which includes chatting with other group members.

Monitoring

If the child is under 13 years of age, they are required to provide a parent email to finish their registration. This ensures that the parent of the child in question consents to the creation of this account, and this email will be a means of monitoring the child's activities on the platform. The parent can also activate "Receive Weekly Email Report," which sends a playtime report email to the parent email with information on the amount of time your

child has gamed. Battlenet also provides an option to manage permissions to purchase items in-game and access payment methods.

• Security

Logging on into the Battlenet account requires an authentication code sent to the parent's email account. Additionally, Battlenet provides a third-party authenticator which prevents unauthorized logins with an easy one-click verification using the Blizzard Authenticator app. This app can be downloaded on the parents' device or child's device. Moreover, one can see the recently logged-in devices in the security settings to check for unauthorized devices on the account.

4.3.2 Epic Games

Epic Games Store is the storefront for the video game company Epic Games. Epic Games Store has both Epic Games own titles, such as Fortnite and Rocket League, and third-party titles. Epic Games has signed exclusivity deals with several video games. Epic Games is included as it is one the most popular PC gaming storefronts [37].

Parental control functions

• Content filtering

Epic games have a parental control functionality that limits the user from acquiring access to mature content using a PIN. Epic games use a rating system to do this. Epic Games uses three different rating systems from which the user can base their rating, namely ESRB, PEGI, and GRAC. PEGI and ESRB are explained in section 2.3.1 and GRAC [38] is the Korean equivalent of them.

Usage controls

Purchasing restriction works according to the rating system and level configured to that account. For example, if the rating level is set to PEGI7, content not rated suitable for PEGI7 will require a PIN to complete the purchase.

Monitoring

Epic games seem to not have any monitoring mechanisms in their parental control functionality. Nevertheless, it is possible to investigate the accounts purchasing history which is provided in the setting. This list provides the user with the date of the purchase, which game was purchased, the price, and the status. This, however, is for already purchased games.

• Security

Epic Games is configured so that if the user desires to edit their parental controls, a 6-digit PIN code is required.

4.3.3 Roblox

Roblox is a platform where users can create their own video games and play games created by other people. While Roblox is free-to-play, it has an in-game currency that costs real money that can be used to purchase in-game goods and perks. Roblox is one of the most popular games for children, the company behind it was in a recent IPO valued at around \$40 billion [39].

Parental control functions

There is no specific parental control service for Roblox, but there are certain settings you can configure to protect your child that resemble those of a parental control service.

• Content filtering

Roblox has a setting called "Account Restrictions". With account restrictions on the user will only be able to access curated content.

Usage controls

Roblox has a privacy tab that allows you to configure who your child is allowed to communicate with. When "Account restrictions" are on, communication will automatically be turned off, including with friends.

Monitoring

There is no parental function for monitoring built into Roblox.

Security

Roblox allows you to set up a PIN code to change settings. This protects the parental controls features from being turned off by the child using the account.

4.3.4 Steam

Steam is the most prominent pc platform for the purchase of video games made by Valve. In addition to purchasing games, Steam has inbuilt friends and a chatting system and forum. It has a workshop where players can submit user-created content to the games they play. Steam was originally created to publish and update Valve's own video games, such as Counter-Strike or Half-Life, but later started allowing other developers to publish their games there. This made Steam the go-to platform for selling and buying video games.

Steam has a parental control function called Family view [40]. Family view lets you pick and choose which games in your library your child is allowed to play and gives you the ability to restrict to online functionalities; These are the Steam store, community-generated content, friends, chats, and groups, and your online profile, screenshots, and achievements. In addition, certain functions built into the Steam client like access to the web browser, music, and settings are disabled by default and cannot be enabled while in Family view. If the family view is enabled on your account every time you log in, you will first enter the family view version and enter a 4-digit PIN code to exit.

Parental control functions

Content filtering

Steam's main function in content filtering is the ability to manually pick and choose which games your child is allowed to play. Unfortunately, there is no functionality to automatically restrict games based on their age rating, which can be an issue for people with large libraries. When using Family view, access to the settings, music, and inbuilt web browser is restricted and cannot be turned on.

• Usage controls

There is no functionality to control how much Steam is used while in Family view.

Monitoring

There are no tools for monitoring your child's activity while using Family View. However, you can see how much a specific game has been played over the last 14 days on your account and that monitoring purchases are made on the account. You will have to keep your activity separate if you share the account with your child so that you can see what is yours and what is your child's activity.

Security

Family View is configured with a 4-digit PIN code that needs to be entered every time you want to exit Family view. The family view is automatically turned on each time you log in. Steam allows you to restrict access to the Steam Store while in Family View so that the child cannot.

4.4 Gaming consoles

The gaming consoles are listed in alphabetic order. More information on the tested streaming platforms can be found in the appendix A.5.4. These are the gaming consoles we have collected information about through online resources:

- Nintendo Switch
- PlayStation
- Xbox

4.4.1 Nintendo Switch

Nintendo Switch is a game console developed by the Japanese video game company Nintendo. Nintendo has parental controls functionality through an app called "Nintendo Switch Parental Controls." The Nintendo Switch Parental Controls app requires either an IOS or Android Smartphone.

Parental control functions

• Content filtering

With the Nintendo Switch parental controls app, you can restrict games based on their age rating [41]. The app also allows you to restrict access to communication with other players and posting to social media.

Usage controls

The Nintendo Switch parental controls app allows you to set daily time limits for each day of the week. The parent can choose whether to give the child a notification or interrupt the game. Nintendo Switch also allows you to restrict who can make purchases in the online store, but this is done through your account settings and not the parental controls app.

Monitoring

The app gives you a monthly report of the most played games.

4.4.2 PlayStation

PlayStation is a popular gaming console. We have excluded testing gaming consoles, as explained earlier. However, we have chosen to rely on online sources to gather information about the parental controls offered by PlayStation.

For setting up parental controls on PlayStation, the parent needs an own separate account for PlayStation Network and an account for each child. If the parent is setting up the child's accounts, they will automatically become the family manager. If child accounts are set up by someone else, they must appoint the parent as "guardian" to enable the parent account as the one manager of parental controls.

Parental control functions

Content filtering

The parent can restrict communication with other players through chat, messages, and game invitations. The same setting restricts the child from viewing content created by other players, as the parent can block videos, images, and texts created. Age rating levels help parents decide which content is appropriate for the child and is used for restricting access to mature content.

Usage controls

The parent can restrict by setting time limits. Each child account can be restricted on when and for how long they access the PlayStation systems. Monthly spending limits can be set to restrict how much the child can spend each month. Internet access can be restricted.

Monitoring

The parent can see how much time the child has been playing.

4.4.3 Xbox

Xbox is a video gaming brand that Microsoft created. Microsoft's Xbox One consoles and Windows 10 PCs play pretty well together. It is possible to stream Xbox console games onto one's PC, but this requires Xbox to be connected to the same network. Xbox has released four generations of the console, namely, Xbox, Xbox 360, Xbox One, and the Xbox series X and S. Xbox one sales were reported to be 68.5 million by November 2020. Given the high number of sales, we decided to study Xbox's parental controls. This study was carried out using Xbox.com [42] due to the limitations that were explained earlier.

Parental control functions

Content filtering

Xbox Family features help manage access to mature content. Parents can filter or allow games, apps, and websites based on the age of their children to ensure they are interacting with age-appropriate content. Children can also request access to content which parents can then approve or decline; Xbox uses the ESRB rating system to do this. The parent can also allow or block the child's ability to join multiplayer online games, create and join clubs, broadcast their gameplay, add friends and chat with other users.

Usage controls

Through the privacy settings, one also can manage what personal information others can see and who is permitted to engage with the account. Additionally, one can also manage who can communicate with their child, select who can see what their child watches or plays, and decide what profile information others can see. It is also possible to block or mute a user. Muting means that an account cannot communicate with the child in-game or in a chat session while blocking prevents the child from receiving that person's messages and game invites, removes them from your friend's list and hides the child's online activity from them.

Xbox provides the "Ask a Parent" feature, which requires the parent's approval for things the child wants to buy in the Microsoft Store, except what they get with gift cards or money in their Microsoft account. They can also set up an allowance whereby the child can only use the money that the parent adds in to limit the child's purchases on Xbox. The parent can also manage how much time is spent each day of the week and when the device can be used. The screen time countdown starts once the person is signed in and stops when signed out. It is also possible to set a time limit for a specific game or app in the Xbox family account.

Monitoring

On Xbox Family one can get an activity report on the child's Microsoft account and view a summary of their activity on Xbox consoles and Windows 10 devices. One can also View their Microsoft Store order history online or from the Xbox console to see if the child has not purchased any game or

application without the parents' consent.

Chapter 5

Survey

The survey was sent to four schools and parents with children aged between 6 and 15 participated. In total there were 167 participants. In this chapter, the choice of survey questions and the structure of the survey is explained.

The purpose of the survey is to understand the following:

- How and what platforms is being used by children
- What risks parents think their child is facing on streaming and gaming platforms
- How many parents use parental control
- Their experiences with and without parental controls

5.1 Conduction of survey

First, all the elementary/middle schools in Oslo were contacted by us, as well as many schools in Viken county. We explained in the email that was sent out to the school's detailed information about the group, our goal, and how they can contribute.

Voksentoppen school from Oslo with pupils from 5-10th grade agreed to participate. Two schools in Trondheim agreed to send our description and link to the survey to the parents using their digital message book. These two schools were: Brundalen school and Flatåsen school. Another school participated from Gjøvik: Blomhaug school, as our supervisor had contacted the school on our behalf. With all of these four schools, we were able to receive more than 100 responses and were ready to collect and analyze the data.

We assured the schools that all we wanted was for them to send a simple mail with the description and link of the survey to the parents. We assured them that we did not need any more help, as we did not plan to ask the schools to send reminders to the parents. Of course, this means that those parents who find the topic

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of parental control online interesting, are the ones who are more likely to participate in the survey. Although getting all parents in a school to participate might reflect the reality better, enforcing all parents with pupils in a school to participate did not seem realistic to do. Especially, as many schools were already having challenges managing the uncertain times brought upon them by the pandemic. Many schools denied our request to participate due to the pandemic, especially the schools in the more affected areas such as Oslo and Viken. More details about the challenges faced during the conduction of the survey and solutions we found will be explained later in section 8.2.

5.2 Survey questions

The survey is divided into three sections, but the parents will only answer two of them. The first section consists of general questions which all parents can answer. The last question of the first section will then determine which section the parent will be led to, either it will be the second or third. The second section is meant for the parents who use the existing parental controls, and the third section is meant for the parents who do not use the existing parental controls. The survey was conducted in Norwegian. Below are the questions translated to English, with explanations of why these questions were chosen and what we wish to understand by asking them. The original questions in Norwegian including the predefined alternatives can be found in appendix A.1.1.

5.2.1 General questions for all parents

The first section consists of general questions for all parents. Figure 5.1 contains the questions from section 1. These questions will help us understand what platforms the children use and how much time children spend on these platforms. We can notice if there are any additional trends for example related to the age of the children by asking the first question. We are asking the parents question 8: what risks they think their children are facing, as this can give an overview of what parents consider the biggest risks, which again might reveal a trend. Question 8 is the last question that will determine which section the parent will be led to on the next half of the survey. If they use any built-in parental controls, they will be led to section 2. Otherwise, if they do not use any built-in parental controls, they will be led to section 3.

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Section 1

- 1. Which of these video game platforms is your child using?
- 2. Which of these video streaming platforms is your child using?
- 3. How many hours does your child spend on video game platforms on weekdays (Monday Friday)? (average over a week)
- 4. How many hours does your child spend on video game platforms on weekends (Saturday Sunday)? (average over a week)
- 5. How many hours does your child spend on video streaming platforms on week-days (Monday Friday)? (average over a week)
- 6. How many hours does your child spend on video streaming platforms on weekends (Saturday Sunday)? (average over a week)
- 7. What risks do you feel the child is facing on these platforms?
- 8. Do you use any of the built-in parental controls?

Figure 5.1: Survey questions from section 1

5.2.2 Additional questions

As already explained, question 8 from the first section 5.1 is the question that will determine which additional questions the parents will answer. This second part of the survey is separated into two different sections, but the respondent will only see one section based on the answer to question 8. Those who have responded that they do use parental controls will be led to another section than those who have responded that they do not use parental control. The parents who use parental control will be led to section 2, and those who do not use it will be led to section 3. Now, both of these sections will be explained further. We will start with section 2 about the questions for parents who use parental control.

Additional questions for parents who use parental control

The second section of the survey consists of questions regarding the existing parental controls. Figure 5.2 shows the questions from section 2. Parents who in the previous section confirmed that they use existing parental controls are directed to this section, as these parents have valuable experience, we wish to get an overview of it. Parents are asked which platforms they are satisfied and dissatisfied with in regards to the parental control functionalities offered. This is done to understand what parents find practical and impractical, which again can help us get a better understanding of which parental control functionalities is deemed effective by parents. These answers can also be helpful when creating the parental control guide if anyone has any specific complaints about the complexity of any of the platforms, as it can direct us towards what requires special attention.

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Further, we are asking how effective parents deem the functionalities offered within the three categories of parental control: content filtering, usage controls, and monitoring. This again is asked to gain a better understanding of which parental control functionalities parents deem effective. Different examples of each category are given for parents to understand what functionalities each category includes. Moreover, we are asking the parents if they are using any other parental control features not mentioned, as we wish to gather and include information about other parental controls we might have overlooked.

Further, questions about how safe the parents feel their children are on gaming and streaming platforms without and with parental controls are asked. This is asked to understand if parents trust the parental control functionalities offered by the platforms. These questions can further make it possible for us to spot a trend, as we assume parents who use parental controls are more likely to be worried about the safety of their children online than the parents who do not use parental controls as earlier explained 1.2.1. Additionally, we assume the perceived safety to be lower when the parents do not use parental controls, compared to the times they use parental controls. If our assumptions prove to be the reality, and the difference between the perceived safety of the children with and without parental control is great, we can understand that the existing parental controls are effective in meeting the needs of the parents. Lastly, there is room left for the parents to offer their suggestions on how to improve parental controls or to share other thoughts on the topic.

Section 2

- 1. Which platforms' parental control are you satisfied with? Possibly why?
- 2. Which platforms' parental control are you dissatisfied with? Possibly why?
- 3. How effective do you think the parental control function "content filtering" is? (e.g., restrictions based on age limit, manual filtering, access to communication)
- 4. How effective do you think the parental control function "usage control" is? (e.g., control the number of hours one can play, limit spending)
- 5. How effective do you think the parental control function "monitoring" is? (e.g., See how your child uses the platform, see how much time your child spends, what it plays / streams etc.)
- 6. Are you using other parental control features not mentioned above? If so, which ones?
- 7. Do you feel that your child is safe on gaming and streaming platforms without parental control? (parental control turned off)
- 8. Do you feel that parental control helps make your child safer on gaming and streaming platforms? (parental control turned on)
- 9. Do you have any suggestions for improving parental control? Do you have any other thoughts regarding parental control you want to add?

Figure 5.2: Survey questions from section 2

Additional questions for parents who do not use parental control

Section 3 consists of questions for parents who do not use parental controls. Figure 5.3 contains the questions from section 3. Firstly, the parents are asked if they feel their children are safe on gaming and streaming platforms without parental controls. On this question, we suppose that most parents will admit to perceiving that their children are safe, as they otherwise might have used some form of parental control. This question can help us verify if our supposition is true. If it proves to be wrong, we can understand that parents perceive the safety of the children as low yet do not use parental controls. This leads to the second question, as this is intending to gain an understanding of the reason behind the choice of the parents to not use parental controls. Finally, the parents are questioned what conditions must be met for them to use parental control, and these answers can be helpful for us when creating the parental control guide, especially if anyone has any complaints about the complexity of any of the platforms. There is space left at the end for parents to add other thoughts regarding the topic of parental control.

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Section 3

1. Do you feel that your child is safe on gaming and streaming platforms without parental control?

- 2. Why do you not use parental controls?
- 3. What conditions must be met for you to use parental control? Do you have any other thoughts regarding parental control you want to add?

Figure 5.3: Survey questions from section 3

Chapter 6

Parental control Guide

As mentioned in the introduction chapter, one of the end products of this study/ research is going to be a parental control guide. The purpose of the parental control guide is to make parental controls easier to configure. The guide is meant to be simple in order for the average parent to use it to set up parental controls on the platforms their children use. The guide consists of instructions on how to set up parental controls on streaming and gaming platforms that we have tested earlier during the information collection phase.

6.1 Reason for creating parental control guide

The reason for why we have chosen to create a guide is because we understand that parents have a hard time setting up parental controls. In the survey we asked parents who do not use parental control the reason for why they are not using it. The results are later discussed in section 7.4.9. The answers to this question revealed that many parents in fact had not even heard about parental control on streaming and gaming platforms until they participated on the survey. Some said it was too difficult to set up, and others said that it was too much work to set up. Many of the parents who did not use parental control said the reason for why they are not doing it is because they feel their children are safe online. If the reason for them feeling their children is safe is a lack of awareness or something else is unclear - and figuring that out would be outside of our scope. This guide is meant to give the parents the information we believe is required for them to make a wise choice about their children's safety on gaming and streaming platforms, as well as how to set up the different parental controls.

6.2 Platforms included

We have chosen to tackle this problem by creating a parental control guide that includes step-by-step instructions on setting up parental controls on the platforms as they are right now. As mentioned earlier, the gaming consoles; Nintendo Switch,

PlayStation, and Xbox have not been thoroughly examined in this thesis so we have chosen not to include them in the parental control guide. The exclusion of these platforms is a downside, as many parents in the survey stated that their children use these gaming consoles as seen in figure 7.5. However, by reducing the number of platforms to be included in the guide, we will give detailed instructions on how to set up the parental controls on the platforms included.

6.2.1 Streaming platforms

These are the streaming platforms that were examined during the platform information collection phase. The survey revealed that all of these chosen platforms are being used by children of the survey respondents, although some are used more than others as seen in figure 7.6. When asking parents what parental control offered by the platforms they are satisfied and dissatisfied with in the survey, some of these streaming platforms were mentioned as seen in figure 7.13. Some parents have said they are satisfied with YouTube Kids, Netflix, NRK TV, Viaplay and Disney+. Meanwhile, some other parents have said they are dissatisfied with YouTube Kids, Disney+ and Netflix. There is a split between parents, as some see it as easy to set up and use, while others find it more challenging as later discussed in section 7.4.8. However, this gap in satisfaction tells us that there is a chance for us to improve the satisfaction of the parents by creating a guide. As the high satisfaction of some parents may indicate that there is a chance to increase the satisfaction level among those with low satisfaction if they learn to use the parental controls and feel they are more in control. The streaming platforms that are included in this guide:

- Amazon Prime Video
- Disney+
- HBO Nordic
- Netflix
- NRK TV
- TV2 Sumo
- Viaplay
- YouTube Kids

6.2.2 Gaming platforms

These are the gaming platforms that were examined during the platform information collection phase. The survey revealed that PlayStation is the most used gaming platform, and the second most used platform is Nintendo Switch as seen in figure 7.5. However, the guide will not include gaming consoles due to lack of necessary equipment, and thereby information as earlier explained. Epic games is the third most used gaming platform and the most popular of the PC gaming platforms and will be included in the guide. Steam is also used by many and will therefore be included. A parent has commented that they are dissatisfied with

Roblox, as there is blood and violence prevalent on the platform as discussed later in section 7.4.8. Battlenet is also included as this platform was also examined during the information collection phase. The gaming platforms included in the guide are:

- Battlenet
- Epic games
- Roblox
- Steam

6.3 Organization and main content

The guide will be in Norwegian as we mainly wish to reach out to parents in Norway. To be able to reach the average parent we have decided to create a simple guide with images and detailed instructions that explain how to set up the parental controls. Each platform will have an introduction about what kind of parent controls are offered, so the parents know what they are going to configure before they continue.

What information each platform collects about its users will also be included in the guide, as parents see collection of personal information as one of the bigger risks the children are facing online as seen in figure 7.11. Additionally, many parents say inappropriate advertising is something they consider a risk the children are facing online which can be closely related to privacy. The platforms offer detailed information about what information they are collecting but, in this guide, we will have a short summary for the parents to easily read. The guide is available in the appendix A.4.

6.3.1 Examples from guide

Figure 6.1 shows an introduction of the parental control functionalities on NRK TV for the user to read before they get started. It states very easily what the platform offers so that the parent knows what they are going to configure before they start.

NRK TV

NRK TV gir foreldrene muligheten til å gi restriksjoner basert på aldersgrense. Alderskontroll kan settes uavhengig av om man har brukerkonto eller ikke. Man får velge mellom fem ulike alderskategorier, og velger deretter en PIN-kode. Denne PIN-koden må tastes om man ønsker å se et program som har en høyere aldersgrense enn den valgte på alderskontrollen.

Figure 6.1: Introduction of the parental control functionalities on NRK TV from the Guide

Figure 6.2 is an example of how the parent is told to navigate to set the parental control. On NRK TV, the only parental control functionality is age control and

that is to be found on the bottom of the page of NRK TV. The red box emphasizes where to click to configure age control.

Slik setter du opp foreldrekontroll (alderskontroll):

1. Naviger til "alderskontroll" nederst på siden:



Figure 6.2: Navigation to set age control on NRK TV

Figure 6.3 is showing how the parent is guided to choose between the possible age limits. The different age limitations are in bold letters for the parent to comprehend easier. As the image shows, the step of choosing the age limit and setting the PIN-code is a combined instruction of two activities. Information about the length of the code and what characters can be used to set the code is also described in the instruction.

2. Det er fem aldersgrenser å velge mellom: 6+, 9+, 12+, 15+, 18+. Velg en aldersgrense og sett en PIN-kode på minst 4 tegn for å aktivere alderskontroll. (Tegn, spesialtegn og sifre er alle tillatt):

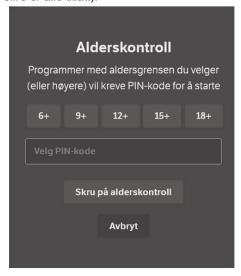


Figure 6.3: Choosing age limit and setting PIN code on NRK TV

Figure 6.4 is an example of how information collected by a platform is shown

in the guide. It is a couple of lines within a box which is easy for parents to read, and the parents are provided with a link if they e.g., wish to read further on why the platform has decided to collect this particular information.

Informasjon samlet inn

Informasjon samlet inn etter samtykke fra personvernregler.

Navnet på produsenten av datamaskinen, mobiltelefonen eller smart-TV, operativsystemet til enheten, nettleserversjonen eller eposten du brukte, og informasjon om tilkoblingen til tjenestene, for eksempel IP-adresse. Mer informasjon kan bli funnet på NRK TV personvernerklærings siden. NRK-TV-Personvernerklæring

Figure 6.4: Information collected by NRK TV

Chapter 7

Discussion and Analysis

This chapter analyzes the parental control functionalities that are implemented on the tested platforms and a comparison between the platform's overall parental controls using a score/value system. This chapter also discusses the security on these platforms, comparing streaming platforms vs. gaming platform's parental controls, and an analysis and discussion of the survey results.

7.1 Parental control functionalities

Scores based on functionalities

Each platform will be given scores based on how they fulfill the requirements for parental control. Streaming and gaming platforms are scored separately due to the differences between them. In other words, they will be scored based on their own set of requirements. Table 7.1 is an example of what requirements are set for You-Tube Kids. This table shows each requirement from the different parental control categories, the parental control functions YouTube Kids offer to fulfill these requirements, and the scores based on this. However, YouTube Kids offer something no other streaming platforms offer, which is why it has the requirement "Restrictions to comment." YouTube has a comment section, whereas YouTube Kids has disabled this functionality, but no other streaming platforms offer a comment section. As it is not relevant for other streaming platforms, this requirement will not be considered when comparing to the others. We wish to look at the requirements for which all streaming platforms should offer parental control functionality.

Category	Requirement	Parental control function	Score
Content filtering	Restrict content by age rating	Choose between 3 age categories	1/1
	Restrict content manually	Can block/report channels and videos	1/1
Usage control	Restrict ability to search	Turn on or turn off searching function	1/1
	Restrictions to comment	Comment section is disabled	1/1
	Setting time limits	-	0/1
	Separate kid profile	Can create individual child profiles	1/1
	Restrict access to settings	Parent authenticates to access settings	1/1
	Restrict specific device	-	0/1
Monitoring	Monitor content watched	Watch history available for each profile	1/1
		7/8	points

Table 7.1: The parental controls on YouTube Kids

Scoring system

Analysis of the parental control functionalities was divided into; No, Unknown, Somewhat, and Yes. These assigned values represent the implementations of the specified functionality on which platform it is set to. Below is an explanation of what each value stands for;

- **No** = No feature exists.
- Somewhat = The application has features which are fulfilling the requirement to some degree. Other functionalities of the application support fulfilling the requirements to some degree, but it is not fulfilling enough to say that the functionality is definite.
- **Yes** = Functionality exists on the platform.
- Unknown (Applies to gaming consoles only): Due to lack of information from not having access to the platform, we cannot say for certain whether certain functionalities exist.

7.1.1 Streaming Platforms

Tables 7.2, 7.3 and 7.9 shows what kind of parental control functionalities was found on each platforms. Table 7.2 illustrates content filtering implementation, Table 7.3 illustrates usage filters implementation and Table 7.9 illustrates monitoring implementation on the different tested streaming platforms.

Content filtering on streaming platforms

Table 7.2 shows the requirements for content filtering on the streaming platforms. YouTube Kids restrict by age rating by giving three age categories for parents to choose from, and parents can block and report both single videos and channels. HBO Nordic has taken another approach, as they offer to lock Kid's section, which has content appropriate for children up to 12. TV2 Sumo and NRK TV, both being

Norwegian streaming platforms offer the parents to choose between the same five age limits as seen in table 2.3. On Disney+, a parent can restrict content by age, the kids' profile automatically restricts content to 13 years and below, but it is also possible to manually configure it to another age limit. Netflix also restricts content based on age and offers the parent an option to restrict content manually. On the other hand, Viaplay and Amazon Prime Video offer restrictions based on age limits, but not manual restrictions.

Platform	Restrict content by age rating	Restrict content manually
Amazon Prime Video	Yes	No
Disney+	Yes	No
HBO Nordic	Yes	No
Netflix	Yes	Yes
NRK TV	Yes	No
TV2 Sumo	Yes	No
Viaplay	Yes	No
YouTube Kids	Yes	Yes

Table 7.2: Content filtering on streaming platforms

Usage controls on streaming platforms

Table 7.3 shows the common requirements we have for streaming platforms on usage control. YouTube Kids offers the parent to create separate profiles for each of their children, and the parent can choose if they will allow the child to use the search function. HBO Nordic has a somewhat separate profile function, as the kid's section can be locked when in use, meaning the child has only access to content within this section. Access to settings is limited for children on YouTube Kids, HBO Nordic, Netflix, and Disney +, but this is done very differently. E.g., YouTube Kids ask the parent to confirm their identity through the Google account, while HBO Nordic removes access to settings while being locked in Kid's section. HBO Nordic restricts access to the searching function to somewhat degree, as they only show content suitable for children in the Kid's section, and all other mature programs will not be reachable by searching. On TV2 Sumo and Viaplay, one can create separate kid profiles, but they are not restricted as one can easily switch between the profiles. NRK TV has no usage controls. Amazon Prime Video is the only platform that allows restricting specific devices.

Platform	Setting time	Separate kid	Restrict spe-	Restrict abil-	Restrict
	limits	profile	cific device	ity to search	access to
					settings
Amazon Prime Video	No	No	Yes	No	No
Disney+	No	Yes	No	No	Yes
HBO Nordic	No	Somewhat	No	Somewhat	Yes
Netflix	No	Yes	No	No	Yes
NRK TV	No	No	No	No	No
TV2 Sumo	No	Yes	No	No	No
Viaplay	No	Yes	No	No	No
YouTube Kids	No	Yes	No	Yes	Yes

Table 7.3: Usage Control on streaming platforms

Monitoring on streaming platforms

Table 7.9 shows the single requirement set for streaming platforms for monitoring. Amazon Prime Video, Disney+, HBO Nordic, NRK TV, and Viaplay are somewhat capable of giving the parent a hint of what the child is watching. E.g., HBO Nordic does not offer a watch list on the Kid's section. However, due to the privacy statement, one can request access to information gathered on an account, and this will include information about what has been watched on the account. Most of these platforms offer a watch history that can show the parent what the children have been watching, but this is not a dedicated monitoring functionality, so it can easily be deleted or erased with time. Therefore, they are scoring "somewhat" compared to, e.g., YouTube Kids that offers a solid monitoring functionality, as the child cannot delete the watch history, and Netflix, which provides a watch history that only the main account has access to.

Platform	Monitor content played/watched
Amazon Prime Video	Somewhat
Disney+	Somewhat
HBO Nordic	Somewhat
Netflix	Yes
NRK TV	somewhat
TV2 Sumo	Yes
Viaplay	Somewhat
YouTube Kids	Yes

Table 7.4: Monitoring on streaming platforms

Summary

These tested platforms allowed you to restrict content by age rating in one way or another, although some only sorted the content into kids and not kids, while other's allowed to sort based on the age rating. None of the platforms allowed you to set time limits. When it comes to monitoring what your child is watching, most

have some sort of monitoring ability, but they are often not part of the parental controls and the logs of what you and what your child is watching can be mixed. The restriction on the comment section is only relevant to YouTube Kids, which has it disabled on all videos marked for kids; for the other platforms, there is no comment section.

Platforms implementations Analysis

Figure 7.3 shows how the tested streaming platforms compare to each other in using parental control categories. Platforms were given a score according to their implementation of these categories. The scores were:

Score	Score represents
1	Yes
0.5	Somewhat
0	No
0	Unknown

Table 7.5: Score values

Furthermore, we consider all categories to be equally relevant, and therefore, a sum of the values of each platform correlates with the level of parental control performance of the platform. When the existence of a parental control functionality is "unknown" it is counted the same as "no" which gives a score of 0.

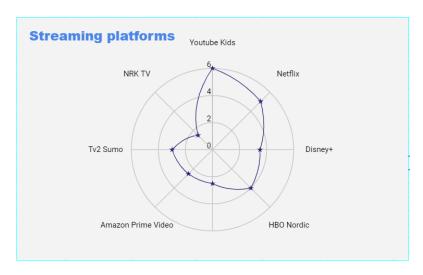


Figure 7.1: Parental control categories implementation on Streaming platforms

7.1.2 Gaming Platforms

Content filtering on gaming platforms

Table 7.11 shows the requirements set for gaming platforms for content filtering. In general, the consoles have much stronger content filtering than the PC platforms. All the consoles allow one to restrict by age rating and restrict access to multiplayer games and a limited ability to restrict content manually. With the PC platforms, only Epic Games allows you to restrict by age rating, only Steam manually, and only Battlenet lets you restrict access to multiplayer.

Platform	restrict content by age	restrict content	Restrict access to multi-
	rating	manually	player
Battlenet	No	No	Yes
Epic Games	Yes	No	No
Roblox	No	No	No
Steam	No	Yes	No
Nintendo Switch	Yes	Somewhat	Yes
PlayStation	Yes	Somewhat	Yes
Xbox	Yes	Somewhat	Yes

Table 7.6: Content filtering on Gaming platforms

Usage controls on gaming platforms

Table 7.12 shows the requirements set for gaming platforms for usage control. Most of the platforms have purchasing restrictions and the ability to restrict communication. Only Roblox lacks purchasing restrictions and Epic Games the ability to restrict communication. All the console platforms could set time limits, while none of the PC platforms can.

Platform	Purchasing restric-	Restrictions to com-	Setting time limits
	tions	ment/communicate	
Battlenet	Yes	Yes	No
Epic Games	Yes	No	No
Roblox	No	Yes	No
Steam	Yes	Yes	No
Nintendo Switch	Yes	Yes	Yes
PlayStation	Yes	Yes	Yes
Xbox	Yes	Yes	Yes

Table 7.7: Usage Control on Gaming platforms

Monitoring on gaming platforms

Table 7.13 shows the implementation of the Monitoring features "purchase monitoring" and "Monitor content played/watched." Battlenet and Xbox have a fea-

ture for monitoring purchases, Epic games and Steam have some features which could monitor purchases to some degree, while Roblox has no feature to monitor purchases. We have not enough data to determine if Nintendo switch and Playstation do implement purchase monitoring. Battlenet, Epic Games, and Roblox do not have a feature to monitor content played. Steam has other functionalities supporting the implementation of content played monitoring to some degree. We do not have enough data to determine if Playstation and Xbox have a feature to monitor content played.

Platform	Purchase monitoring	Monitor content played/watched
Battlenet	Yes	No
Epic Games	Somewhat	No
Roblox	No	No
Steam	Somewhat	Somewhat
Nintendo Switch	Unknown	Yes
PlayStation	Unknown	Unknown
Xbox	Yes	Unknown

Table 7.8: Monitoring on Gaming platforms

Summary

The trend is that there are stronger content restrictions available for the consoles than for the different PC platforms for gaming platforms. All of the consoles can restrict content by their age rating, somewhat of an ability to restrict content manually, and the ability to restrict content manually. Among the PC platforms, only Epic Games allow you to restrict by age rating, only Steam manually, and only Battlenet allows restrictions on access to multiplayer. Roblox does not tick any of the content usage restrictions but has a setting that will only allow the player to play on curated servers, similar to how YouTube Kids works. Certain platforms like Steam and PlayStation can use a web browser as part of the service; the parental control either automatically blocks or allows you to block this service.

With regards to the usage controls, the situation is more equal between PC and console platforms. All platforms except for Roblox have some functionality for purchasing restrictions. Regarding communications restrictions, the situation is similar, with only Epic Games not having this functionality in place. However, all of the console platforms can set time limits, while none of the PC platforms do.

Platforms implementations Analysis

Figure 7.4 shows how the tested gaming platforms compare to each other in using parental control categories. Platforms were valued according to their implementation of these categories. The values used in gaming platforms were the same as those used for streaming platforms shown in table 7.10.

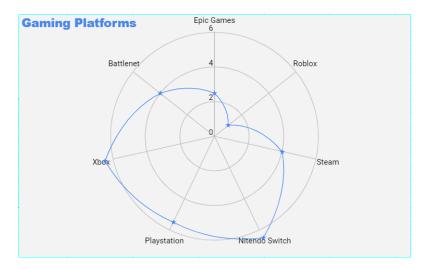


Figure 7.2: Parental control categories implementation on gaming platforms

7.2 Security

7.2.1 Security on Streaming Platforms

The security mechanisms on the different streaming platforms are relatively similar; all of the platforms bar Viaplay uses restrict content using a PIN code. However, there is a security hole existing in certain platforms, such as Amazon Prime Video, which can enter settings and turn off parental controls while in parental control mode without needing to know the PIN. Some platforms like Amazon Prime Video allow you to watch content restricted by parental controls without turning the parental controls off by typing in the PIN code. YouTube Kids and Disney+ allow you to configure a challenge to exit parental controls. This has the advantage of not needing to remembering a PIN, but since older children most likely will be able to solve these, their usability is rather limited. However, YouTube Kids does prompt the parent to log in with their Google account to be able to change the settings, which adds another layer of security.

7.2.2 Security on Gaming Platforms

Security on gaming platforms was limited to PC gaming platforms since this requires access to the platform for testing purposes. Epic Games and Roblox require a PIN in order for the user to access their parental controls. This limits the user's ability to bypass parental controls by editing the settings. On the other hand, Battlenet requires the user to provide their parent's email to access the parental control settings. A link to the parental control settings is then sent to this email. This ensures that only the person who has access to the parent's email can edit the parental control settings. Steam requires a PIN to exit the family view, and this limits the user's ability to bypass the parental controls configured on the family

view.

These security functionalities require that the parent keep the PIN codes protected from the child in Epic Games, Roblox, and Steam. In the case of Battlenet, the parent must not give access to their email to the child. In general, it is also important that the parent is present during the creation of the accounts.

Platform	Monitor content played/watched
Amazon Prime Video	Somewhat
Disney+	Somewhat
HBO Nordic	Somewhat
Netflix	Yes
NRK TV	somewhat
TV2 Sumo	Yes
Viaplay	Somewhat
YouTube Kids	Yes

Table 7.9: Monitoring on streaming platforms

Summary

These tested platforms allowed you to restrict content by age rating in one way or another, although some only sorted the content into kids and not kids, while other's allowed to sort based on the age rating. None of the platforms allowed you to set time limits. When it comes to monitoring what your child is watching, most have some sort of monitoring ability, but they are often not part of the parental controls and the logs of what you and what your child is watching can be mixed. The restriction on the comment section is only relevant to YouTube Kids, which has it disabled on all videos marked for kids; for the other platforms, there is no comment section.

Platforms implementations Analysis

Figure 7.3 shows how the tested streaming platforms compare to each other in using parental control categories. Platforms were given a score according to their implementation of these categories. The scores were:

Score	Score represents
1	Yes
0.5	Somewhat
0	No
0	Unknown

Table 7.10: Score values

Furthermore, we consider all categories to be equally relevant, and therefore, a sum of the values of each platform correlates with the level of parental control

performance of the platform. When the existence of a parental control functionality is "unknown" it is counted the same as "no" which gives a score of 0.

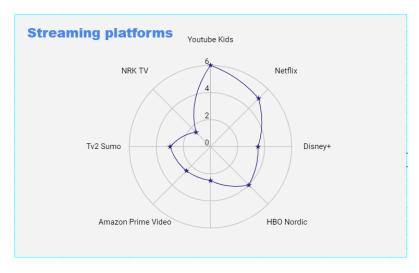


Figure 7.3: Parental control categories implementation on Streaming platforms

7.2.3 Gaming Platforms

Content filtering on gaming platforms

Table 7.11 shows the requirements set for gaming platforms for content filtering. In general, the consoles have much stronger content filtering than the PC platforms. All the consoles allow one to restrict by age rating and restrict access to multiplayer games and a limited ability to restrict content manually. With the PC platforms, only Epic Games allows you to restrict by age rating, only Steam manually, and only Battlenet lets you restrict access to multiplayer.

Platform	restrict content by age	restrict content	Restrict access to multi-
	rating	manually	player
Battlenet	No	No	Yes
Epic Games	Yes	No	No
Roblox	No	No	No
Steam	No	Yes	No
Nintendo Switch	Yes	Somewhat	Yes
PlayStation	Yes	Somewhat	Yes
Xbox	Yes	Somewhat	Yes

Table 7.11: Content filtering on Gaming platforms

Usage controls on gaming platforms

Table 7.12 shows the requirements set for gaming platforms for usage control. Most of the platforms have purchasing restrictions and the ability to restrict com-

munication. Only Roblox lacks purchasing restrictions and Epic Games the ability to restrict communication. All the console platforms could set time limits, while none of the PC platforms can.

Platform	Purchasing restric-	Restrictions to com-	Setting time limits
	tions	ment/communicate	
Battlenet	Yes	Yes	No
Epic Games	Yes	No	No
Roblox	No	Yes	No
Steam	Yes	Yes	No
Nintendo Switch	Yes	Yes	Yes
PlayStation	Yes	Yes	Yes
Xbox	Yes	Yes	Yes

Table 7.12: Usage Control on Gaming platforms

Monitoring on gaming platforms

Table 7.13 shows the implementation of the Monitoring features "purchase monitoring" and "Monitor content played/watched." Battlenet and Xbox have a feature for monitoring purchases, Epic games and Steam have some features which could monitor purchases to some degree, while Roblox has no feature to monitor purchases. We have not enough data to determine if Nintendo switch and Playstation do implement purchase monitoring. Battlenet, Epic Games, and Roblox do not have a feature to monitor content played. Steam has other functionalities supporting the implementation of content played monitoring to some degree. We do not have enough data to determine if Playstation and Xbox have a feature to monitor content played.

Platform	Purchase monitoring	Monitor content played/watched
Battlenet	Yes	No
Epic Games	Somewhat	No
Roblox	No	No
Steam	Somewhat	Somewhat
Nintendo Switch	Unknown	Yes
PlayStation	Unknown	Unknown
Xbox	Yes	Unknown

Table 7.13: Monitoring on Gaming platforms

Summary

The trend is that there are stronger content restrictions available for the consoles than for the different PC platforms for gaming platforms. All of the consoles can restrict content by their age rating, somewhat of an ability to restrict content

manually, and the ability to restrict content manually. Among the PC platforms, only Epic Games allow you to restrict by age rating, only Steam manually, and only Battlenet allows restrictions on access to multiplayer. Roblox does not tick any of the content usage restrictions but has a setting that will only allow the player to play on curated servers, similar to how YouTube Kids works. Certain platforms like Steam and PlayStation can use a web browser as part of the service; the parental control either automatically blocks or allows you to block this service.

With regards to the usage controls, the situation is more equal between PC and console platforms. All platforms except for Roblox have some functionality for purchasing restrictions. Regarding communications restrictions, the situation is similar, with only Epic Games not having this functionality in place. However, all of the console platforms can set time limits, while none of the PC platforms do.

Platforms implementations Analysis

Figure 7.4 shows how the tested gaming platforms compare to each other in using parental control categories. Platforms were valued according to their implementation of these categories. The values used in gaming platforms were the same as those used for streaming platforms shown in table 7.10.

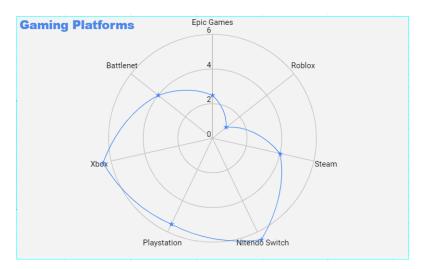


Figure 7.4: Parental control categories implementation on gaming platforms

7.3 Streaming vs gaming platforms

Generally, we found that there were stronger parental controls available for streaming and console platforms than there were for PC gaming platforms. All of the streaming and console platforms had the possibility of restricting content by age rating while only one of the four PC platforms we investigated had this ability. Time limits were only available on the consoles with none of the PC gaming or

streaming platforms having the option for this. The streaming platforms have generally somewhat of an ability to monitor the content while this has been lacking in the PC platforms except for Steam. We were not able to find information about monitoring for Xbox and Playstation, but Nintendo advertises the ability to see what your child is playing.

7.4 Survey results

7.4.1 Which platforms do people use

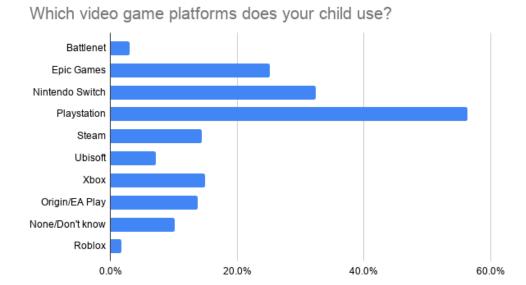
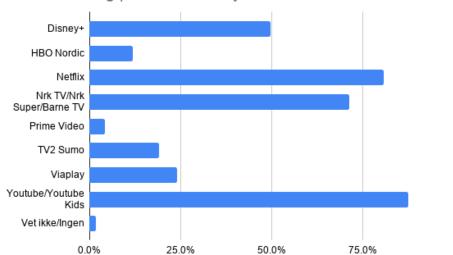


Figure 7.5: Which gaming platforms do children use

Generally, consoles were more popular than PC platforms. A majority (56.3%) of respondents reported to their child using PlayStation and slightly less than a third (32.3%) reported their child using Nintendo Switch. The most popular PC platform Epic Games was used by about a quarter (25.1%) of the respondents. The rest of the platforms were at less than 15% usage. The least used platform was Roblox which only 1.8% of parents responding with their child using.



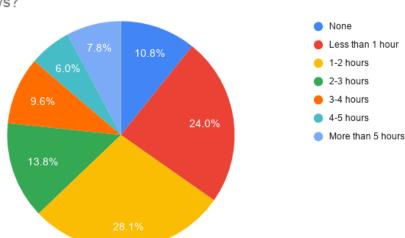
Which streaming platforms does your child use?

Figure 7.6: Which streaming platforms do children use

Among streaming platforms, we found that YouTube (87.4%), Netflix (80.2%), and NRK TV (70.7%) were used by an overwhelming majority of our respondent's children. Disney+ was used by slightly less than half (49.1%), while all the other platforms had less than 25% of children using them. The least used platform was Amazon Prime Video which only 4.2% of respondents reported that their children used.

7.4.2 Hours spent on weekdays

A large majority (76.7%) of parents said their children used less than 3 hours on gaming platforms on weekdays. The biggest group were those that used gaming platforms between 1 to 2 hours as shown in figure 7.7. Moreover, children who spend between 0 and 2 hours on gaming platforms account for roughly half of the respondents. Around 30% use gaming platforms between 2 and 5 hours, while 7.8% use them more than 5 hours on weekdays. 10.8% of children do not use gaming platforms at all.

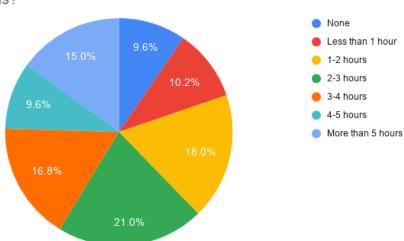


How many hours does your child spend on gaming platforms on weekdays?

Figure 7.7: Gaming on normal days

7.4.3 Hours spent on weekends

More than half of the children (48%) use less than 3 hours on gaming platforms on the weekends. The biggest group are those who use them between 2 and 3 hours and is followed by those who use between 1 and 2 hours as seen in figure 7.8. The hours spent on gaming platforms on weekends vary more than during weekdays. The number of children who do not use gaming platforms at all does not change significantly during the weekends as opposed to weekdays. However, it does drop by 1.2%, meaning that this percentage only uses the gaming platforms during the weekends.

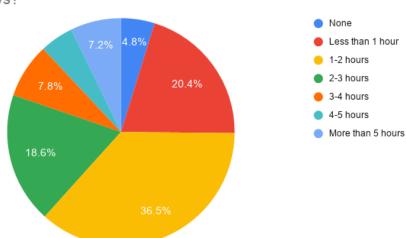


How many hours does your child spend on gaming platforms on weekends?

Figure 7.8: Gaming on Weekends

7.4.4 Hours spent on weekdays

Most (80.3%) of the children use less than 3 hours on streaming platforms on weekdays, with about half of these spending between 1 and 2 hours as shown in figure 7.9. The rest of the children use more than 3 hours on streaming platforms with the biggest group being those who use between 3 and 4 hours. A small percentage (4.8%) of the children do not use streaming platforms at all which is lower than children who do not use gaming platforms.

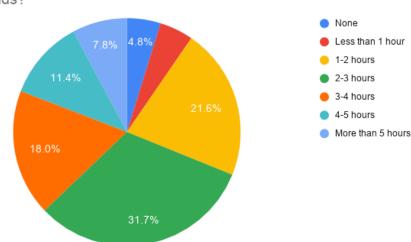


How many hours does your child spend on streaming platforms on weekdays?

Figure 7.9: Streaming on Weekdays

7.4.5 Hours spent on weekends

During the weekend more than two-thirds use streaming platforms more than 2 hours a day with the largest group being those who use it between 2 and 3 hours as seen in the figure 7.10. In general, as with the gaming platform, there's a trend of children using streaming platforms more during the weekends. The number of children who do not use streaming platforms on weekends is unchanged.



How many hours does your child spend on streaming platforms on weekends?

Figure 7.10: Streaming on Weekends

7.4.6 Risks parents feel children face

Some predefined options were given when parents were asked what risks they feel their child is exposed to on gaming and streaming platforms. Figure 7.11 shows the risks and the relative size of respondents who viewed each suggested risk as a risk their child/children faces.

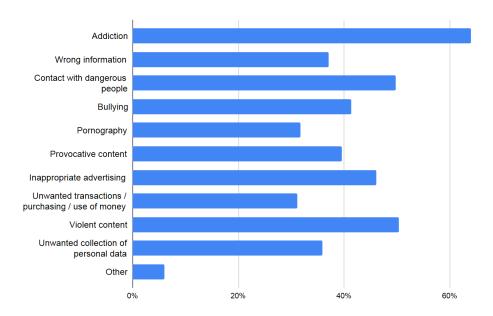


Figure 7.11: Risks children face according to parents

Over a half of the respondents (64,7%) feel that their child is exposed to the risk of addiction on streaming and gaming platforms. Addiction is thereby the most feared risk and is followed by violent content which is agreed upon as a major risk by slightly more than half of the respondents (50,3%). Slightly less than half fear their children will encounter dangerous people (49,7%).

Respondents had the opportunity to write their own answers if they felt the predefined options did not cover enough. Some other additional fears and risks mentioned by parents listed under "other" in figure 7.11 are: Muscle and skeletal disorders, passivity, social distance, lack of social affiliation as friends are in gaming environments, and echo chamber ¹. The results can be found in appendix A.1.2.

7.4.7 Usage of parental control functionalities among respondents

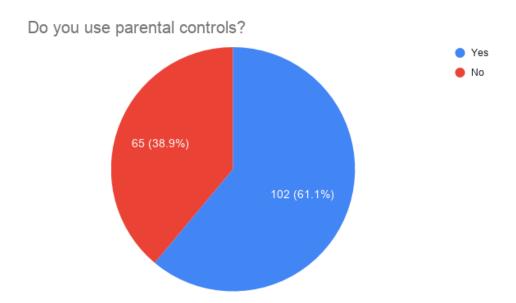


Figure 7.12: Do you use parental controls?

The majority of the respondents (61,1%) confirm that they use the built-in parental controls. The high number of parents reporting that they are using parental controls could be correlated to that those who use parental controls being more likely to find a survey about it more interesting to participate in than those who do not use it.

¹Echo chamber is an environment in which a person encounters only beliefs or opinions that coincide with their own so that their existing views are reinforced and alternative ideas are not considered.

7.4.8 The parent's use of Parental controls

This section of survey results comes from the 61.1% of the respondents who answered that they use built-in parental controls 7.12.

Parents happiness with existing parental controls

In total, we got 68 answers by parents about which platforms they liked and 36 about which they did not. However, due to the parents being asked to write their own answers, a lot of answers had to be scrapped as they listed parental control tools outside the scope of our thesis.

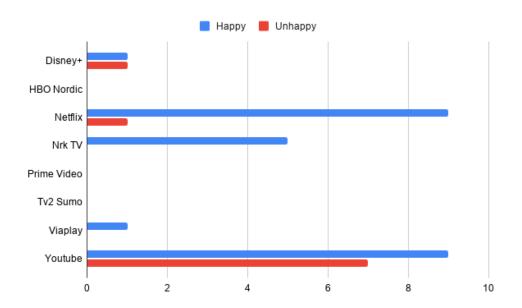


Figure 7.13: Parents happiness with streaming platforms

In general, we can see that the parents surveyed were happier with the parental controls for streaming platforms than those for gaming platforms. Netflix and NRK TV had an overwhelming number of the respondents being happy, with Netflix a lot of people cited it being easy to set up as their reason. YouTube Kids had slightly more happy than unhappy parents. Some parents voiced concern that a lot of the ads shown on YouTube Kids were inappropriate and that YouTube's own algorithms which filter content were not good enough and too easy to circumvent. Disney+ had one person happy and one unhappy, while Viaplay was only mentioned by one respondent who was happy with it. HBO Nordic, Amazon Prime Video, and TV2 Sumo were not mentioned by any of the parents.

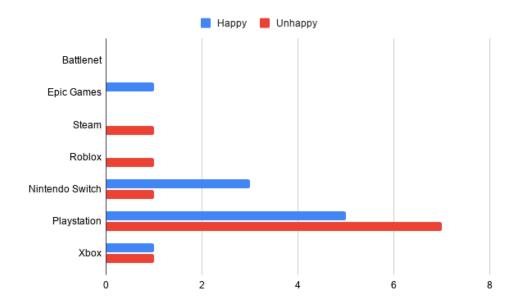


Figure 7.14: Parents happiness with gaming platforms

As mentioned earlier parents were generally less happy with gaming platforms than streaming platforms. PlayStation received both the greatest number of happy and unhappy parents, but with more unhappy than happy ones. Two of those that were unhappy cited it being difficult to set up as their reason, however there were contradicting responses from those being happy citing its ease of use. Nintendo had two respondents being happy and one being unhappy. The unhappy cited that it only gives the ability to trigger an alarm when the child is playing too long, however according to Nintendo themselves it should be possible to automatically interrupt the system when the timer is up [41]. However, as we haven't had the ability to properly test the consoles we cannot verify either Nintendo's or the parent's claim about this. One user unhappy with Steam cites "parental controls not existing" as their reason, but as shown earlier in the information collection part of this thesis, Steam does have some parental control functionalities. With Roblox, one parent cited "violence and blood" as their reason for being unhappy with its parental controls.

The effectiveness of the parental control function "content filtering"

Most of the respondents that use parental controls find content filtering functions effective or very effective, with almost a half of the respondents finding content filtering functions effective parental controls. As shown in figure 7.15. Comparatively few of the respondents (18.7%) do not find content filtering functions effective or do not use content filtering. Even though over a half of the respondents find content filtering effective, the percentage is not significant enough to suggest that content filtering is flawless.

Since almost another half of the respondents do not seem to find content filtering effective or do not use them, the effectiveness of content filtering could be considered average. Of course, this does not show the whole picture since the respondents who do not use content filtering functionalities could lack information on the available functionalities or find them too complicated to use. So, they completely stop using them, or the platforms they use do not have content filtering functionalities. The fact, though, is that content filtering is seen to be effective or very effective by the majority of the respondents, even though this majority isn't significant enough to consider the existing content filtering as well received. Because of this reason, there needs to be more information available on what content filtering is available and some improvements on the existing implementations especially since the percentage that finds them neither effective nor ineffective is biggest compared to usage controls and monitoring functionalities.

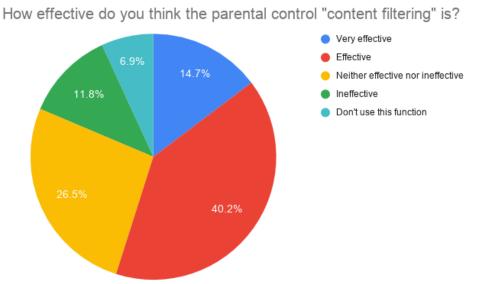


Figure 7.15: content-filtering-effectiveness

The effectiveness of the parental control function "usage control"

The majority of the respondents (68.6%) find usage control functions effective or very effective, as shown in figure 7.16. This percentage of respondents is considered significant. Additionally, almost none finds the usage control functions ineffective, and ultimately no one finds them very inefficient. This shows that the existing usage controls are generally effective and that usage controls perform better than content filtering on the surveyed platforms. Nevertheless, some respondents do not use usage controls, which could be because the platforms they use do not have them.

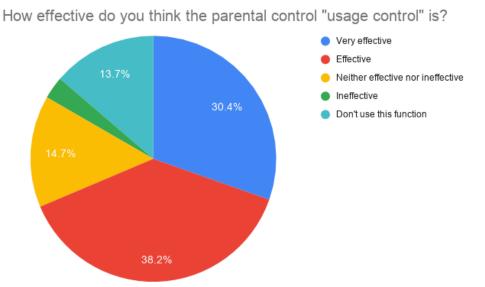


Figure 7.16: Usage-control-effectiveness

The effectiveness of the parental control function "monitoring"

Over a half of the respondents find monitoring functions effective or very effective, as shown by figure 7.17. This suggests that the existing monitoring functions are good. Very few thought monitoring was ineffective however more than 40% either didn't use it or said it was neither effective nor ineffective. This shows that there is room for improvement.

There could be several reasons resembling content filtering since the charts almost resemble. However, the difference is that the number of respondents who do not use monitoring functionalities is more considerable (22.5%) in this case.

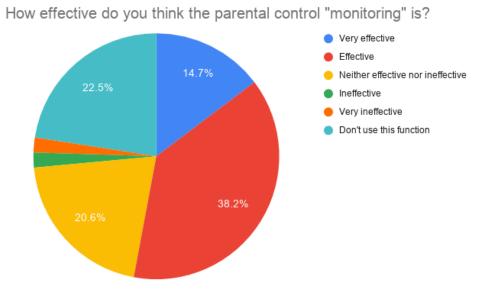


Figure 7.17: Monitoring-effectiveness

Other parental control features that are not mentioned above that the parents use.

The survey included a section whereby the participants could write which parental control features they use that were not included in the prior survey questions, there were 18 responses from the participants and 13 of them answered parental control features that are out of the scope of this research like DNS filters, IOS screen time and Telenor. 5 of the respondents answered that they also use a supervisor approach to parental control. These were there answers; 7.14

Respondents	Responses
Respondent A	"Through daily and open dialogue, checks, full
	control of all accounts, logins and passwords
	etc."
Respondent B	"Talk, educate and guide my kid about safe use
	of internet."
Respondent C	"I follow what is played and streamed."
Respondent D	"Sitting with my child when he plays, watching
	movies."
Respondent E	"Limits time spent by the child on the tele-
	phone."

Table 7.14: Other parental controls used by parents

Low sense of safety without parental controls

Do you feel your child is safe on gaming and streaming services without parental controls?

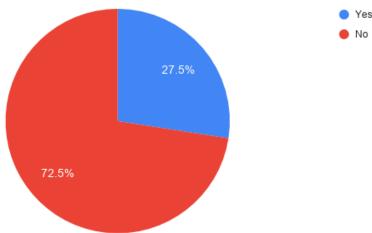


Figure 7.18: Do you feel your child is safe on gaming and streaming services without parental controls?

The majority of the respondents (72,5%) who use parental control do not feel that their child is safe on streaming and gaming platforms without parental control. The remaining respondents (27,5%) said they do feel their child is safe on streaming and gaming platforms even without parental controls. Yet all the respondents who replied to this question are users of parental controls. This can raise the question of why parents who feel their child is safe without parental controls use parental controls despite the feeling of safety.

The reason can be that the respondents do not feel their child is directly unsafe as they may have a different threshold for what they consider safe and not. In other words, maybe they feel their child is safe, but want to control children's use of these platforms and be prepared for things to go wrong by being on the safe side. However, most parents who use parental controls are concerned about their child's safety and feel they are not safe. This suggests that awareness of the risks children face can among parents increase the use of parental controls.

Parental controls and increased sense of safety



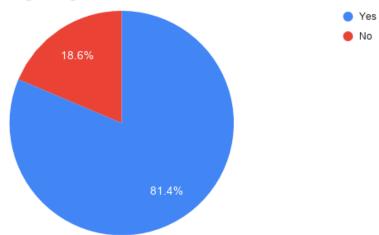


Figure 7.19: Do you feel your child is safe on gaming and streaming services without parental controls?

The majority of the respondents (81.4%) feel parental controls are helping to make their child safer on gaming and streaming platforms. In other words, more than 4 out of 5 parents who use parental controls see the benefit that is keeping their children safe by using parental control.

Suggestions for improvement and other thoughts regarding parental control

This question allowed the respondents to share their other suggestions or thoughts in their own words. This was a voluntary question where respondents who used parental control were given the space to write. Some of the answers are more valuable to discuss than others as some are more related to our thesis and within our scope. The responses can be found in appendix A.1.2.

One respondent state that parental control is important but is concerned that many people know too little about the subject. The respondent is therefore suggesting that schools could arrange courses or provide information about the dangers around this and how parental control is used.

As the respondent states, parents may indeed benefit from schools shining a light on this topic. Our contribution here will be the parental control guide. The parental control guide created during this thesis will be sent to the schools that participated in the survey first and foremost. The schools will then make it available for the parents, and the parents will then be able to familiarize themselves with parental controls on some of the most used platforms by children. The respondent says most people might not know about parental controls, which gives the idea that our approach to creating the parental control guide with step-by-step instructions with images was a practical approach to reach the average parent with none to little knowledge of the topic.

Another respondent says they do not know how to set up parental control, or how to find it on the different platforms. This is a person who already uses parental control yet is stating that they find it challenging on some platforms. This shows that even parents who use parental controls regularly could have use of a parental control guide.

More clear age controls for both gaming and online content are wanted by another respondent. The respondent admits that the features might be there already, but that he/she has not had the capacity to get familiarized with it. As we have seen earlier when testing the platforms, the majority of streaming platforms 7.2 and over half of the gaming platforms 7.11 offers some form of age control. Another respondent says they want a log of watched programs. As we know after testing streaming platforms, YouTube Kids, Netflix, and TV2 Sumo offer monitoring of the playlist while all other streaming platforms offer the same to somewhat degree 7.9. Unfortunately, we may not be able to suggest changes to the platforms that have chosen not to offer age controls or a definite log of what is being watched. However, our parental control guide shows how to set up age controls and how to find the log of programs watched on the platforms that do offer it, which will help parents get familiarized with the functionality.

Some respondents are stating that the existing parental controls should be improved. One respondent says that parental controls should have a greater degree of adaption and brings up Roblox as an example. The respondent says that Roblox offers parents the ability to block violent/inappropriate content and that the child will then lose the ability to chat with friends. Maybe they want to regulate content without losing the chat functionality. Another respondent says they want to regulate the videos beforehand. And another respondent says that Steam should have better controls for games but is not specifying what to improve. The same respondent wants better controls for app games on Apple, while another respondent wants better control over TikTok. This is however not included in our scope. Another respondent suggests that more options to specify the parental controls would be good. In addition, another respondent is asking for an intuitive layout. This response emphasizes that setting up and using parental control can sometimes be far from intuitive. Two other respondents want to have a system where they can control every platform from. This could simplify the process of doing parental control significantly and reduce time.

Some respondents are not confident in leaving everything to the parental controls existing on the platforms. One respondent says they are uncertain about leaving it up to the built-in controls as they want to have an overview themselves. Five parents say they want to sit with the child and watch what they watch, and educate the child on what they should do and not do, which is a form of supervising. Two of the respondents are also concerned that their children can surpass parental controls easier as they are more often digitally knowledgeable than their parents. Another parent is emphasizing that the child should learn to navigate themselves and make good decisions, saying that control and independence of the child should be balanced.

Some respondents are more concerned about social media platforms with chatfunctionalities. One parent is saying that they can never know who the child is chatting to and that many things happen on chat. Another parent wants to sort the chat based on content and vocabulary/bullying. This is also outside of our scope, but the concerns of parents are valid to shed light on.

7.4.9 Parents not using parental controls

The child's safety on gaming and streaming platforms without parental controls

Do you feel your child is safe without parental controls?

• Yes
• No

48 (73.8%)

Figure 7.20: Do you feel the child is safe without parental controls?

A significant majority (73.8%) of those that did not use parental controls felt that their child was safe on streaming and gaming platforms without it turned on, this is in stark contrast to those that did user parental controls where only 27.5% felt safe without it turned on. However, with parental controls turned was slightly lower than among those that used parental controls were 81.4% felt that their child was safe while using gaming and streaming platforms.

Why do you not use parental controls?

The parents who did not use parental controls were asked to give a reason why they did not. We provided four alternatives as well as the ability for the parents to write in their own reasons. The additional reasons provided by the parents have been examined and sorted into rough categories in the chart below. It should be noted that parents could cite multiple reasons for not using parental controls, so the total number of answers is higher than the number of respondents answering the question.

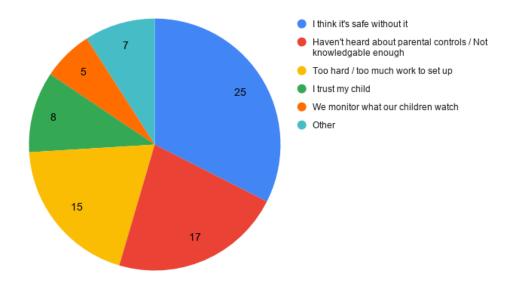


Figure 7.21: Why do parents not use parental controls

The most common reason the parents gave with a total of 25/65 respondents giving it as a reason for not using parental control was that they felt their child was safe without it. 16 of out the 65 respondents cited them not knowing about parental control as their reasoning for not using it. 9 of the parents thought parental controls were too hard to set up, while 6 thought it was too much work to set up. 8 of the parents felt their child could be trusted online, some cited their age as the reason while other cited their children as being very careful while online. Five out of 65 parents cited they monitor everything the child is watching and therefore did not feel it's necessary to use parental controls, some even said that the child is always with a parent while using any of the platforms. Two of the parents cited parental controls as being too invasive and filtering content they viewed as okay to watch for their child.

Parents thoughts regarding parental controls and what they would want to add in order to use them.

The answers gotten from this question can be divided into these categories; "Nothing is needed" only two respondents are in this category, "The child doesn't need it for now", "need for more information about parental controls" and "Parental control improvements". Some of the answers are not relevant to the discussion in our thesis than others. The responses can be found in appendix A.1.4.

As mentioned above, not all respondents answered the question, for example, one respondent answered "Nothing" meaning that nothing can be done for him or her to use parental control. This respondent did not add a reason for this and therefore will be excluded. Additionally, 35 of the respondents left it blank.

The child does not need parental controls now

9 of the respondents can be categorized in the "The child does not need parental controls now" category. The trend here seems to be that the parents think the children are still young and since they are not actively on streaming or gaming platforms there is, therefore, no need for parental controls. Some other parents prefer a more supervisory approach to parental control, by guiding and instilling the right morals in their child they feel like this is the right approach that works better. Some other parents are waiting to see if they need them if they observe something from their children, this suggests that these parents either have a lot of trust in their children or they feel that the parental controls are too much work and maybe need them only in the right moment. Overall, the majority of the respondents in this category seem like they will end up using parental controls in the future and there our parental control guideline could be helpful to this particular group of parents. Table 7.15 shows the answers that respondents provided which fall into this category.

Respondent	Answer
Respondent A	If I had felt that the child was exploring sites/games that were
1	not suitable for the child's age or had been in contact with
	others online.
Respondent B	When the child starts using PC, YouTube or starts playing
	against others online via console.
Respondent C	Currently has a good overview of what the kids do on the In-
	ternet. This will not be the case for a long time. Must consider
	this asap.
Respondent D	If I had younger children who did not have the values I have
	already learned mine.
Respondent E	That the child tells about inappropriate things she has seen/-
	gained access to. Trust that the child does not actively seek
	out such.
Respondent F	I want to use parental control the day my child gets access to
	social media. As of now, we stick to the age limit of 13 years,
	i.e, my child does not have access to various social media yet.
Respondent G	Has used age restriction in e.g. Netflix. It works fine. Have
	also tried screen time limitation. But it did not work so well.
	Rather try to enter into dialogue and be a good example.
Respondent H	When necessary, it will be inserted.
Respondent I	If we see / discover signs that it is necessary
Respondent J	I kind of have parental control everything they download I
	must approve. Plus, I play a lot with them. I talk a lot with
	them about what is Okay language use, etc. If I hear ugly
	language use in a chat, I tell those in question, regardless of
	whether it is my or someone else's children.

Table 7.15: The child does not need parental controls now

Parental control improvements

8 of the respondents can be categorized in the "Parental control improvements" category. These parents have tried some parental controls and have felt that they worked badly or that they are too complicated for use. Again, the parental control guide that we made could be really helpful for this group. The reason behind our decision to create a parental control guide was echoed by the answer given by this category of respondents, one respondent answered that they would use parental controls if there were easy to use, which shows that a parental control guide could be useful to this respondent. The parental control guide is included in chapter 6 and guides the parents on how to configure and use parental controls on the tested platforms in this thesis. Another solution could be having an integrated platform of different parental controls, this is mentioned in the conclusion chapter. Figure 7.16 shows the answers that respondents provided which fall into this category.

Respondent	Answer
Respondent A	Easy to set up, easy to customize.
Respondent B	It must be simple and must work. Have only tried one user on
	Mac but it worked poorly.
Respondent C	Less restrictions on content
Respondent D	Less restrictions.
Respondent E	Greater control.
Respondent F	Easier to use.
Respondent G	Parental control must not prevent / cause things you do not
	want to be blocked.
Respondent H	That it does not require too much administration.

Table 7.16: Parental control improvements

Need for more information on parental controls

7 of the respondents can be categorized in the "need for more information on parental controls" category. This category of respondents might find this thesis interesting to read as there is not much information on the internet on the specific parental controls on gaming and streaming platforms. 7.17 shows the answers that respondents provided which fall into this category.

Respondent	Answer
Respondent A	I need to learn something about what opportunities you have.
Respondent B	Need more info about parental control. We're probably a little
	too naive.
Respondent C	More information about what is available on the various plat-
	forms.
Respondent D	Need guidance.
Respondent E	That someone helps us with that.

Table 7.17: Need for more information on parental controls

7.5 Discussion

7.5.1 General questions for all parents

The results of the survey show that most children spend a considerable amount on both gaming and streaming platforms. Parents feel their children spend both more time on gaming and streaming platforms on the weekends compared to weekdays. For example, the number of parents saying their children used more than 2 hours on gaming platforms went from under 40% on weekdays to more than 60% on weekends. The number who reported the children as playing more than 5 hours almost doubled from 7.8% to 15%. You can see very similar numbers on the streaming platforms with those spending more than 2 hours going from less than 40% during the weekdays to almost 70% during the weekends. However here there was almost no difference in the number of people spending more than 5 hours on the platforms. Around 10% reported their children spending no time on gaming platforms and about 5% of them spending no time on streaming platforms.

Our findings show that the most popular streaming platforms have more users than the most popular gaming platforms by significant. 87.4% of the parents reported their children using YouTube/YouTube Kids, the most popular streaming platform in our survey. This is more than 30 percentage points higher than the most popular gaming platform PlayStation which had 56.3% of parents answering that their child used it. Netflix (80.2%) and NRK TV (70.7%) were also significantly ahead of PlayStation in the number of users. This gap cannot be explained by more children using streaming platforms than gaming platforms as the gap here was very small, only about 5 percentage points (95% vs 90%). For YouTube and NRK TV, the platforms being free could be a reason why they are more widespread as there is no barrier to entry for using it. Of course, similar things could be said for the PC platforms which are free to use, however, the hardware required for PC gaming can be quite expensive, so it makes sense the most children do not use these platforms. However, Netflix which costs money is still close to 25 percentage points ahead of PlayStation while costing money. Another reason why the streaming platforms see more widespread usage is that for the gaming platforms people have less of a reason to use the different platforms as most can play the same games. Xbox and PlayStation do very similar things and have mostly the same games compared to YouTube, NRK TV, and Netflix which has for the most part different content available, so there is less of a reason for people to own multiple console platforms.

Our survey found that more than 60% of parents said they used parental control. However, one should take into consideration that there is a possibility parents who don't use parental controls have less of an interest in a survey about parental controls so the numbers should always be taken with a small grain of salt.

7.5.2 Parents who use parental control

Parents satisfaction with parental controls

As mentioned earlier, parents seem to be generally more satisfied with the existing parental controls on the streaming platforms than the gaming platforms. This can be seen when comparing figure 7.13 and 7.14.

NRK TV and Netflix have satisfied many parents greatly compared to many of the other platforms. As we have already seen while testing the platforms, NRK TV has one of the easiest parental control functionalities which only allows the parent to choose an age limit and set a PIN code for protection. This is interesting as it shows that a platform does not necessarily require an advanced variety of parental controls to satisfy the parents. On the other hand, Netflix not only lets the parents restrict based on age but can also restrict specific content manually. Netflix also offers the parent to create child profiles, monitor what the child watches, and restrict access to advanced settings such as payment settings. Netflix compared to NRK TV offers more variety of parental controls, which could give the reason to believe it is more appreciated among parents. In other words, the level of complexity and variety of the parental controls offered does not seem to be a clear indication of the satisfaction of parents, as both complex and less complex parental controls are scoring high in satisfaction.

The parental controls on YouTube Kids also received a lot of feedback, mostly positive but many negative as well. This is a platform that offers a huge variety of different parental controls that no other streaming platforms offers, e.g., restriction to search function. A reason why parents are more dissatisfied with YouTube Kids/YouTube can be that many children might use the ordinary YouTube which offers no parental control, and in the survey, we gave the combined option: "YouTube/YouTube Kids". It could also be that the parental controls on YouTube Kids are perceived as complicated or time-consuming compared to the other platforms, such as NRK TV.

The high amount of feedback for NRK TV, Netflix, and YouTube Kids can also be explained by their popularity among children and parents. As we have seen from Figure 7.6, these three platforms are also the most used, and will therefore naturally receive the most feedback as well.

Gaming platforms received less positive feedback compared to streaming platforms, and here Nintendo Switch and PlayStation received the most feedback as we have seen in figure 7.14. PlayStation received more negative than positive feedback, while Nintendo switch received more positive than negative feedback. Unfortunately, we were not able to test these gaming consoles as already mentioned earlier. This means unfortunately that our parental control guide is not going to help the users of PlayStation to improve the use of parental control. On the other hand, Steam and Roblox have gotten one negative feedback each. Steam got one negative feedback saying the parental controls do not exist, but this we already know is untrue after testing. Roblox has blood and violence, but this is more of a feedback to content than to the parental control functionalities them-

selves. The parent may be concerned that the violent content on Roblox cannot be blocked by the functionalities of parental control. This is the case as Roblox does not offer specific parental control functionalities, rather they are more focused on restricting communication. However, Roblox offers a setting for only allowing curated content which means age-appropriate games for those under 13 years of age. This could be helpful for the parent who is concerned about the blood and violence found in games on Roblox.

Effectiveness of content filtering, usage control and monitoring

As we have seen from the survey results usage control is the parental control category that offers the controls that most parents agree is effective, referring to figure 7.16 compared to figure 7.15 and 7.17. The second most effective parental control deemed by parents is content filtering and the last one is monitoring. Fortunately, all of the parental control categories are scoring over half on effectiveness.

As we have seen from testing the platforms the parental control category usage control is the category that generally offers the most functionalities. When looking at the requirements we had set for each parental control category in methodology in table 3.1, it is clear that the category usage control has more requirements than the categories monitoring and content filtering. So, to see that usage control is scoring high on effectiveness is very fortunate considering the number of functionalities that should be in place for parents to feel safe about their children.

It is not surprising that monitoring is scoring lowest as most streaming platforms do not offer a definite monitoring functionality to see what the children watch. Most of the streaming platforms offer monitoring to a somewhat degree as one can see what was recently watched. However, these are not actual parental control functionalities. Only YouTube Kids, Netflix, and TV2 Sumo offer a proper monitoring functionality as seen in table 7.9. Compared to this, the gaming platforms are not scoring that much better either, as only Nintendo switch offers a definite monitoring functionality to see what the children are playing as seen in table 7.13. There is room for improvement of monitoring functionality. Maybe more platforms should offer a definite parental control functionality for monitoring a child's activity.

The reason why content filtering might get a lower score on effectiveness compared to usage control might be that parents feel that it is challenging to know what content to restrict. As we have seen during information collection while testing, all streaming platforms offer content filtering based on age rating as seen in table 7.2. This raises the question of why parents might find it challenging to restrict content. It could be that they disagree with the age ratings, or wishes more platforms offered the opportunity to restrict content manually. On the gaming platforms on PC, content filtering is generally weaker than on gaming consoles as seen in table 7.11. Maybe the parents find it challenging to use the content filtering functionalities because they perceive it as less intuitive to navigate. There is

room for improvement in content filtering. All gaming platforms should offer content filtering based on age rating, manual restriction, and restriction to content created by others/multi-playing. More streaming platforms should offer manual content filtering. Both streaming and gaming platforms should offer more intuitive content filtering functionalities. Maybe it would be helpful for parents to see what content each age rating includes and excludes.

Other parental controls parents use

As seen in table 7.14, many parents consider a form of supervision parental control. Out of the 18 answers this question received, 5 of them are shown in this table. The rest of the 13 answers are as mentioned other forms of parental control which is out of our scope. E.g., parental control offered by Telenor is network level control as we have mentioned earlier when addressing other definitions of parental control in chapter 2.

Earlier in chapter 2, the literature review was done. A study researching the differences between supervision and restriction showed how supervision had a stronger relationship to high-risk behavior online. This study was as mentioned limited to adolescents. However, it is relevant to consider that introducing restrictions during the transition from childhood to adolescence might be more challenging than starting to restrict the child from its younger age.

However, these parents who use daily and open dialogue, full account control with logins and passwords, educating, sitting with the child while he/she is watching or playing are also the same parents who have stated that they do use parental control other than these mentioned here. On the other hand, it could also be that they considered this to be parental control and therefore answered yes to using parental control, even though it was made clear that this was not defined as parental control in this survey. Only built-in functions on platforms were defined as parental control, yet it is relevant to point out that many parents do in fact consider this approach of supervision as parental control. Yet what we have learned from the literature review, is that supervision alone might not be enough to ensure that the child is not engaging with high-risk behavior online. Supervision and restrictions might both play a role in keeping the children safe.

Suggestions and other thoughts

As already discussed earlier, parents who use parental control shared their suggestions for improvement and other thoughts. From what has been extracted and discussed, we know that some parents would like it if schools took a more active role to educate parents. Here we believe our parental control guide can be useful for schools to share with the parents.

Even some who use parental control find it challenging to navigate through the parental controls, which gives the idea that our parental control guide can be useful even for the parents who normally use parental control. Some respondents had specific ideas on how to improve the parental controls: having clear age control, dedicated monitoring functionalities, a greater degree of adaption of controls, regulations of videos beforehand, and intuitive layout. This shows that the platforms have clear demands from the parents, and from testing the platforms we can understand why parents are asking for these improvements. As many platforms do not tell what age control is allowing and disallowing, many platforms lack a proper monitoring function, and not all platforms are intuitive to navigate through.

Some respondents say they do not trust the built-in parental controls enough to leave it up to them alone, and supervising with restriction is a good way to keeping the children safe online. This especially is true when children can if they want to bypass some of the controls if they give it a good try.

Others are more concerned about social media platforms which are outside of our scope.

7.5.3 Parents who do not use parental control

Reason for not using parental control

Most parents who do not use parental control say the reason for not using it is because they believe it is safe without it, as seen earlier in figure 7.21. Awareness of risks could change the mind of these parents and maybe lead them towards making use of parental controls.

The second most common reason is that many parents had not heard about parental control before participating in this survey. In other words, this survey might have helped some parents to gain some degree of awareness about parental controls. Awareness is again the key to make more parents use parental control.

The third most common reason is that many parents find it too challenging and perceive it as too much work to set up parental controls. For these parents, the parental control guide created during this thesis could be useful to navigate through the parental controls of some of the most popular streaming and gaming platforms.

Some parents say they trust their children. This is a choice every parent must take on their own, but it is relevant to note that children might need some form of restriction or supervision as they might not yet be developed enough to make well-calculated and independent decisions. Again, increasing the awareness of the risks children face could be useful to parents to make wise decisions.

Other parents say they monitor what their children watch, although it is not through the built-in parental controls. This is to somewhat degree a form of supervision, and it could be considered better than no controls at all. Many children might not take their devices and sit independently with them, and for these children, parents might feel safe to only watch over what they are doing at any given moment without using the built-in parental controls on the platforms.

Suggestions and other thoughts

As already mentioned earlier, some parents view parental controls as unnecessary for their children right now as seen in table 7.15. Maybe the children do not spend much time playing or streaming and have their parents around them when they do it. These parents do not seem to think that their child is being exposed to risks yet. Many of the respondents express their trust in their child and in their ability to monitor and redirect the child if necessary. Most of the parents who do not use parental controls feel that their child is safe on streaming and gaming platforms, as we have seen earlier.

However, some parents say they have tried certain parental control functionalities but gave up because it was too challenging as seen in table 7.16. Additionally, others say what they need to start using parental controls is less administrational work. Some parents clearly express that it must be easier to use parental controls to consider using them. Some of the respondents have answered that they need guidance and to learn more about the parental controls to start using it. They wish to learn about their opportunities and want it to be easy to set up and adapt as seen in table 7.17. These answers support our work with the parental control guide, as this can help these parents learn about what is being offered by the different streaming and gaming platforms.

7.5.4 Sense of safety with and without parental control

72.5% of parents who responded that they use parental control does consider their child to be unsafe on streaming and gaming platforms without parental control. Compared to this 81.4% of the same respondents say that parental control is increasing their sense of safety about their child using streaming and gaming platforms.

An overwhelming majority of the parents who use parental controls see the benefit of it. When comparing to the 72,5% of respondents who did not feel their child is safe without parental controls, these results show that the impact of parental controls is significant in making the parents feel more confident about their child's safety. In other words, parental control is mostly seen as sufficient to allow the parents to protect their children from the risks they face on streaming and gaming platforms.

On the other hand, parents who do not use parental control were also asked if they feel their child is safe on streaming and gaming platforms without parental controls. 73.9% of the respondents responded that they do feel their child is safe without parental controls. That is almost the same amount - 72.5% - of parents who use parental control who do not feel their child is safe without it. This makes sense, as these parents would have tried to take some steps to change the situation if they felt their child is unsafe in the first place. Maybe the reason why they sense their child is safer than the other parents who use parental controls is a lack of awareness of the risks or an increased level of trust in their child.

7.5.5 Discussing the hypotheses

We made two hypotheses before the conduction of the survey in section 1.2.1. The survey results discussed in section 7.5.4 reveals that there is indeed a correlation between parent's level of concern and their use of parental controls. Additionally, it reveals that the sense of safety among parents varies significantly with and without the use of parental control comparatively. In other words, our hypotheses are confirmed to be true.

- Parents' level of concern correlates with their use of parental control. Parents who use parental controls are generally more worried about their child's safety than those who do not use it. The majority of parents who use parental control are concerned about their child's safety, compared to those parents who do not use parental control as they believe their child is safe. If parents who do not use parental controls become more aware of the risks, they might start using parental controls too.
- Parents sense that parental control on streaming and gaming platforms improves the safety of children.

The result of the survey reveals that parents who use parental control feel the benefit of an increased sense of safety. The majority of parents who use parental control feel their child is safer on streaming and gaming platforms with the aid of parental control. In other words, parental control is a great tool for increasing the sense of safety among the parents who are worried. Therefore, we can understand that the existing parental controls are at least partially effective in meeting the needs of the parents.

Chapter 8

Conclusion

This chapter discusses our thesis from a critical perspective, as well as discussing challenges faced during the project and how we resolved them. Suggestions for future work are included, as well as an evaluation of the group's work. Conclusively, we are summarizing our work and findings.

8.1 Critique of the thesis

As the survey results showed, gaming consoles are widely used. This posed a challenge since we could not conduct a complete test of these consoles without having access to them, as mentioned in the limitation chapter. Information about gaming consoles was only obtained using platforms, websites, and apps. Therefore, consoles were not included in the parental control guide. In the survey, we had a question about which parental controls they were happy and unhappy voluntary. In hindsight, this might have been a slight mistake as many participants did not answer this question. In addition, providing the different platforms as alternatives rather than having them write in the platforms manually could have yielded better results.

As shown in the survey results, parents have different understandings of parental control. Some included supervision as a parental control. For example, they watched content with the child or taught the child what to avoid when on the internet. A combination of restriction and supervision would be the most effective form of parental control. However, since this thesis focuses on educating parents on the existing parental controls on gaming and streaming platforms, the focus was on restrictive parental controls like restricting access content or other functionalities like purchasing or settings.

8.2 Challenges faced during conduction of survey

Originally, we started the project with the limitation of children aged between 6 and 15. In other words, elementary and middle school children. Problems faced

during the conduction of the survey made us expand the age group of children.

Two schools in Oslo replied with interest and told us that they would send our message with a description and link of the survey to their pupils' parents. In the email, we had specified we wanted parents with pupils in elementary schools. However, we contacted the Postmottak Utdanningsadministrator, who further sent our mail to all schools with elementary grades in Oslo, including those who showed interest. One of the two schools stopped replying, so we figured they might have lost interest or that their schedule might have been filled up. However, the Voksentoppen school that was still willing to participate was a school with pupils from 5th to 10th grade. Unfortunately, we failed to double-check the grade of the school before sending out the email to parents. Therefore, as some parents started answering the survey, we could not conclude that these answers belonged to parents with children in our limited age group: 6-12.

With the less than ten answers we had received and no other schools showing interest, we did not want to delete the only data we had acquired. Meanwhile, we created the first version of the parental control guide and started analyzing the platforms. After a while, we understood how helpful it would be for our thesis to have valid survey results to discuss and understand and create a more suitable parental control guide to the average parent. Therefore, we went on to contact all elementary schools in Trondheim. Learning from our past mistake, we double-checked if the schools are indeed ordinary elementary schools with pupils from 1-7th grade. However, the grade question revealed that more parents had children in 8-10th grade even when targeting elementary schools. The reason could have been that these respondents had more than one child and therefore chose more than one option for grades. This mistake was handled well, as parental control is also relevant for parents with children in middle school.

As already mentioned in section 5.1, we could not acquire responses from all parents on the four schools that participated. In other words, the data might reflect the reality less effectively as parents who use parental control might be more likely to take a survey about parental controls. This may affect the results to make it seem like more parents use parental control than in reality.

8.3 Future work

For future work, we recommend a more in-depth view into the consoles with a more hands-on analysis to validate the manufacturers' claims. Further on, we also recommend looking into parental controls outside of those included in gaming and streaming platforms. In our survey, many parents reported using parental controls not related to specific platforms such as Google Family Link.

As the parental controls are constantly evolving, we recommend continuously updating the parental control guide for eventual changes that might have happened to the different parental controls.

This bachelor went through two of the three proposed paths for the project. In the future, doing the third part integrating the different parental controls into a common platform could be helpful. However, this would have to heavily rely on API services which are currently not available.

To better understand how parental controls are used, a survey of children and their thought on parental controls could be a good idea. In addition, a more extensive survey of the parents could also be done to get more accurate results as we think a larger sample group would have improved our survey.

8.4 Evaluation of the group's work

We had daily meetings where we evaluated the process. These meetings were held by the group members only. We would talk about what we have done so far and the plan for the next day, week, etc.

The tasks were usually divided into 1-3 days sprints. We divided the different tasks along with the project among us to spread out the work more effectively. In other words, we managed to do as planned in the early phases of the project, as we held regular short meetings to discuss our progress. When in doubt, the group members would bring up the topic during the meetings to discuss and share our opinion on how to solve the issues. Discussing usually gave us clarity. We would evaluate each other's contribution and give each other feedback on improving the work done.

The formulation of tasks was mainly based on our own in-group discussions and the feedback we got from the supervisor and sometimes task-giver.

8.5 Conclusion

In conclusion to this thesis, we focus on explaining how the task was described in section 1.2. The following paragraphs include each task, our observations, and findings from solving each task.

8.5.1 The systematic review and analysis of existing parental controls on some online streaming and gaming service.

Our findings show that most platforms do have some parental controls, but they vary significantly in their functionality and usability.

By defining parental controls and dividing them into three categories based on their functionalities, namely, content filters, usage control, and monitoring, we could better test the gaming and streaming platform's parental controls and analyze the platform's different implementations of parental control. This analysis gave us a better understanding of the requirements for parental controls. It provided a comparison of each platform that helped map the weaknesses and strengths of each parental control functionality on the different platforms and

gave the basis for recommendations for improvements. We observed that gaming consoles generally have better parental controls than other gaming platforms. However, we could not investigate them due to a lack of physical access to the consoles, and internet resources were used instead. Therefore, a more in-depth review of gaming consoles was recommended for future work. All tested streaming platforms were found not to have time-limiting functionalities and no manual content restriction except for YouTube kids and Netflix. Such analysis was conducted using the information collected from testing the platforms and a scoring system that assigns a value (1) if the platform in question implements the parental control functionality. Using this scoring system, we compared the streaming platforms, and YouTube Kids was found to have the best parental controls. When comparing the PC gaming platforms, Battlenet and Steam scored best, and when comparing the console platforms Xbox and Nintendo Switch scored best, with all three scored extremely high.

8.5.2 The survey conducted to understand the relation parents/guardians have with parental control.

A survey was created to get feedback from parents who have children aged 6 to 15, it was conducted with the help of elementary schools in Norway, and 167 parents participated. In the survey, parents gave feedback on the time their children spend on gaming and streaming platforms. We found a growth in the hours spent on weekends. It was also observed that popular streaming platforms have more users than popular gaming platforms; for example, 87.4% of the parents answered that their children use YouTube or YouTube Kids, the most popular streaming platform, compared 56.3% reporting their child using PlayStation the most popular gaming platform. The most popular PC gaming platform had even fewer users, with only 25.1% of parents reporting to using it.

Streaming platforms tended to get higher ratings from the parents, with more parents reporting satisfaction with their different parental controls than gaming platforms.

We also got feedback on the effectiveness of the three parental controls categories used in the paragraph above, where usage control functionalities were the most effective, followed by content filters and monitoring functionalities scored worst. There was a stark contrast in opinion on whether parental controls were necessary among those that used it and those that do not.

Those who did use parental controls generally felt that their child was not safe without it turned on, but also felt that parental control helped make their children safer online.

On the other hand, those that did not use parental control felt their children were safe online.

8.5.3 Creation of a parental control guide

This thesis aims to help parents gain more knowledge about parental controls and help them manage the children's internet use. Hence, a parental guide was designed with help from the data collected from testing the gaming and streaming platforms to achieve this and make it easier for them to configure parental controls. The need for more information for parents was echoed by the feedback attained from the survey conducted on elementary school parents, which proved a lack of awareness from parents who do not use parental controls. The parental control definition used in this thesis is meant to be understandable to any parent, tech-savvy or not. The guide gives the parent step-by-step instructions on how to turn on the different parental controls and explain their functionalities.

8.5.4 Hypothesis confirmed

Our findings confirmed the main hypotheses as explained in 1.2.1 as discussed in 7.5.5. Here is a summary.

Parents who are more concerned about their child's safety on streaming and gaming platforms are more likely to use parental control, whereas parents who feel less concerned about the same are less likely to use parental control.

Parents who use parental control feel the benefit of it, as they report feeling an increased level of safety. Therefore, we can conclude that the existing parental controls are at least partially effective in meeting the needs of the parents.

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Appendix A

Additional Material

A.1 Survey

A.1.1 Survey Questions



Figure A.1: The purpose of the survey

Section 1

Hvilke av disse videospill-plattformene bruker barnet ditt? *
Battlenet
Epic Games
Nintendo Switch
Playstation
Steam
Ubisoft
Xbox
Origin/EA Play
☐ Vet ikke
Other

Figure A.2: Which of these video game platforms is your child using?

::: Hvilke av disse videostrømming-plattformene bruker barnet ditt? *
Disney+
HBO Nordic
Netflix
□ NRK TV
PrimeVideo
TV2 Sumo
Viaplay
YouTube/YouTube Kids
Vet ikke
Other
Figure A.3: Which of these video streaming platforms does your child use?
::: Hvor mange timer bruker barnet ditt på videospill-plattformer på hverdager (mandag - fredag)? * (gjennomsnitt over en uke)
Barnet spiller ikke
Ounder 1 time
1-2 timer
2-3 timer
3-4 timer
Mer enn 5 timer

Figure A.4: How many hours does your child spend on video game platforms on weekdays (Monday - Friday)? (average over a week)

:::
Hvor mange timer bruker barnet ditt på videospill-plattformer i helgedager (lørdag - søndag) ? * (gjennomsnitt over en uke)
Barnet spiller ikke
O Under 1 time
1-2 timer
2-3 timer
3-4 timer
○ 4-5 timer
Mer enn 5 timer
Figure A.5: How many hours does your child spend on video game platforms on weekends (Saturday - Sunday)? (average over a week)
Hvor mange timer bruker barnet ditt på videostrømming-plattformer på hverdager (mandag - * fredag)? (gjennomsnitt over en uke)
Barnet bruker ikke strømmetjenester
Under 1 time
1-2 timer
2-3 timer
3-4 timer
4-5 timer
Mer enn 5 timer

Figure A.6: How many hours does your child spend on video streaming platforms on weekdays (Monday - Friday)? (average over a week))

:::
Hvor mange timer bruker barnet ditt på videostrømming-plattformer på helgedager (lørdag - *søndag)? (gjennomsnitt over en uke)
Barnet bruker ikke strømmetjenester
O Under 1 time
1-2 timer
2-3 timer
3-4 timer
4-5 timer
Mer enn 5 timer
Figure A.7: How many hours does your child spend on video streaming platforms on weekends (Saturday - Sunday)? (average over a week)
Hvilke risikoer føler du barnet står overfor på disse plattformene? *
Avhengighet
Feilinformasjon
Kontakt med farlige personer
Mobbing
Pornografi
Provoserende innhold
Upassende reklame
Uønskede transaksjoner/innkjøp/bruk av penger
Uønsket innhenting av personopplysninger
☐ Voldelig innhold
Other

Figure A.8: What risks do you feel the child is facing on these platforms?

Bruker du noen av de innebygde foreldrekontrollene? *
○ Ja
○ Nei
Figure A.9: Do you use any of the built-in parental controls?
Section 2
Hvilke plattformers foreldrekontroll er du fornøyd med? Eventuelt hvorfor?
Long answer text
Figure A.10: Which platforms' parental control are you dissatisfied with? Possibly why?
Hvilke plattformers foreldrekontroll er du fornøyd med? Eventuelt hvorfor?
Long answer text
Figure A.11: Which platforms' parental control are you satisfied with? Possibly why?
Hvilke plattformers foreldrekontroll er du misfornøyd med? Eventuelt hvorfor?
Long answer text

Figure A.12: Which platforms' parental control are you dissatisfied with? Possibly why?

Hvor effektiv synes du foreldrekontroll-funksjonen "innholdsfiltrering" er? (f.eks. restriksjoner basert på aldersgrense, manuell filtrering, tilgang på kommunikasjon) Veldig effektiv Effektiv Verken effektiv eller inefekktiv Inefekktiv Veldig ineffektiv Bruker ikke denne funksjonen Figure A.13: How effective do you think the parental control feature "content filtering" is? (e.g restrictions based on age limit, manual filtering, access to communication) Hvor effektiv synes du foreldrekontroll-funksjonen "brukskontroll" er? (f.eks. kontrollere antall timer man får spille, begrense pengebruk) O Veldig effektiv Effektiv Verken effektiv eller ineffektiv Ineffektiv Veldig ineffektiv Bruker ikke denne funksjonen

Figure A.14: How effective do you think the parental control function "usage control" is? (e.g control the number of hours you can play, limit spending)

	iv synes du foreldrekontroll-funksjonen "overvåkning" er? (f.eks. Se hvordan barne [.] olattformen, se hvor mye tid barnet ditt bruker, hva den spiller/strømmer etc)
O Veldig e	ffektiv
Effektiv	
○ Verken e	effektiv eller ineffektiv
O Ineffekti	V
O Veldig ir	effektiv
O Bruker il	ske denne funksjonen
	A.15: How effective do you think the "monitoring" parental control fund
spends	(eg See how your child uses the platform, see how much time your chil, what it plays / streams etc)
spends Bruker du a	, what it plays / streams etc) andre foreldrekontroll-funksjoner som ikke er nevnt ovenfor? Hvis ja, hvilke?
spends Bruker du a Long answe	what it plays / streams etc) andre foreldrekontroll-funksjoner som ikke er nevnt ovenfor? Hvis ja, hvilke?
spends Bruker du a Long answe	, what it plays / streams etc) andre foreldrekontroll-funksjoner som ikke er nevnt ovenfor? Hvis ja, hvilke?
spends Bruker du a Long answer Figure If so, w	what it plays / streams etc) andre foreldrekontroll-funksjoner som ikke er nevnt ovenfor? Hvis ja, hvilke? text A.16: Are you using other parental control features not mentioned above
spends Bruker du a Long answer Figure If so, w	what it plays / streams etc) andre foreldrekontroll-funksjoner som ikke er nevnt ovenfor? Hvis ja, hvilke? text A.16: Are you using other parental control features not mentioned above thich ones?

Figure A.17: Do you feel that your child is safe in play and streaming services without parental control? (parental control turned off)

Figure A.20: Do you feel that your child is safe in play and streaming services without parental control?

Hvorfor bruker du ikke foreldrekontroll? *
For mye jobb å sette opp
For vanskelig å sette opp
Føler det er trygt uten
Har ikke hørt om foreldrekontroll for spill og strømming før nå
Other
Figure A.21: Why not use parental controls?
Hva må til for at du skal bruke foreldrekontroll? Har du eventuelt noen andre tanker angående foreldrekontroll du ønsker å legge til?
Long answer text

Figure A.22: What does it take for you to use parental control? Do you have any other thoughts regarding parental control you want to add?

A.1.2 Survey results

How many hours the child uses on average per week on gaming platforms on normal days (Monday to Friday

Hvor mange timer bruker barnet ditt på videospill-plattformer på hverdager (mandag - fredag)? (gjennomsnitt over en uke)

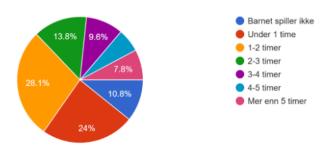


Figure A.23: Gaming in normal days

How many hours the child uses on average per week on gaming platforms on weekends (Saturday to Sunday

Hvor mange timer bruker barnet ditt på videospill-plattformer i helgedager (lørdag - søndag) ? (gjennomsnitt over en uke)

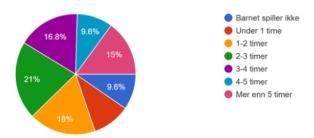


Figure A.24: Gaming on Weekends

How many hours the child uses on average per week on Streaming platforms on normal days (Monday to Friday

Hvor mange timer bruker barnet ditt på videostrømming-plattformer på hverdager (mandag - fredag)? (gjennomsnitt over en uke)

167 responses

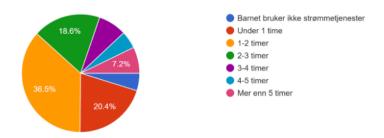


Figure A.25: Streaming in normal days

How many hours the child uses on average per week on Streaming platforms on Weekends days (Saturday to Sunday

Hvor mange timer bruker barnet ditt på videostrømming-plattformer på helgedager (lørdag - søndag)? (gjennomsnitt over en uke)
167 responses

18% 11.4% 7.8%

Barnet bruker ikke strømmetjenester
Under 1 time
1-2 timer
2-3 timer
3-4 timer
4-5 timer
Mer enn 5 timer

Figure A.26: Streaming in weekends

What risks do you feel the child is facing on these platforms?

Hvilke risikoer føler du barnet står overfor på disse plattformene? 167 responses

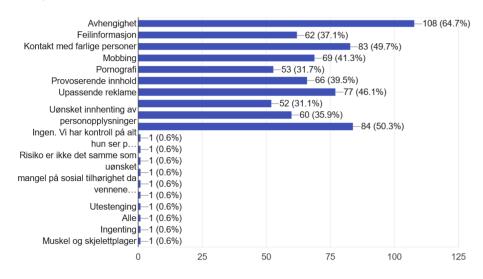


Figure A.27: felt risks among parents

Other answers respondents has written which isn't clearly visible in chart:

- Muskel og skjelettplager
- Social distancing
- Passivitet
- mangel på sosial tilhørighet da vennene er i gaming miljøer
- Utestenging
- Ekkokammer
- Risiko er ikke det samme som uønsket
- Ingenting
- Alle
- Ingen. Vi har kontroll på alt hun ser på/spiller.

Do you use any of the built-in parental controls?

Bruker du noen av de innebygde foreldrekontrollene? 167 responses

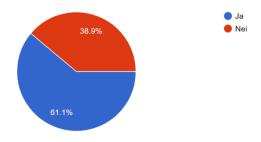


Figure A.28: parental-control-used

How effective do you think the parental control feature "content filtering" is? (E.g restrictions based on age limit, manual filtering, access to communication)

Hvor effektiv synes du foreldrekontroll-funksjonen "innholdsfiltrering" er? (f.eks. restriksjoner basert på aldersgrense, manuell filtrering, tilgang på kommunikasjon)

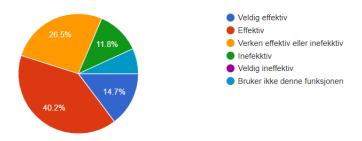


Figure A.29: content-filtering-effectiveness

How effective do you think the parental control function "usage control" is? (E.g control the number of hours you can play, limit spending)

Hvor effektiv synes du foreldrekontroll-funksjonen "brukskontroll" er? (f.eks. kontrollere antall timer man får spille, begrense pengebruk)

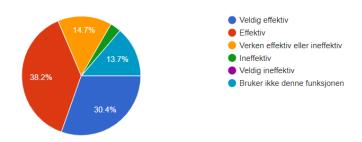


Figure A.30: Usage-control-effectiveness

How effective do you think the "monitoring" parental control function is? (E.g See how your child uses the platform, see how much time your child spends, what it plays / streams etc ...)

Hvor effektiv synes du foreldrekontroll-funksjonen "overvåkning" er? (f.eks. Se hvordan barnet ditt bruker plattformen, se hvor mye tid barnet ditt bruker, hva den spiller/strømmer etc...)

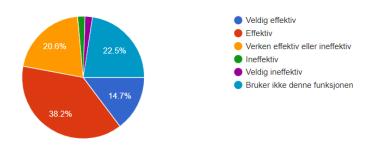


Figure A.31: Monitoring-effectiveness

Do you feel that your child is safe on gaming and streaming services without parental control? (parental control turned off)

Føler du at barnet ditt er trygg på spille- og strømmetjenester uten foreldrekontroll? (foreldrekontroll skrudd av)

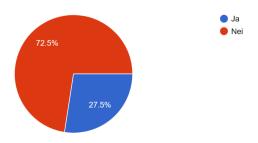


Figure A.32: Felt safety among parents without parental control

Do you feel that parental control helps make your child safer on gaming and streaming services? (parental control turned on)

Føler du at foreldrekontroll bidrar til å gjøre barnet ditt tryggere på spille- og strømmetjenester? (foreldrekontroll skrudd på)

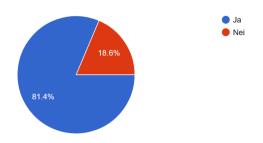


Figure A.33: Felt safety among parents with parental controls

Which platforms parental controls are you happy with? Why?

- Barna bruker mest iPad, og der må det tastes kode for å bruke mer tid enn det som er satt av
- Skjermtid og overvåking
- Microsoft og app store
- Foreldrekontroll switch, netflix
- YouTube Kids, Netflix
- YouTube. Eneste jeg har funnet.
- Foreldrekontroll på Apple telefon og foreldrekontroll Google
- YouTube
- Bruker Family-link for å begrense hva som blir sett på og hvor lenge. Har kun youtubekids, ikke vanlig youtube. Har egen bruker på netflix som er tilpasset barn. Fungerer bra, selv om videoer på youtubekids kan være stygge.
- Family link
- Google sin for Android generelt, mange muligheter
- Kids YouTube
- Windows family. Fleksibel og lett å styre ulike tilgangen på ulike programmer
- Vi bruker family link. Enkel, grei og lett å bruke
- YouTube kids, NRK.
- PlayStation. Den har en enkel og solid funksjon for å legge inn sperrer og filter
- A
- Microsoft, niantic, PlayStation, Nintendo, Apple: gir oversikt over bruk. Samt gjør barna bevisst på at de ikke kan «ferdes usett»
- NRK oppgir mange kunnskap til barn
- netflix, stopper effektivt å se det man ikke får se
- Xbox live/Microsoft
- Vi bruker foreldrekontroll fra Google og Apple, fornøyd med at de blokkerer porno og upassende innhold, samt at de lar oss stenge for nettbruk og apper.
- Netflix
- Ebicgame
- Ingen fordi de gir ikke god nok kontroll og oversikt eller valgmuligheter. Heller ikke mulighet for statistikk
- NRK Super stiller inn etter alder
- Family Link
- Netflix kids option
- Egentlig ingen, men Microsoft sin er den med best funksjonalitet
- Viaplay og Netflix har egne tilganger for barn.
- Husker ikke hvilke plattformers, men kan raskt stenge ned alle tilganger med tre tastetrykk. Far som har admin her
- iPad
- Barnet mitt har ikke fått mobiltelefon, men bruker foreldrekontrollen på

ipad'en. Han får ikke tilgang på apper med 12års aldersgrense

- Nrk
- Family linj
- Netflix, DisneyPlus. Enkelt å sette opp.
- Apple Family sharing
- · Apple og Google
- Youtube
- Nrk super
- Oversikt over mobil bruk på IPhone. Jeg må godkjenne spill som skal lastes ned
- Apple og Nintendo. Enkel å bruke
- You tube Kids. Samsung. Kjenner dem for dårlig til å uttale meg
- Android
- Ps4
- Vi bruker meste med lego, tegne, se TV og lekser. Fordi hvis bare opptatt av eletronic greya de har ikke tid med familie og lekser.
- iPhone sin skjermtid-der jeg kan begrense tidsbruken på telefonen
- iphone
- Playstation har fin foreldrekontroll, der man overvåker tidsforbruket. You-Tube styrer jeg, da jeg ser alt h/n ser.
- Netflix innhold basert på barnets alder. Men lett for barnet å bruke min profil eller «Se sammen» og få tilgang til mer. Lett kontroll å bruke, men også lett å overstyre av barnet selv.
- Aldersgrense på streaming. Hindrer barnet å bli utsatt for vold, sex og dårlig språk
- Bruker panda 360 foreldrenontroll og zyxel 110 firewall hardware. Fungerer mot det meste
- iPhone
- YouTube og skjermtid på mobil
- Google, Telenor seksualisert innhold, tidskontroll
- iPhone, smart-tv og Mac
- Ingen er 100% men kids youtube bremser litt selv om det ikke fjerner "søppelinnhold."
- samarbeid med barna
- Playstation Aldersgrenser

Which platforms parental controls are you unhappy with? Why?

Nintendo Switch, gir bare alarm når spilletiden er over.

Playstation og Xbox har vi ikke funnet ut av foreldrekontrollen på, så der må vi gjemme fjernkontrollene

TV"n er en smart-tv, og det er ikke mulig å begrense tilgang på Netflix og YouTube. Selv om vi sletter

append, finner barna ut hvordan de kan laste dem ned (uten at de kan lese engang)

Bruker foreldrekontrollen til PS men klarer ikke å henge med - blir for tidkrevende

Har prøvd bare family link og er fornøyd med det.

YouTube kids, litt for vanskelig å du kan ikke legge til hvilken som helst kanaler selv

Playstation. For få muligheter.

Ikke prøvd andre

PS4 har et for komplisert oppsett med brukerkontoer for foreldre og barn.

Figure A.34: Which platforms parents are unhappy with part 1

YouTube. Algoritmen som er lagt inn av Google på YouTube er for enkel å omgå og reklamene som legges der går ofte rett gjennom innlagt filter/sperre.

Disney+

Mye tulle program

apple, enkelt for barnet å oppheve sperringene

Youtube

Jeg vet ikke.

Alle der vi har det - av samme årsak som i forrige sprøsmål

Youtube (har ikke kids) - mye upassende reklame og tips til lignende innhold

Youtube

Figure A.35: Which platforms parents are unhappy with part 2



Figure A.36: Which platforms parents are unhappy with part 3



Figure A.37: Which platforms parents are unhappy with part 4

Do you have any suggestions for improving parental control? Do you have any other thoughts regarding parental control you want to add?

Answers from respondents:

- Foreldrekontroll er veldig viktig, men mange kan for lite om det. Kanskje kunne skolen arrangere kurs/gi informasjon om farene rundt dette og hvordan foreldrekontroll brukes?
- Mer tydelige alderskontroller for både spilling og innhold på nett. Mulig funksjonene er der allerede bare at jeg ikke har hatt kapasitet til å sette meg inn i det.
- Jeg vet ikke hvordan jeg setter det opp/finner det på de ulike.
- Ikke noen gode forslag her annet enn at barn og ungdom alltid finner nye veier ved for «streng» foreldrekontroll». Gi barna litt rom får prøving og feiling under gitte rammer. Har en tanke: hva er definisjonen på foreldrekontroll, uansett arena? Deres fokus er nettbasert spill og streaming, men jeg ønsker å spille inn at det handler om et helhetsbilde under oppdragelse. Hva er greit og ikke greit? Hvor kontrollerte må vi være? Hvordan oppfører vi oss ved fysiske møtepunkter kontra nettbasert møtepunkter? Mitt motto er at du alltid må stå inne for hva du både sier og skriver. Atferd er i samme kategori. Må påpeke at jeg er imot fri oppdragelse og er streng på de viktige tingene føler jeg. Oppnår man gjensidig tillit mellom barn og voksne løses mye av seg selv. Lykke til med forskningen!
- Jeg tenker at foreldrekontroll kan ta «toppen av isfjellet» mtp visse begrensninger av tid og innhold. Men unger er i stor grad bedre enn en stor andel av foreldrene når det kommer til det digitale, og klarer å omgå disse kontrollene om de absolutt vil. Foreldrekontroll på disse plattformene/spill/telefon kan aldri erstattes av å snakke med barna og interessere seg for det de holder på med i den digitale verdenen.
- Foreldrekontroll vil kun gi en begrenset beskyttelse for barn. Upassende innhold kommer via kjente kanaler, og andre kanaler endrer seg så raskt at filter ofte ikke henger med. I tillegg når undervisning er lagt opp rundt google
 og google chrome som har dårlig sikkerhet og foreldrekontroll er dette et
 problem
- Det vil alltid finnes noen som klarer å omgå innlagte filter/algoritmer. Forbedringen må komme fra oss som foreldre som må være mere deltakende/observante på hva/hvordan barna bruker de forskjellige plattformer og veilede/lære dem i hva som er rett og ikke.
- Jeg har ikke satt meg nok inn i foreldrekontroll i ulike tjenester. Foreldrekontroll kan uansett ikke gjøre jobben alene, ungene må også lære å navigere selv vurdere innhold, ta gode valg. Kontroll og læring/selvstendiggjøring må balanseres.
- Større grad av tilpasning. Eksempelvis i spillet Roblox kan foreldre stenge av for voldelig/upassende spill. Da mister barnet også chat-funksjonen slik at det ikke kan chatte med venner.

- Usually there is a discussion of limitations and control. I think its valid and just needs to be extended to guidance to value of online content and lead children towards that as well.
- Vanskelig å vite når man skal "slippe opp" for at barnet skal kunne bli selvstendig i "nettverden". Vet det er for tidlig ennå.
- Må passe på alle program som skal barne se på . Snakke til barn det er ikke viktig program p se på Ellers år grenser.
- Man kan godt sitte sammen med barnet å se hva de gjør. Da kan man også lære dem hva de ikke skal gjøre.
- bør være et bra system hvor foreldre kan logge på og styre fra et annet sted enn der barnet spiller.
- Usikker på om jeg ønsker å overlate kontrollen til innebygde funksjoner. Vil ha oversikt selv.
- Apple burde ha mye bedre kontroll på app-spill. Det gjelder også for Steam.
- Ønsker bedre kontroll på spesielt TikTok som er mye brukt her i huset.
- Kunne skille på bruk og tid man kan bruke på forskjellige enheter.
- Man vet aldri hvem barnet chatter med, og mye kan skje på chat
- Sortering av innhold og ordbruk/mobbing i chatter
- en app for styring av alle plattformer
- flere muligheter til å spesifisere
- Logg over sette programmer.
- Mer intuitivt oppsett.
- Regulerer video før
- Nei, takk
- Nei
- Nei
- Nei
- Nei
- Nei

A.1.3 Do you feel that your child is safe on streaming and gaming platforms with parental controls turned off?

Føler du at barnet ditt er trygg på spille- og strømmetjenester uten foreldrekontroll? 65 responses

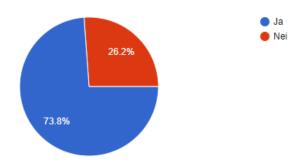


Figure A.38: Do parents who do not use parental feel their children are safe?

A.1.4 Why do you not use parental controls?

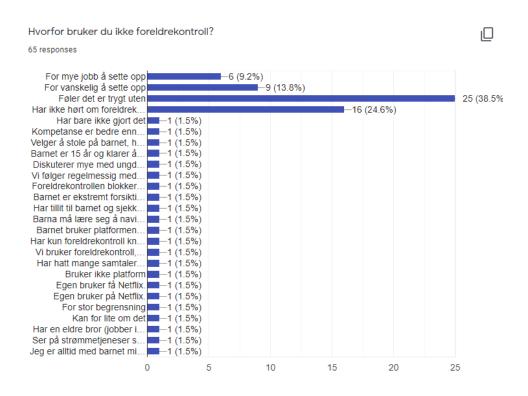


Figure A.39: Why do some parents not use parental controls?

What does it take for you to use parental control? Do you have any other thoughts regarding parental control you want to add?

Answers from respondents:

- Hvis jeg hadde følt at barnet utforsket sider/spill som ikke var egnet for barnets alder eller vært i kontakt med andre på nett.
- Når barnet begynner å bruke PC, YouTube eller begynner å spille mot andre på nett via konsoll.
- Har per i dag god oversikt hva ungene gjør på Internett. Slik vil det ikke være i lang tid. Må vurdere dette asap.
- Hvis jeg hadde yngre barn som ikke hadde de verdiene jeg allerede har lært mine.
- At barnet forteller om upassende ting hun har sett/fått tilgang til. Stoler på at barnet ikke aktivt søker opp slikt.
- Jeg vil bruke foreldrekontroll den dagen barnet mitt får tilgang til sosiale medier. Pr.nå holder vi oss til aldersgrense 13 år, dvs., barnet mitt har ikke tilgang til div.sosiale medier enda.
- Har brukt aldersbegrensing inne på bl.a. Netflix. Det fungerer fint. Har også forsøkt skjermtid-begrensing. Men det fungerte ikkje så bra. Prøver heller å gå i dialog og vere eit godt eksempel.
- Når det blir nødvendig kommer det til å settes inn.
- Hvis vi ser/ oppdager tegn på at det er nødvendig
- Håper min sønn er like fornuftig som mora! Under barnevernets omsorg har min datter lært om selvskading. Blitt innlagt på psykiatrisk mange ganger. Min sønn fungerer og har fått lov å ha kontakt med meg! Takker
- I kind of have parental control .. everything they download I have to approve. Plus I play a lot with them. I talk a lot with them about what is ok language use, etc. If I hear ugly language use in a chat, I tell those in question, regardless of whether it is my or someone else's children.
- Foreldrekontroll må ikke være til hinder/gjøre at ting man ikke ønsker sperret, sperres.
- Det må være enkelt og må fungere. Har bare prøvd på en bruker på Mac, men det fungerte dårlig. Var tungvint og jeg måtte legge inn en og en nettside som var ok feks. Endte med at jeg tok det bort
- Mindre begrensninger på innholdet
- Mindre begrensninger.
- Større kontroll
- Lett å bruke
- Lett å sette opp, lett å tilpasse
- At det ikke krever for mye administrasjon
- Ingen ting
- Nei
- Jeg trenger å lære noe om hvilke muligheter man har.

- Trenger mer info om foreldrekontroll. Vi er nok litt for naive.
- Mer opplysning om hva som finnes på de ulike plattformene.
- Mer opplysning om hva som finnes på de ulike plattformene.
- Trenger mer info om foreldrekontroll. Vi er nok litt for naive
- Veiledning
- Veiledning
- At noe hjelper oss med det

A.2 Minutes of Meetings

A.2.1 Thursday, 04/03/2021

Questions Comments by group

- 1. Is there anything else we should put in the description of the survey?
- 2. Is the something that we should add in the survey?
- 3. On the "føler du barnet ditt er trygt på nett" we are trying to see if the parent controls are sufficient.
- 4. Where should we put the reasoning for the ordering of the platform?
- 5. How best do we start the discussion and analysis section?
- 6. About the Survey, should we have a message in the email sent to the schools?
- 7. About the literature review, what should we discuss exactly here?
- 8. If we are going to use some picture or diagrams, do we need to ask for permission?

Answers And Comments by Supervisor

- 1. In the Survey, i feel like there is something missing. Ask with the employer too. **(DONE)**
- 2. About "føler du barnet ditt er trygt på nett". what are you trying to get from it? **(DONE)**
- 3. In the discussions And analyse a table would be helpful where you explain the common features. you can have categories on the side, and the platforms on the top and the commonality and differences. Overall, I think you should start making use of tables in this chapter. Maybe one table for the gaming services and services. or international vs national services. best case or worst case ranking platforms. (MAYBE)
- 4. Are the TV ratings the same in Norway as in other countries? (DONE)
- 5. In the introduction maybe you can add a bit about yourselves and the group works and also a target group for this project, parents, readers(students, researchers). (NOT DONE)
- 6. In the introductions some groups add research questions etc.. you can add on its new sub chapter later on. (NOT DONE)
- 7. You should have an email for the parents (in the email) when they receive the survey, tell them "we will make sure to share the results with you", "and provide all feedback", "all answers are anonymous", "we are trying the increase the level of awareness and knowledge so that you can assure a safe experience for your children online" (DONE)
- 8. you should have a section about parental control in the lit review, multiple definitions for parental controls, and then decide if you want to talk about the categories, you can find different categories but again conclude that we choose one of them " this is related to gaming services etc". maybe add a bit about what are the main effect or side effect of the parental controls (ALMOST DONE)

- 9. I don't know. try to create a version of your own based on the diagram (answer to question 8) **(DONE)**
- 10. You should have an explanation of parental controls. You could use the explaining in the report at the beginning of the Survey. (**DONE**)
- 11. It seems like there is a jump in the survey, maybe another question before the "noen forslag in the survey" (DONE)
- 12. In the Survey, Try splitting the gaming platforms and streaming platforms in the first question. so that they are forced to each from each. **(DONE)**
- 13. In the Survey question " er du misfornøyd" you should ask, why? (DONE)
- 14. Ask them which Parental control categories they prefer. Are they using them? , how are they useful to them? , are they benefiting from them equally?. Am not sure they are about to distinguish them. Maybe explain in the beginning or the second part. **(DONE)**
- 15. Make sure you are not ask about the same thing in the Survey. (DONE)
- 16. Try to validate their answers. (DONE)
- 17. Find the most preferred platforms, then why? (DONE)
- 18. Try to get comments from the survey subjects. (DONE)
- 19. Try to get some feed back from the employer and then send it to me by next week. **(DONE)**
- 20. In the literature rev explain what the parental controls. and then talk about how they are divided(the Categories).(DONE)
- 21. I didn't see any sources that argue why the platforms we choose are being used, find a link for that or say " based on our experience"
- 22. In the report you need to reason the order maybe the download numbers or write them alphabetically in the survey. (DONE)
- 23. In the report, when it comes to observation you should explain that you will add in your personal observations at the chapter explaining this chapter. (NOT DONE)
- 24. Maybe take one movie and see the different ratings in different countries. like half a page is enough. what do we allow here vs what do we allow somewhere else. (NOT DONE)
- 25. First thing to do now should be the survey, send it to me and the employer and send it out this week! if you do not get the good enough results from the survey you can use your own observations.(DONE)
- 26. Next meeting on Friday, 12.03.2021. (DONE)

A.2.2 Friday, 12/03/2021

Questions Comments by group

- 1. We asked for a review of report
- 2. Can we mention rating systems outside of the background information?
- 3. We are having a hard time with starting with analysis section.
- 4. Frode said that analysis is going to be the most content, but for us it look like it will be only tables.

- 5. In literature rev, Can we look at negative aspects of parental control, gaming etc and then explain in the end why task is relevant.
- 6. Yes we do using the parental control requirements. (Answer to question 1)

Answers Comments by Supervisor

- 1. Do you have some requirement to determine which platform is working well? **(DONE)**
- 2. Tables should have a summary, something that adds value to the table. **(DONE)**
- 3. For the categories do you have a link for the parental control categories?
- 4. You can write a little about rating systems elsewhere but the main explanation should be in the background section. Have a sentence explaining which ratings they have. for example "Epic games uses ESRB or PEGI." (ALMOST)
- 5. what is the main issue? (DONE)
- 6. Send the report to me in time so that i have time to read it.(DONE)
- 7. You can connect literature review to analysis if there is something there that you find that you should analysis. (NOT DONE)
- 8. In analysis You can score rates on how they are enabling parental control and what they should do further. Also compare between what the platforms are doing vs what they should do more.(ALMOST)
- 9. The survey is your main contribution. But it doesn't mean that it should be the largest one.(Answer to question 4) **(NOT DONE)**
- 10. Tablets in analysis; 2 tables all streaming in one and all gaming in another. If there is too info you can split according to geography. (NOT DONE)
- 11. You can have the parental specification in the methodology chapter.(ask Erjon again)
- 12. If the source is from Wikipedia it is possible to find the original source.
- 13. You can have background information as a subsection in literature review. (DONE)
- 14. You can also talk about the relative importance of each requirement.. Maybe one requirement is more important than 3 combined? Might be but not be. **(DONE)**
- 15. Next meeting on Monday, 22/03/2021

A.2.3 Monday, 22/03/2021

Questions Comments by group

- 1. Is the literature review enough?
- 2. What if we don't get enough answers in the survey?
- 3. We want to include to show the risk that are found on the internet. (Answer to question 4)

Answers Comments by Supervisor

- 1. The tables look Good. (DONE)
- 2. Find a source for the three parental control categories. You can link it in the description of the tables
- 3. The Parental control functionality there is a design issue. Put one category in one cell. 2) and then if security is not part of the categories why put it in the table. Put an extra colon .. so as to separate the parental control and non parent controls. (that would be good for visualization) you can experiment with bold different colors. (DONE)
- 4. In the survey, you can talk about the different questions, maybe categories them.. If you can connect the survey question with the literature view. (ALMOST Done)
- 5. Move the observations in information collection to discussion and analysis. (DONE)
- 6. In the Discussion chapter having 8 tables is ok.. Or more than enough, maybe marge security with monitoring (those that are small) you don't have to. But not too many tables.. You can use bold later, italic.. Etc. you should also talk a bit about the table. Talk more around them. You can remove the security table and comment about it (especially if there is a trend). 2 tables streaming and 2 for gaming platforms. The explanation of yes / no etc.. is usually in the caption or you also make a paragraph. In caption (yes asterisk explanation). (DONE)
- 7. Fill in more content. (Done)
- 8. You need many results. You can use the suggestion part and put it in the discussion as feedback if you don't get more answers in the survey (Answer to question 2) (DONE)
- 9. You could have more stuff about parental control definitions. I don't think everyone defines parental controls the same. And then you can summarise and say we will use this definition for this task/ study. (**DONE**)
- 10. About the analysis part, could you create a way of comparing the different fixtures. And have a chart for for how they compare with each other For example. yes = 1 and add up and then you can compare between the different platforms. And you can also comment on. It would nice to have chart.. (opens excel) Radar chart would be nice. You even compare the different categories. for example, Netflix has 8 points and battle net has 5 points. So if you have the recommendation part you can then talk about to improve them. (ALMOST Done)
- 11. You can have one Radar chart for Gaming and one for Streaming platforms.
- 12. About the survey. You can have one paragraph for each question. Why did you put, why you think they are relevant. How they help with the task. Describe them. Should be one page in the methodology **(DONE)**
- 13. Next meeting on Tuesday, 30.03.2021.

A.2.4 Tuesday, 30/03/2021

Answers Comments by Supervisor

- 1. You should talk about the guide in the main report, you could have a separate chapter for it. (Done)
- 2. You should elaborate on the feedback from the survey in the discussion. I Think it fits better in the discussion chapter. (**Done**)
- 3. You can write 2.2.2 as subsub sections (the table) or use
- 4. (Done)
- 5. On rating systems, the tables should be made into subsubsub sections, don't make For example PEGI as a separate chapter than "gaming rating" should be under instead. (Done)
- 6. Every chapter should have a short description. 1 or 2 paragraphs. (Done)
- 7. Methodology: a flow chart that shows the process. For example, the process started with the lit review then we... and then Put the chart in the first section and go through them separately. (Done)
- 8. You should fix the headers in the 4 chapters. (Done)
- 9. You should change the part about the console since you say that will not include them but they are. **(Done)**
- 10. You should write "no information available "instead of blank spaces in the information collection. (**Done**)
- 11. Chapter 5: it's ok now. You could use a table. "Section", "question" and then the description can be done below the table. You don't need to describe all the options. Just mention them. (**Done**)
- 12. The radar, what i was thinking is to add them up. you can say that they(categories) are equally relevant and then add them up.(DONE)
- 13. If the comment section restriction only is for YouTube kids, you can remove it from the tables and chart and then discuss it separately. It should be a requirement in the streaming platforms. Put it at the beginning of 6.1(**Done**)
- 14. Observation. Rename it maybe "Discussion".(Done)

A.2.5 Friday, 09/04/2021

Answers Comments by Supervisor Employer

- 1. Say figure number for referring and not "below and above" (Done)
- 2. Subsubsection security in discussion and analysis should be subsection instead (Done)
- 3. Text first, then figure. Under the correct section (Survey chapter mainly) (Done)
- 4. Information collected by each service should be in parental control guide, and separately in attachment. (**Done**)
- 5. Parental control guide as a chapter should come after survey and before discussion and analysis. (Done)
- 6. Parental control guide can be divided into two parts, as one of the parts will go out of date quickly. Yet it's good it is this was as it's easy for parents who are not techies: (+)Second part could be general instructions but it should be small so parents actually read it (+)Provide information for parents to

- decide what to do (not suggestions)
- 7. Chapters should start on a new page (Done)
- 8. Remind the schools about the survey and maybe give a deadline to speed up process.(**Done**)
- 9. YouTube Kids table should be moved to discussion and analysis at top, to explain how points are given.(**Done**)
- 10. 0 to 1 is better than 0 to 100 in Radar charts.(Done)
- 11. Google form: "can't trace people of survey answers easily, so google forms is ok" (can be explained in Methodology maybe)
- 12. Survey results should be written to some degree to send it to the employer in two weeks.(**Done**)

A.2.6 Friday, 16/04/2021

- 1. Change "what parents say", headers shouldn't be questions. (Done)
- 2. Subsection merge in chap 6 Structure -> Main content/organizing (Done)
- 3. Table 10 needs to fit to content.(Done)
- 4. Radar points need to be fixed like last week.(Done)
- 5. Parental control guide: center pictures, more flashy titles, maybe crop pictures, captions (figure 1, figure 2, figure 3) (**Done**)
- 6. Number/percentage in "what parents say", from survey results.(Done)
- 7. Move Recommendations to conclusion.(Done)
- 8. 7.4 Survey results, 7.5 Discussion.(Done)
- 9. Methodology describe survey a little bit, and Survey chapter more about it. (DONE)
- 10. Table 8, 9, 10 and 11, 12, 13: shortly comment each table. (Done)
- 11. 6.4 information collected: some of it moved to literature review, and some of it to methodology. (**Done**)
- 12. Import thesis into new overleaf template. (Done)
- 13. "Connect the dots" (" next chapter talks about..." etc (Done)

A.2.7 Monday 26/04/2021

- 1. In the survey result it is better to add in the chapter in the actual report. **(DONE)**
- 2. You don't need to actually write exact the results in the survey result, it is better to write around them and show the charts. (**DONE**)
- 3. you can remove the question about the grading from the survey if you feel you cant write about it.
- 4. if you have the image or chart next to the text then you can see if you do not need to write about them then you can summarise that way.
- 5. on the time spent by children question results you can have our stand on gaming platforms and our stand on streaming platforms and then weekends and weekday (DONE)
- 6. Do not have questions as headers (DONE)

- 7. On the Risks the parents feel the children are spending on the platforms, it better to add the chart and then maybe write about on the top 3 or 5 and then rest will show up in the chart. **(DONE)**
- 8. you should organise the questions so that you can distinguish between the parents that use parental controls and parents that do not use parental controls.(**DONE**)
- 9. i dont think it is OK to add the console in the survey but they are not in the guideline and sometimes there is unknown etc.
- 10. I am not sure about adding the the comments from the survey results but it might be Okay. we can see what the employer/ task giver says he might have an outsider view.
- 11. you might have a table instead of a list for the comments because they are easy to read.(DONE)
- 12. There is a bit of discussion maybe somethings can be moved to the discussion chapter were you can summarise and compare. or you can have a small the discussion part for each section 1, 2 and 3. but just write for now. (DONE)
- 13. Some of the paragraphs in the survey result are big so it could be better to divide it into two.(**DONE**)
- 14. On the result for why parents dont use parental controls maybe you can marge them also for the top answer you can have them in the chart and them the smaller ones can be others.
- 15. Write more in the methodology, what do mean by survey in 3.1 i think you should write about the information collection process in general. (**DONE**)
- 16. its important to have an introduction to introduce the chapter. or you can have in the prior chapter a sentence summarizing and connecting it to the next chapter (**DONE**)
- 17. in the methodology you can explain the activities you had in the first paragraph, you can also have a flow chart showing these activities and how they are connected. and you can also add something about the literature review and something about the survey (e.g "we planned to contact the elementary school", you can talk about what you planned in this chapter and in the survey chapter you can talk about what happened / the results how many people participate, which school, how many answers were got etc) its okay to have something in the methodology and more in their subsequent chapters. (DONE)
- 18. The parental control requirements table could be added on another column for the parental control categories and non-parental control categories. (**DONE**)
- 19. In the survey, you could maybe write the question in (not bold). it wouldn't hurt..
- 20. you should rename the section 1 section 2 etc, have them resemble the ones in the survey results chapter. **(DONE)**
- 21. Remove survey results in the survey.(DONE)
- 22. In the parental control guide, remove the "Voice of the parents", you can say

- " Feedback from the parents" (DONE)
- 23. The last paragraph in the information collected in the parental control guide is too long. summarize it. (**DONE**)

A.2.8 Monday, 03/05/2021

- 1. You need to rephrase the highlighted sentences.(DONE)
- 2. Change the flowchart in the methodology (DONE)
- 3. Don't be so specific with the percentages in the survey result, try to summarize it more since you already have a chart (**DONE**)
- 4. In the table 7.9, 7.10, 7.11 it would be better to use alphabetical instead of numbers. (**DONE**)
- 5. you could be nice to add something about recommendations for security in the guide if you have time.

A.2.9 Monday, 10/05/2021

- 1. You need to rephrase the highlighted sentences. (DONE)
- 2. You need to separate the paragraphs, dont have long paragraphs especially when they have different ideas in them. (DONE)
- 3. Move the figure in the methodology after the text
- 4. Add survey questions in the appendix. (**DONE**)

A.3 Project agreement



Norges teknisk-naturvitenskapelige universitet

Prosjektavtale

mellom NTNU Fakultet for informasjonsteknologi og elektroteknikk (IE) på Gjøvik (utdanningsinstitusjon), og
NTNU, IIK YErnst Gunnar Gran
(oppdragsgiver), og
Abirami kugathasan, Ian Shammah, Sander Arntzen Hauknes
Sander Arntzen Hauknes
(student(er))

Avtalen angir avtalepartenes plikter vedrørende gjennomføring av prosjektet og rettigheter til anvendelse av de resultater som prosjektet frembringer:

1. Studenten(e) skal gjennomføre prosjektet i perioden fra Jan 21 til Juni 21.

Studentene skal i denne perioden følge en oppsatt fremdriftsplan der NTNU IE på Gjøvik yter veiledning. Oppdragsgiver yter avtalt prosjektbistand til fastsatte tider. Oppdragsgiver stiller til rådighet kunnskap og materiale som er nødvendig for å få gjennomført prosjektet. Det forutsettes at de gitte problemstillinger det arbeides med er aktuelle og på et nivå tilpasset studentenes faglige kunnskaper. Oppdragsgiver plikter på forespørsel fra NTNU å gi en vurdering av prosjektet vederlagsfritt.

- 2. Kostnadene ved gjennomføringen av prosjektet dekkes på følgende måte:
 - Oppdragsgiver dekker selv gjennomføring av prosjektet når det gjelder f.eks. materiell, telefon, reiser og nødvendig overnatting på steder langt fra NTNU i Gjøvik. Studentene dekker utgifter for ferdigstillelse av prosjektmateriell.
 - Eiendomsretten til eventuell prototyp tilfaller den som har betalt komponenter og materiell mv. som er brukt til prototypen. Dersom det er nødvendig med større og/eller spesielle investeringer for å få gjennomført prosjektet, må det gjøres en egen avtale mellom partene om eventuell kostnadsfordeling og eiendomsrett.
- 3. NTNU IE på Gjøvik står ikke som garantist for at det oppdragsgiver har bestilt fungerer etter hensikten, ei heller at prosjektet blir fullført. Prosjektet må anses som en eksamensrelatert oppgave som blir bedømt av intern og ekstern sensor. Likevel er det en forpliktelse for utøverne av prosjektet å fullføre dette til avtalte spesifikasjoner, funksjonsnivå og tider.

4. Alle beståtte bacheloroppgaver som ikke er klausulert og hvor forfatteren(e) har gitt sitt samtykke til publisering, kan gjøres tilgjengelig via NTNUs institusjonelle arkiv NTNU Open.

Tilgjengeliggjøring i det åpne arkivet forutsetter avtale om delvis overdragelse av opphavsrett, se «avtale om publisering» (jfr Lov om opphavsrett). Oppdragsgiver og veileder godtar slik offentliggjøring når de signerer denne prosjektavtalen, og må evt. gi skriftlig melding til studenter og instituttleder/fagenhetsleder om de i løpet av prosjektet endrer syn på slik offentliggjøring.

Den totale besvarelsen med tegninger, modeller og apparatur så vel som programlisting, kildekode mv. som inngår som del av eller vedlegg til besvarelsen, kan vederlagsfritt benyttes til undervisnings- og forskningsformål. Besvarelsen, eller vedlegg til den, må ikke nyttes av NTNU til andre formål, og ikke overlates til utenforstående uten etter avtale med de øvrige parter i denne avtalen. Dette gjelder også firmaer hvor ansatte ved NTNU og/eller studenter har interesser.

- 5. Besvarelsens spesifikasjoner og resultat kan anvendes i oppdragsgivers egen virksomhet. Gjør studenten(e) i sin besvarelse, eller under arbeidet med den, en patentbar oppfinnelse, gjelder i forholdet mellom oppdragsgiver og student(er) bestemmelsene i Lov om retten til oppfinnelser av 17. april 1970, §§ 4-10.
- 6. Ut over den offentliggjøring som er nevnt i punkt 4 har studenten(e) ikke rett til å publisere sin besvarelse, det være seg helt eller delvis eller som del i annet arbeide, uten samtykke fra oppdragsgiver. Tilsvarende samtykke må foreligge i forholdet mellom student(er) og faglærer/veileder for det materialet som faglærer/veileder stiller til disposisjon.
- 7. Studenten(e) leverer oppgavebesvarelsen med vedlegg (pdf) i NTNUs elektroniske eksamenssystem. I tillegg leveres ett eksemplar til oppdragsgiver.
- 8. Denne avtalen utferdiges med ett eksemplar til hver av partene. På vegne av NTNU, IE er det instituttleder/faggruppeleder som godkjenner avtalen.
- 9. I det enkelte tilfelle kan det inngås egen avtale mellom oppdragsgiver, student(er) og NTNU som regulerer nærmere forhold vedrørende bl.a. eiendomsrett, videre bruk, konfidensialitet, kostnadsdekning og økonomisk utnyttelse av resultatene. Dersom oppdragsgiver og student(er) ønsker en videre eller ny avtale med oppdragsgiver, skjer dette uten NTNU som partner.
- 10. Når NTNU også opptrer som oppdragsgiver, trer NTNU inn i kontrakten både som utdanningsinstitusjon og som oppdragsgiver.
- 11. Eventuell uenighet vedrørende forståelse av denne avtale løses ved forhandlinger avtalepartene imellom. Dersom det ikke oppnås enighet, er partene enige om at tvisten løses av voldgift, etter bestemmelsene i tvistemålsloven av 13.8.1915 nr. 6, kapittel 32.

12. Deltakende personer ved prosjektgjennomføringen:
NTNUs veileder (navn): Eyon 20to
Oppdragsgivers kontaktperson (navn): Ernst Gunnar Gran
Student(er) (signatur): Jan Shapman dato 27.01.23 dato 27.01.23 dato 27.01.23
dato
Oppdragsgiver (signatur): Lund June June dato 2/1-2
Signert avtale leveres digitalt i Blackboard, rom for bacheloroppgaven. Godkjennes digitalt av instituttleder/faggruppeleder.
Om papirversjon med signatur er ønskelig, må papirversjon leveres til instituttet i tillegg. Plass for evt sign:
nstituttleder/faggruppeleder (signatur): dato dato

A.4 Parental control guide

ForeIdrekontroll-guide

Dette er en guide for å sette opp foreldrekontroll utviklet som en del av en bacheloroppgave i digital infrastruktur og sikkerhet. Guiden er ment å hjelpe foreldre som ikke er kjent med foreldrekontroll med å sette det opp og fortelle dem om de ulike funksjonalitetene som tilbys av plattformene. Informasjon om hva slags personopplysninger som blir samlet inn av hver tjeneste blir inkludert som en påminnelse. Guiden inneholder de fleste videostrømming og spillplattformene tilgjenelig i Norge, med unntak av spillkonsoller. Strømmingsplatformene inkludert er Disney+, HBO Nordic, Netflix, Nrk TV, Prime Video, TV2 Sumo, Viaplay og Youtube Kids. Videospill plattformene inkludert i guiden er Battlenet, Epic Games, Roblox og Steam. Det må tas et forbehold om at guiden er utviklet i løpet av mars-mai 2021 så tjenestene kan se annerledes ut når du bruker dem i fremtiden.

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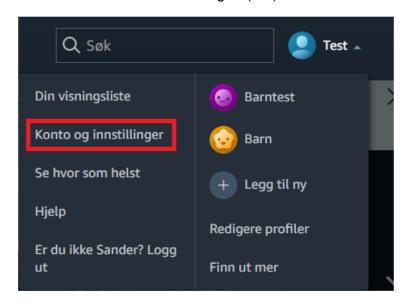
Strømmetjenester

Amazon Prime Video

Prime Video lar deg begrense innhold basert på aldersgrense. I innstillingene kan du konfigurere enn 5-sifret PIN-Kode og velge hvilken aldersgrense som kan velges. Du kan velge om barnet kun skal få se innhold ment for Alle eller helt opp til 18 år. En unik funksjon med Prime Video er at du kan sette opp begrensinger på spesifikke enheter, slik som en Ipad eller i nettleseren.

Slik setter du opp foreldrekontroll

1. Klikk på ikonet øverst til høyre hvor profilnavnet ditt står, deretter på "Konto og Innstillinger" (rød).



2. Klikk på foreldrekontroll og sett opp PIN-Kode. Når PIN-koden er satt opp krever det kan du se filmer/tv-serier som ikke er tilgjengelig med foreldrekontroll ved å taste inn koden.



3. Sett opp aldersgrense ved å velge en av de fem grensene under. Du kan velge om barnet ditt kan se innhold ment for alle eller opp til 7, 13, 16 eller 18 år. Du kan også velge hvilke enheter du vil at foreldrekontrollen skal være gjeldende på. For eksempel kan du sette opp foreldrekontroll på lpaden, men ikke i nettleseren.



Informasjon samlet inn

Informasjon samlet inn etter samtykke fra personvernregler

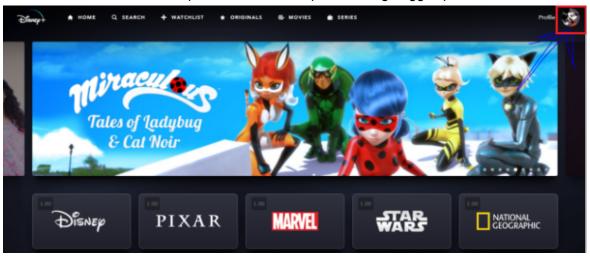
Amazon Prime Video bruker Amazons personvernerklæring siden den eies av Amazon, noe av informasjon som bli lagret av Amazon er; Ditt navn, adresse og telefonnummer, betalingsinformasjon, alder, posisjonsinformasjon, IP-adresse, personer, adresser og telefonnumre som er oppført i adressene dine, informasjon om kreditthistorikk, bilder og videoer samlet eller lagret i forbindelse med Amazon tjenester, din IP-adresse, pålogging, e-postadresse og passord, lokasjon av enheten eller datamaskinen. Mer informasjon finner du på Amazon Personvernerklæring-siden. Amazon-Personvernerklæring

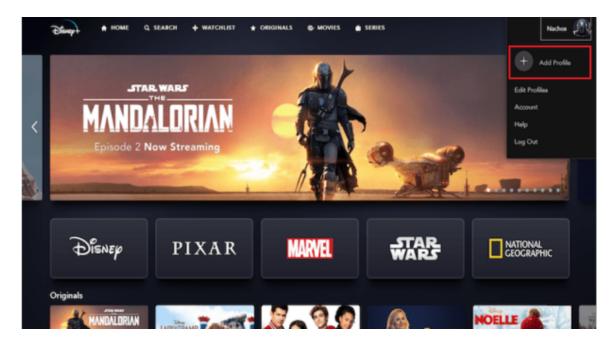
Disney+

Disney+ gir foreldre en mulighet til å opprette en separat barne-profil som gir brukeren et barnevennlig grensesnitt. På denne profilen vises bare PG- og PG13-innhold og barnets tilgang til innstillinger begrenses.

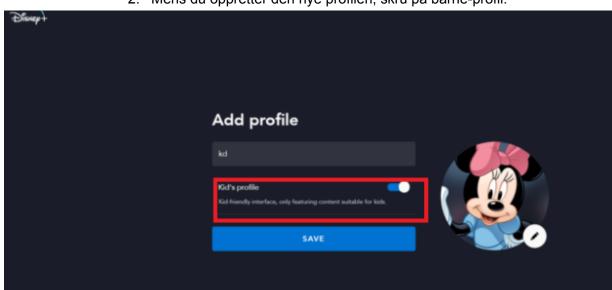
Slik setter du opp foreldrekontroll

1. Klikk på min nåværende profil -> velg "legg til profil".





2. Mens du oppretter den nye profilen, skru på barne-profil.



3. Denne barneprofilen viser ikke PG- og PG13-innhold.



PG og PG13 er fra Amerikansk film rangeringssystem som er laget av Motion Picture Association film rating system og er basert på alder. Norge har også et rangeringssystem som er laget av Medietilsynet.(Medietilsynet). PG tilsvarer (9 år og over) og PG13 tilsvarer (12 år og over), men vær oppmerksom på at anbefalinger for aldersgrense satt av Medietilsynet ikke nødvendigvis samsvarer med det Amerikanske film rangeringssystemet.(Motion Picture Association film rating system).

Informasjon samlet inn

Informasjon samlet inn etter samtykke fra personvernregler

Ditt fornavn og etternavn, bostedsland, kjønn, fødselsdato, e-postadresse, brukernavn og passord, postadresse, telefonnummer og betalingsinformasjon, informasjon fått fra en tredjepart (for eksempel en leverandør av nettsteder eller plattformer, om bruk av deres applikasjoner på tredjeparts plattformer eller enheter) Stedsinformasjon, inkludert stedsinformasjon levert av en mobil eller annen enhet som interagerer med et av deres nettsider, applikasjoner eller fysiske egenskaper, eller assosiert med din IP-adresse eller annen online eller enhets identifikator, aktivitetsinformasjon om bruken din og bruken av enhver person (er) du autoriserer gjennom kontoen din, for eksempel innholdet du ser eller legger ut, hvor ofte du bruker Disney+ og dine preferanser. Opptak når du ringer til supportsenteret. Mer informasjon finner du på siden om personvernregler for Walt Disney Company. Disney+Personvernerklæring

HBO Nordic

Foreldre blir på HBO Nordic tilbudt en måte å begrense tilgangen ved å opprette en 4-sifret PIN-Kode som må skrives før de får tilgang til innhold som er utenfor Kids-seksjonen. HBO har forskjellige seksjoner, blant dem er "HJEM", "WATCHLIST" og "KIDS". Kids-seksjonen tilbyr en låse-funksjonalitet. Når den er låst vil ikke barna ha tilgang til andre seksjoner eller innstillingene.

Slik setter du opp foreldrekontroll

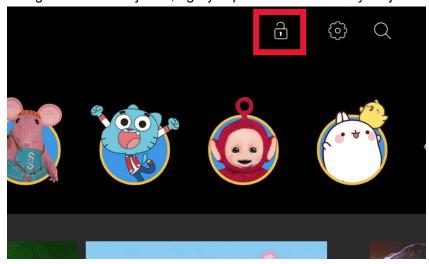
1. Naviger til "Min konto" -> "Innstillinger" -> "Foreldrekontroll".



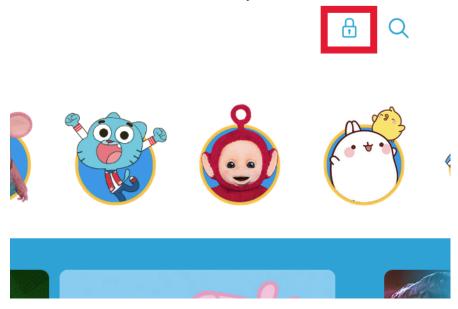
2. Opprett en 4-sifret PIN-Kode, og bekreft den ved å skrive den inn på nytt.



3. Naviger til Kids-seksjonen, og trykk på låsen øverst i høyre hjørne.



4. Tjenesten vil da låse seg til Kids-seksjonen, og man må trykke på låsen igjen for å forlate seksjonen.



5. Når man trykker på lås opp i Kids-seksjonen blir man bedt om å taste den 4-sifrede koden for å kunne forlate seksjonen. Hvis PIN-Koden glemmes, trykk "glemt pin-kode".

Deretter vil en e-post bli sendt til den registrerte postkontoen med ytterligere instruksjoner for gjenoppretting av koden.



Informasjon samlet inn

Informasjon samlet inn etter samtykke fra personvernregler

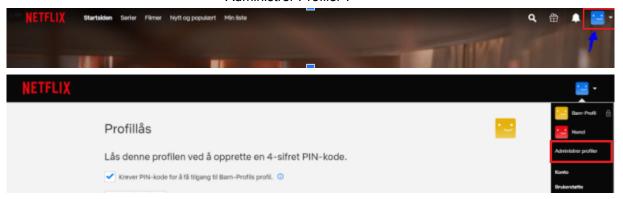
Fornavn, etternavn, kredittkort identifikatorer, kupongkoder, passord, e-postadresse, debetog kredittkort informasjon og betalingshistorikk (inkludert informasjon om prøveperioder, perioder uten aktivt abonnement osv.) Og leverandørkonto identifikatorer, geo -lokalisering / IP-adresse, enhetsinformasjon (enhetstype, enhet navn, enhets-ID), landskode, ISP-informasjon, operativsystemversjon, visnings historikk, tittelvalg, søk (bare lagret lokalt hos brukeren) og resultater av markedsførings sporing, opptak av innkommende samtale til kundetjenester, transkripsjoner av e-post eller chat korrespondanse, spørreundersøkelse hvis brukeren svarer på undersøkelser levert av HBO Nordic. Mer informasjon kan bli funnet HBO Personvernerklæring.

Netflix

Netflix gir foreldrene muligheten til å manuelt blokkere noen filmtitler. Tilgang til foreldrekontroller er beskyttet med Netflix passordet og det er derfor anbefalt å holde passordet hemmelig for barn. Netflix har en separat barne-profil. Barne-profil gir et barnevennlig brukergrensesnitt, og begrenser brukeren fra å få tilgang til kontoinnstillingene. Netflix barne-profil begrenser automatisk innhold til rating 7+ og under, men dette kan endres ved å redigere foreldrekontrollen ved hjelp av voksen profilen som har tilgang til kontoinnstillingene. Mulig aldersgrense er: Alle, 7+, 13+, 16+ eller 18+.

Slik setter du opp foreldrekontroll

1. Logg inn på Netflix Kontoen din => på startsiden, klikk på brukeren din. Velg deretter "Administrer Profiler".

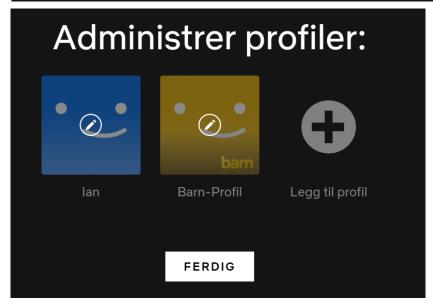


2. Velg "legg til profil".



3. Gi profilen et navn og velg alternativet for barn på høyre side av profilnavnet. Hvis du velger dette kan denne profilen bare vise filmer og serier egnet for aldersgrensen 12 år og yngre og profilen vil da ikke ha tilgang til innstillinger/ administrere profiler. Når du har gjort det, klikker du på "Fortsett" og "Ferdig".





4. Hvis du er på datamaskinen din, vil du ha et "Barn" alternativ ved siden av søkefunksjonen, dette vil automatisk føre deg til en barneprofil.

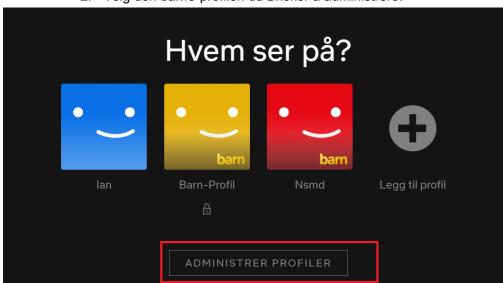


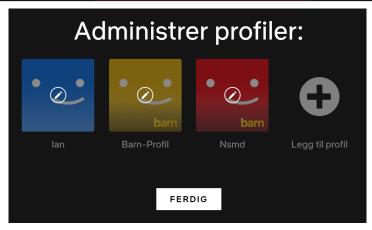
Rediger foreldrekontroll:

1. På startsiden, klikk på brukeren din og velg "Administrer Profiler".

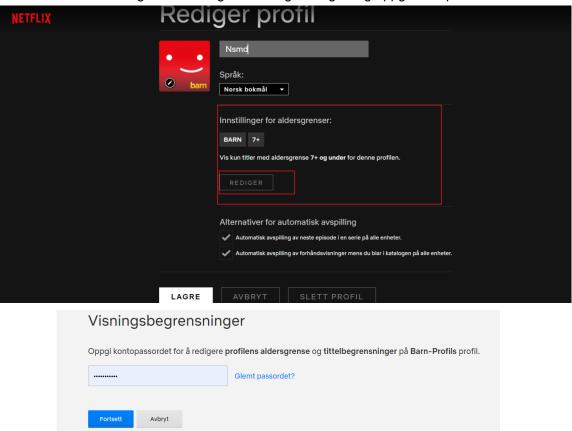


2. Velg den barne-profilen du ønsker å administrere.

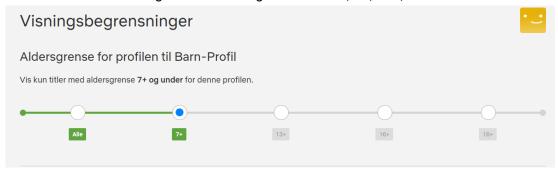




3. Under Innstillinger for aldersgrenser velg "Rediger" og oppgi kontopassordet.



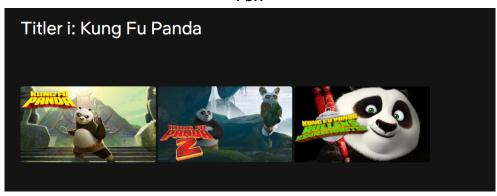
4. Her kan du velge ønsket aldersgrense fra Alle, 7+, 13+, 16+ eller 18+.



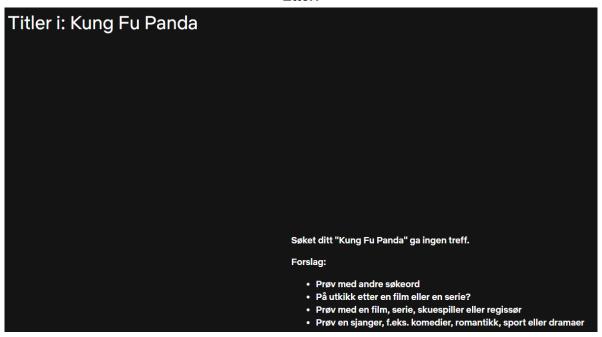
5. Du kan også fjerne bestemte titler manuelt. F.eks "Kung Fu Panda", og klikk lagre.



Før:

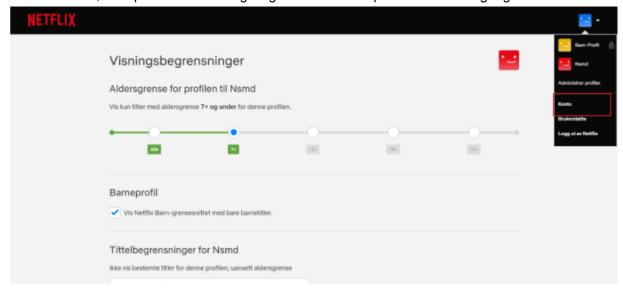


Etter:

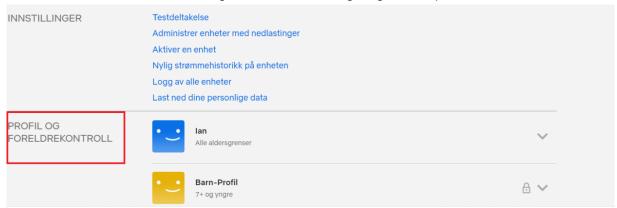


Oprette PIN-kode for låsing av profiler:

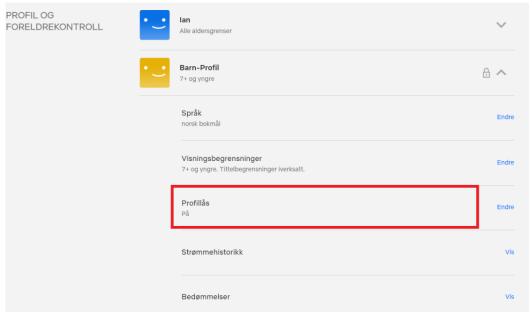
1. På Startsiden, klikk på brukeren din og velg "Konto". Barne-profiler har ikke tilgang til dette.



2. Bla nedover til "Profil og Foreldrekontroll" og velg ønsket profil.

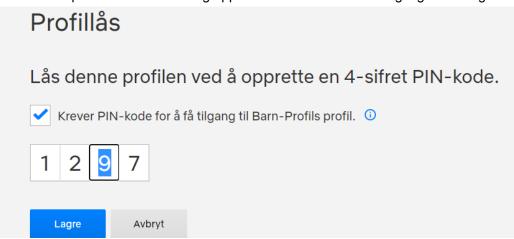


3. Under valgt profil, klikk på "Endre" på alternativet for profillås. Oppgi kontopassordet ditt og fortsett.



Profillås		
Oppgi kontopassordet for å redigere profillåsen på Barn-Profils profil.		
	Glemt passordet?	
Fortsett Avbryt		

4. Slå på dette alternativet og opprett en 4-sifret PIN-Kode og lagre endringene.



Informasjon samlet inn

Informasjon samlet inn etter samtykke fra personvernregler

Ditt navn, e-post, postadresse, betalingsinformasjon, telefonnummer, innholds preferanser, kontoinnstillinger, aktiviteten din på Netflix som tittelvalg og serier du har søkt og sett på, dine interaksjoner via e-post eller tekstmeldinger med Netflix kundestøtte, tid, dato og grunn til kontakt med kundesupport, en utskrift av chat samtalene med kundesupport, samtaleopptak hvis du ringer kundesupport, enhets-ID-er eller andre unike identifikatorer, inkludert for nettverksenhetene dine og andre enheter som er Netflix-kompatible på ditt WIFI-nettverk, ad-id, din IP-adresse, nettleser- og standardinformasjon for webserver logg, tilkoblingsinformasjon (WiFi eller mobildata), enhets- og programvareinformasjon, informasjon hentet gjennom informasjonskapsler, annonse data. Mer informasjon finner du på Netflix-støttesiden. Netflix-Personvernerklæring.

NRK TV

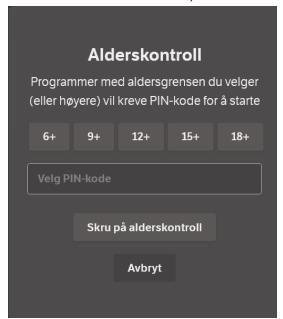
NRK TV gir foreldrene muligheten til å gi restriksjoner basert på aldersgrense. Alderskontroll kan settes uavhengig av om man har brukerkonto eller ikke. Man får velge mellom fem ulike alderskategorier, og velger deretter en PIN-kode. Denne PIN-koden må tastes om man ønsker å se et program som har en høyere aldersgrense enn den valgte på alderskontrollen. Vær oppmerksom på at det dessverre er mulig å slette alderskontrollen ved hjelp av å slette cookies, og instruksjoner på hvordan dette gjøres finner man også på NRK TVs sider.

Slik setter du opp foreldrekontroll

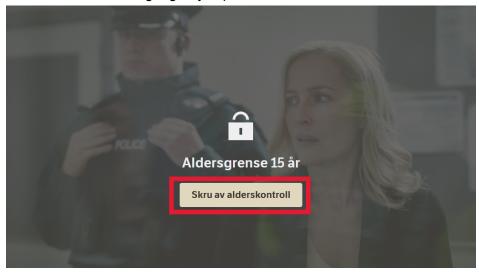
1. Naviger til "Alderskontroll" nederst på siden.



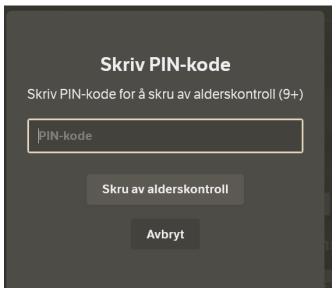
2. Det er fem aldersgrenser å velge mellom: **6+, 9+, 12+, 15+, 18+**. Velg en aldersgrense og sett en PIN-kode på minst 4 tegn for å aktivere alderskontroll. (Tegn, spesialtegn og sifre er alle tillatt)



3. Om du nå vil se noe over den angitte aldersgrensen, må du skrive inn PIN-koden for å få tilgang. Trykk på "Skru av alderskontroll".



4. Når du klikker "Skru av alderskontroll", blir du bedt om å skrive inn PIN-kode. Tast inn PIN-koden for å skru av alderskontroll.



Informasjon samlet inn

Informasjon samlet inn etter samtykke fra personvernregler.

Navnet på produsenten av datamaskinen, mobiltelefonen eller smart-TV, operativsystemet til enheten, nettleserversjonen eller eposten du brukte, og informasjon om tilkoblingen til tjenestene, for eksempel IP-adresse. Mer informasjon kan bli funnet på NRK TV personvernerklærings siden. NRK-TV-Personvernerklæring

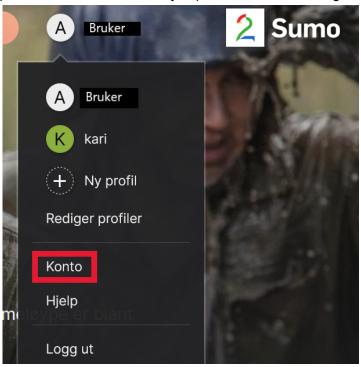
TV2 Sumo

Foreldrekontroll på TV2 Sumo lar deg begrense tilgangen til innhold som har aldersgrense.

Foreldre har muligheten til å velge mellom fem alderskategorier, og må deretter sette en 4-sifret PIN-Kode. Man må oppgi den valgte koden, for å kunne se innholdet som er beskyttet av foreldrekontroll.

Slik setter du opp foreldrekontroll

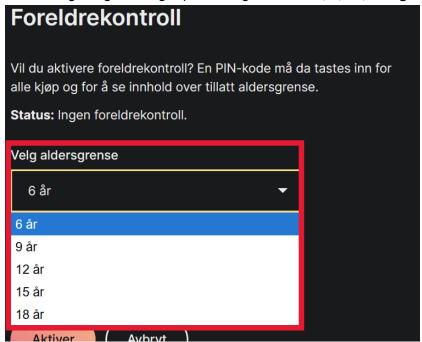
1. Logg deg på TV2 Sumo-nettstedet, trykk på konto-ikonet ditt, og velg "Konto".



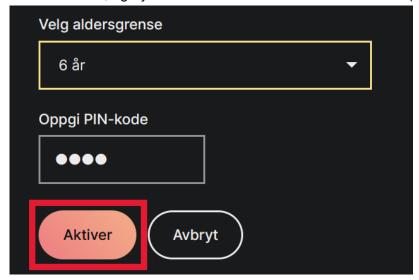
1. I rullegardinmenyen er det et eget alternativ for foreldrekontroll.



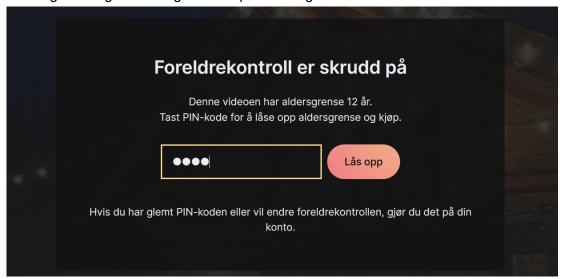
2. Her kan du velge begrensninger på aldersgrenser fra 6, 9, 12, 15 og 18 år.



3. Velg en 4-sifret PIN-Kode, og trykk "Aktiver" for å aktivere foreldrekontroll (kun siffer).



4. Nå må man skrive koden om man skal se på noe som er over aldersgrensen. Begrensningene trer også i kraft på mobil og nettbrett som er koblet til kontoen.



Kjøp og leie av film sjekker også aldersgrense på samme måte, men kort-informasjon trengs for å utføre betaling. Har man glemt koden vil det bli sendt en gjenopprettings e-post til kontoeier.

Informasjon samlet inn

Informasjon samlet inn etter samtykke fra personvernregler

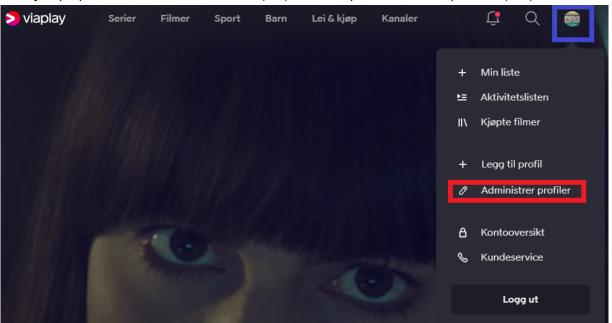
Ditt navn, adresse, fødselsdato, kjønn, betalingsinformasjon og e-postadresse, loggdata, IP-adresser, informasjonskapsler, samt informasjon om hvordan du bruker våre digitale tjenester, skriftlig korrespondanse, chatlogger, opptak av samtaler med kundesupport .Mer informasjon finner du på Tv2 Personvernerklæring-siden. TV 2s personvernerklæring

Viaplay

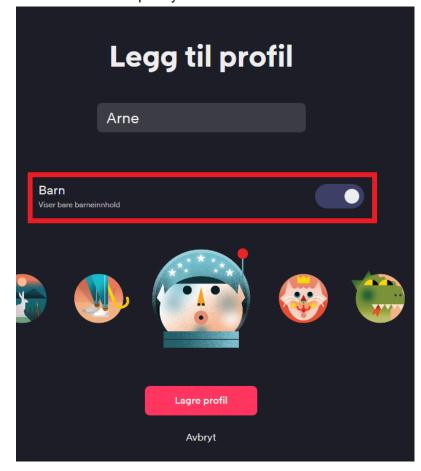
Viaplay har ingen foreldrekontroll funksjonalitet, men du kan sette opp profiler som filtrerer innholdet slik at kun det som er ment for barn blir vist. Dessverre er ikke dette noen løsning ettersom barnet vil kunne bytte profil eller lage enn ny en som ikke har denne funksjonen skrudd på.

Slik setter du opp foreldrekontroll

1. Trykk på profilikonet øverst til venstre (blå), deretter på "Administrer profiler" (rød).



2. Klikk på "Legg til profil".



3. Skru på bryteren som heter "Barn".

4. Skriv inn et navn og klikk "Lagre profil".

Informasjon samlet inn

Informasjon samlet inn etter samtykke fra personvernregler

Ditt navn, e-postadresse, telefonnummer og adresse, betalingsinformasjon, fødselsdato, nasjonalitet, korrespondanse når du kontakter Viaplay (registrere telefonsamtaler, e-post, chat logger, osv.), Brukerinformasjon du velger å oppgi for undersøkelsens formål (f.eks. i forbindelse med brukerundersøkelser), sosiale medier kontoer (merk at erklæringen ikke gjelder for din bruk av dine sosiale medier kontoer), brukernavn og passord, og e-postadresse, telefonnummer og annen informasjon du oppgir for den individuelle profilen når du oppretter brukerprofiler, informasjon om brukeratferden din, slik som ser atferd, stjernemerket og navigering, informasjon om dine besøk til Viaplay ved hjelp av informasjonskapsler, innhold i historikk for hver brukerprofil. Mer informasjon finner du siden Viaplay Privacy Policy. Viaplay personvernerklæring

YouTube Kids

YouTube Kids tilbyr foreldre en rekke forskjellige foreldrekontroll-løsninger. Man blir anbefalt å logge inn med Google-konto for å kunne få tilgang til flere foreldrekontroll-funksjoner. Man kan lage separate kontoer til sine barn, og velge en av tre forskjellige alderskategorier som man mener er tilpasset barnet best. Da vil YouTube Kids vise innhold som er tilpasset barn til og med i denne alderskategorien. Man kan velge om barnet skal ha lov til å bruke søkefunksjonen, eller om hen kun skal ha tilgang til utvalgte kanaler YouTube Kids har godkjent. For å kunne endre på innstillingene til kontoen må man bekrefte at man er forelder ved å logge inn på Google-kontoen igjen. Foreldre kan blokkere og/eller rapporte videoer og kanaler de mener ikke er egnet for barnet. Man får også full oversikt over hva barnet ser på, og barnet kan ikke slette denne historikken. Forelder kan slette eller sette historikk på pause, for å stoppe barnet i å få "anbefalte videoer". Rapportering av videoer er også mulig om man mener noe er upassende, og dette vil hjelpe YouTube Kids med å fortsette å holde seg tilpasset til barn.

Slik setter du opp foreldrekontroll

1. Når du navigerer til youtubekids.com vil du bli spurt om du er et barn eller en forelder.



Be en forelder om å konfigurere YouTube Kids



FINN UT MER

2. YouTube Kids ber deg bruke et par minutter på å sette opp og ta noen viktige sikkerhets avgjørelser, og her trykker man videre.

Velkommen

Før barnet ditt begynner å utforske alt det morsomme som finnes i YouTube Kids, bør du sette av et par minutter til å ta noen viktige sikkerhetsavgjørelser i foreldrekontrollene.



3. Man blir deretter bedt om å taste inn fødselsåret sitt (forelder), for å bekrefte alderen.

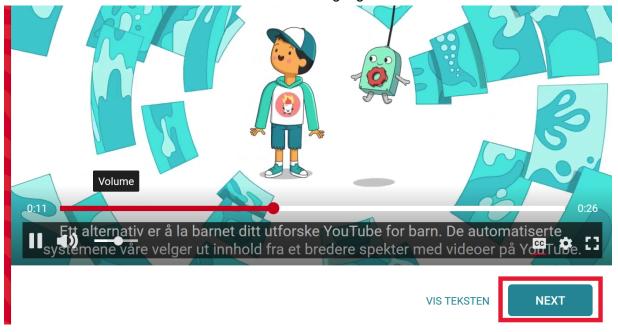
Tast inn fødselsår og trykk "Submit":

Hei, forelder!

Skriv inn fødselsåret ditt. Dette er bare for å bekrefte alderen din. Alderen lagres ikke.



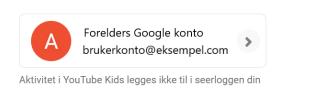
4. Nå vil YouTube Kids spille av en video som inneholder mer informasjon om foreldrekontrollene de tilbyr. Etter å ha hørt denne kan man klikke videre på neste for å sette i gang.



5. På neste steg vil forelder få muligheten til å logge inn med Google konto (Sign in) eller fortsette uten å logge inn (Hopp over). YouTube Kids tilbyr flere foreldrekontroll funksjoner for de som logger på. Derfor anbefales det å logge på.

Logg på med en foreldrekonto

Logg på med din egen konto for å konfigurere en profil og få tilgang til flere foreldrekontroller. Hvis du ikke vil logge på, kan du hoppe over dette trinnet.



ACK

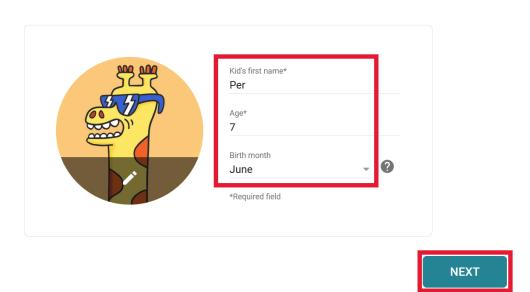
HOPP OVER

SIGN IN

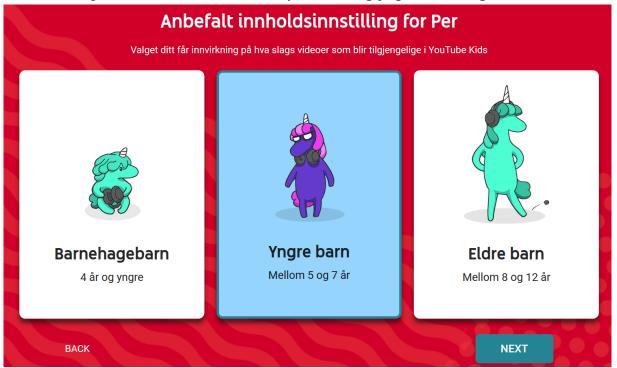
6. Etter å ha logget inn vil man kunne få opprette en barneprofil. Her er det obligatorisk å legge inn barnets fornavn og alder for å opprette profilen. Fødselsmåned kan man legge til om man ønsker, og dette gjør at YouTube Kids kan levere mer nøyaktig alderstilpasset innhold. Trykk videre når informasjonen er fylt inn.

Opprett en profil

Vi forsøker å tilpasse innholdet i YouTube Kids etter barnets alder. Bare du og barnet ditt kan se denne informasjonen.



7. Etter å ha opprettet en barneprofil vil man kunne få muligheten til å velge mellom de tre alderskategoriene YouTube Kids har å tilby. De er: **4 og yngre**, **5-7 år**, **og 8-12 år**.



8. Om man synes det er vanskelig å velge kan man få mer informasjon om hva hver av alderskategoriene tilbyr ved å trykke på hver enkelt og lese. Velg en for å gå videre.

4 år og yngre:





Barnehagebarn

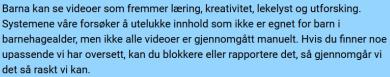
Innhold anbefalt for barn på opptil 4 år















Q Søkeresultatene er begrenset til innhold som er anbefalt for barn på 4 år yngre.





Hvis du ønsker deg flere kontroller, for eksempel muligheten til å godkjenne





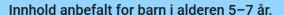


5-7 år:























Barna kan utforske interessene sine og søke etter en rekke ulike emner, for eksempel sanger, tegnefilmer, hobbyer med mer. Systemene våre forsøker å utelukke innhold som ikke er egnet for yngre barn, men ikke alle videoer er gjennomgått manuelt. Hvis du finner noe upassende vi har oversett, kan du blokkere eller rapportere det, så gjennomgår vi det så raskt vi kan.

Q Søkeresultatene er begrenset til innhold som er anbefalt for barn på 7 år yngre.

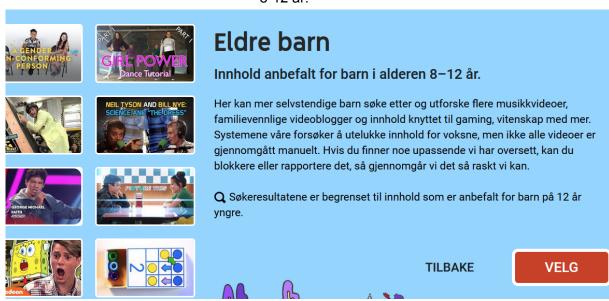
Hvis du ønsker deg flere kontroller, for eksempel muligheten til å godkjenne



TILBAKE

VELG

8-12 år:



9. Etter å ha valgt alderskategori blir man bedt om å velge å skru på eller skru av søkefunksjonen. Skrur man av søkefunksjonen vil barnet kun ha tilgang til materiale fra kanaler YouTube Kids har godkjent, og barnet kan dermed ikke søke etter andre videoer. Skrur man på søkefunksjonen kan barnet søke gjennom millioner av videoer som befinner seg på YouTube Kids. Velg en av alternativene for å fortsette.

Vil du slå søk av eller på?

Når du **slår på søkefunksjonen**, kan barnet ditt søke etter nye og interessante videoer blant millioner av videoer i YouTube Kids-appen.

Hvis du **slår av søkefunksjonen**, kan barnet bare se videoer fra et utvalg kanaler som er godkjent av YouTube Kids. Barnet kan ikke søke etter videoer.

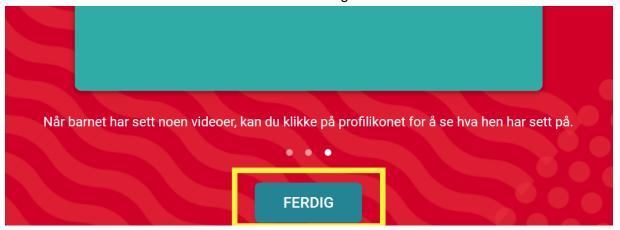
Det finnes likevel alltid en mulighet for at hun eller han finner innhold du anser som upassende. Du kan rapportere slikt innhold til oss, så går vi raskt gjennom det.

BACK

SLÅ AV SØKEFUNKSJONEN

SLÅ PÅ SØKEFUNKSJONEN

10. Nå er opprettelsen av første barneprofilen ferdig, og man har muligheten til legge til flere barneprofiler om man ønsker dette. Når profilen/profilene er opprettet vil man gå videre til å få en innføring i de forskjellige foreldrekontroll-funksjonene. Fortsett ved å trykke "Ferdig".



11. Da er det fundamentale på plass og barna kan sette i gang å benytte seg av tjenesten.

Bra jobbet, Abirami K!

Hvem bruker YouTube Kids akkurat nå?



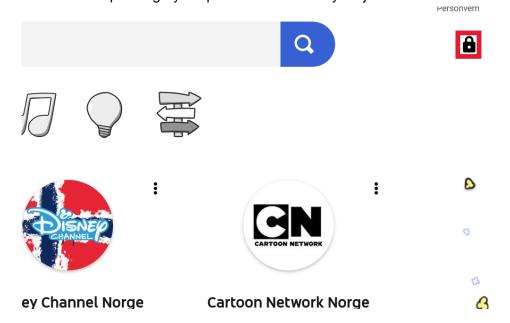
ADD ANOTHER PROFILE

Hvordan endre innstillinger eller åpne foreldreveileder

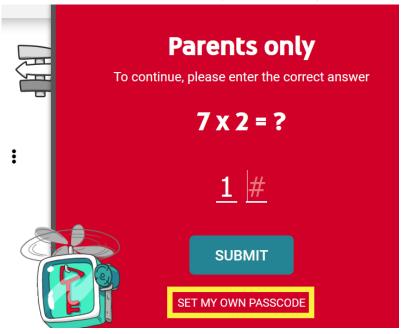
1. Hva man skal gjøre for å endre innstillinger eller åpne foreldreveileder.



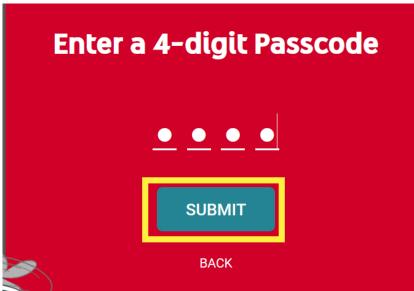
2. Som nevnt i punktet over må man for å endre innstillingene på en barneprofil gå inn på hver profil og trykke på låsen i øverst høyre hjørne.



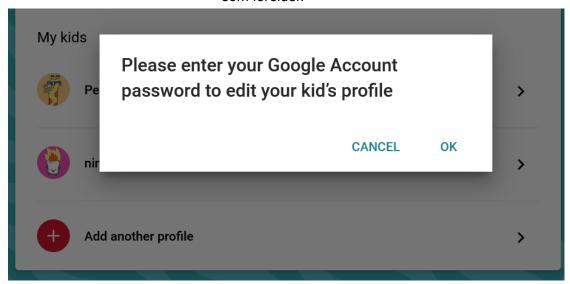
3. Når man første gang vil inn på innstillingene vil man få et regnestykke å løse for å bekrefte at man er voksen. Dette kan være enkelt for barn å komme rundt, for alle har kalkulator. Derfor vil vi anbefale å sette opp et 4-sifret kode ved å trykke på "Set my own passcode".



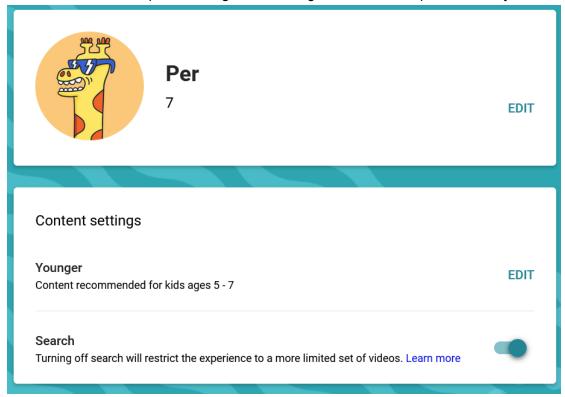
4. Da vil man bli bedt om å svare på mattestykket og kan deretter sette koden. Trykk på "Submit" når du er ferdig og bekreft koden ved å taste den inn på nytt.



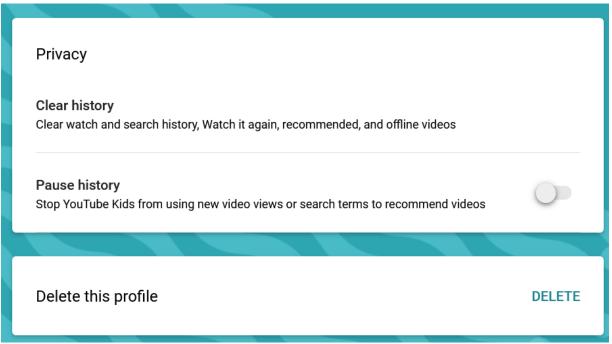
5. Et mattestykke og en kode kan være lett å sette opp for et barn, men for å gjøre endringer i barneprofilene må man uansett logge inn på Google-kontoen igjen for å bekrefte sin identitet som forelder.



6. Etter å ha bekreftet identitet vil man få tilgang til de ytterligere innstillingene. Her vil man kunne endre barne-profilen, velge alderskategori, skru av eller på søkefunksjonen.



7. Man kan også slette logger, eller sette historien på pause slik at YouTube Kids ikke anbefaler videoer utifra hva barnet har søkt og sett på tidligere. Man kan også slette profilen.

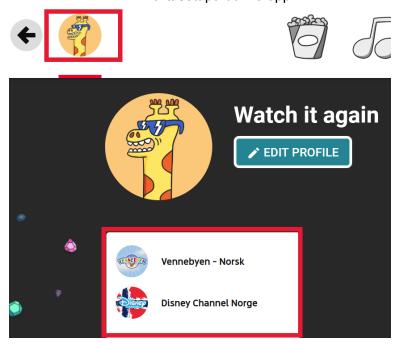


Hvordan monitorere hva barnet ser på

1. Hva man skal gjøre for å monitorere hva barnet har sett på.



2. Som YouTube Kids nevner i punktet over kan man monitorere barnets aktivitet. For å se hva barnet har ser på kan man trykke på profilikonet, og her vil listen over det som har blitt sett på dukke opp.

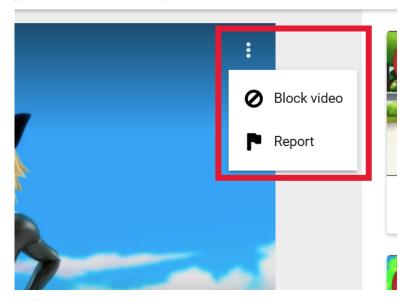


Hvordan rapportere og/eller blokkere videoer

1. Hva man må gjøre for å blokkere å rapportere videoer.

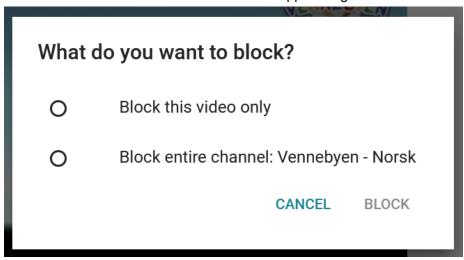


2. For å blokkere eller rapportere videoer kan går man inn på den enkelte videoen for å gjøre dette slik som tidligere nevnt av YouTube Kids i punktet over.

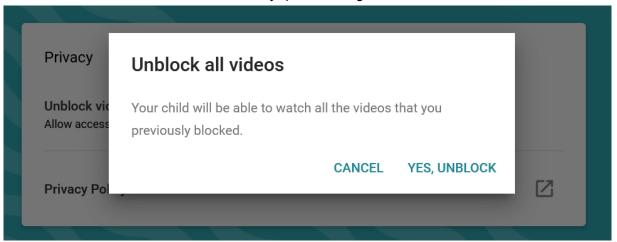


Blokkering

1. Når man prøver å blokkere en video vil man få muligheten til å velge mellom å blokkere kun den ene videoen eller hele den opprinnelige kanalen.

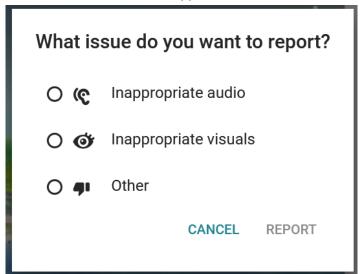


2. Om du ønsker å fjerne blokkeringen på videoer du tidligere blokkerte kan du gjøre dette under "Privacy" på innstillinger.



Rapportering

1. Når man prøver å rapportere vil blir man bedt om å velge årsaken til hvorfor man rapporterer.



Informasjon samlet inn

Informasjon samlet inn etter samtykke fra personvernregler

Enhetstype og innstillinger, for eksempel maskinvare modell og versjon av operativsystem, logginformasjon, inkludert detaljer om hvordan tjenesten deres brukes, enhets

hendelsesinformasjon og enhetens IP-adresse, unike applikasjons numre, som applikasjons versjonsnummer og unike identifikatorer, som brukes til å samle inn og lagre informasjon om en app eller enhet, for eksempel foretrukket språk, appaktivitet og andre innstillinger, videoene barnet ditt ser på, søkeordene deres og andre interaksjoner med innhold og annonser i appen. Hvis et barn bruker lydfunksjoner i appen, for eksempel stemmesøk, samler appen kort taleinformasjon. Denne informasjonen vil ikke bli brukt til interessebasert annonsering, som den er på vanlig YouTube, og personlig informasjon om barnet vil ikke være tillatt å bli delt med tredjeparter eller for offentligheten. Informasjon vil imidlertid bli delt hvis foreldrenes samtykke eller for juridiske formål. Mer informasjon finner du i YouTube Kids Privacy Notice. Youtube Kids personvernerklæring.

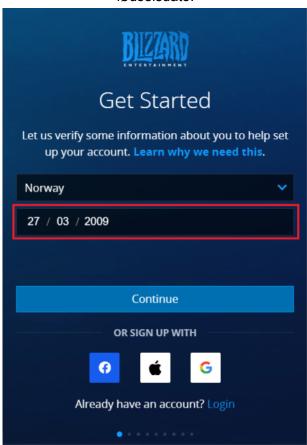
Videospilltjenester

Battlenet

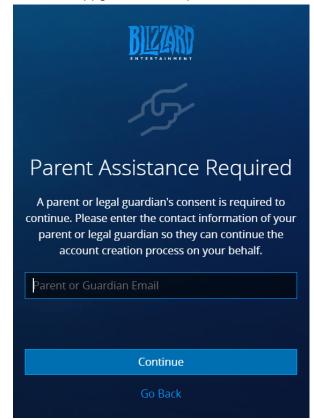
Battlenet krever foreldre- og barns e-postadresse, og tilgang til foreldrekontrollen krever en PIN-kode som sendes til foreldres e-postadresse. Dette sikrer at barnet ikke har muligheten til å fjerne foreldrekontrollen ved hjelp av legitimasjonen. Med Battlenets foreldrekontroll kan man administrere innstillinger for spiller til spiller interaksjon, hvordan barnets konto ser ut for andre i Blizzard-fellesskapet, administrere innstillinger for kjøp og spillinnstillinger.

Opprett en battlenet-konto

1. Gå til siden for oppretting av Battlenet-konto https://eu.battle.net/account/creation/flow/creation-full, legg til land og barnets fødselsdato.



2. Hvis du er under 13 år, må du oppgi foreldres e-postadresse for å fullføre registreringen.





3. En lenke for å opprette kontoen sendes til foreldrenes E-post. Klikk på den, les og aksepter personvernreglene og fortsett.

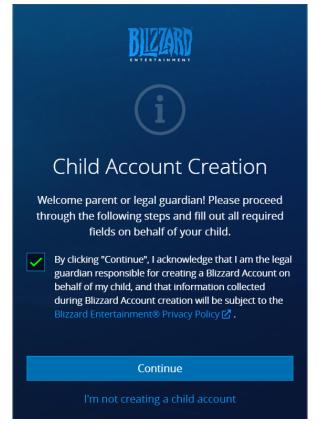




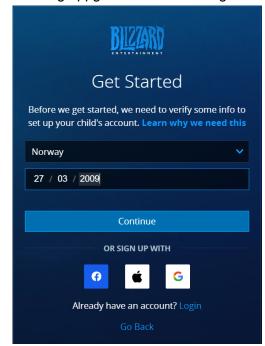
You are receiving this email because your child has expressed an interest in creating a Blizzard Account, which is required to play games on Blizzard services (such as World of Warcraft and StarCraft II), purchase items in the Blizzard Gear Store and the Blizzard Shop, and use the social features of our Blizzard onlinegaming service. During the account creation process, your child was asked to provide the email address of a parent or guardian in order to proceed. If you would like your child to be able to use a Blizzard Account, you will need to create one for him or her at this website:

You must create the account in your own name. During the process, you will need to provide an email address that will be used as the account name, and another that will receive instructions on how to use Blizzard's Parental Controls features. You may use the same email address.

For more information on these features, please visit our Parental Controls website.

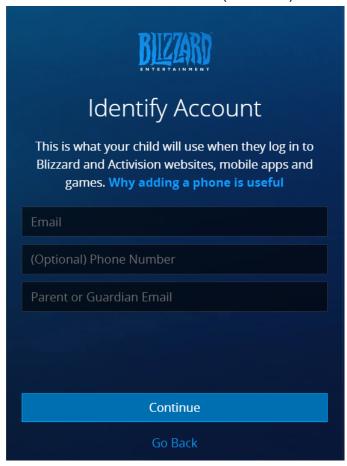


4. Bekreft barnets alder og oppgi barnets fornavn og etternavn og fortsett.



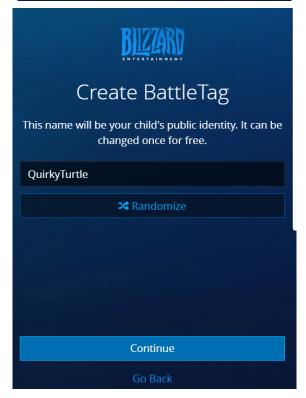


5. Oppgi e-postadressen til barnet som skal brukes for å logge inn og e-posten din (foreldres e-postadresse). Du kan også oppgi telefonnummeret ditt for for å aktivere ekstra innloggings- og konto gjenopprettingsalternativer, motta kritiske varsler og forbedre konto sikkerheten(anbefales).



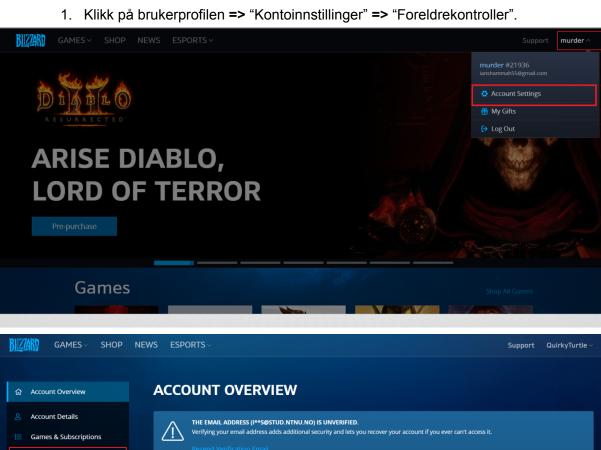
6. Aksepter alle vilkår og fortsett => bekreft at du er forelder ved å løse det oppgitte problemet => lag konto passord og fortsett => lag brukernavnet til barnet og fortsett. Kontoen opprettes deretter og kan brukes til å logge på i Battlenet-appen som er lastet ned på barnets-enhet.

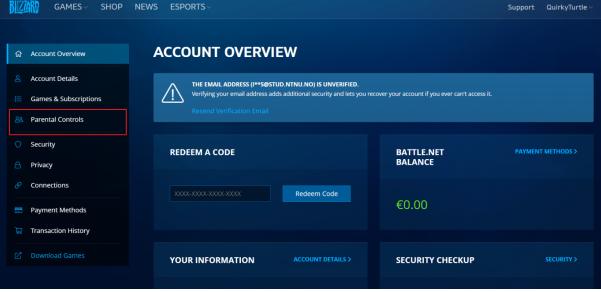




7. Battlenet kan lastes på mac os og windows PCer. Bruk linken: https://www.blizzard.com/en-sg/apps/battle.net/desktop til å laste opp Battlenet på barnets PC. Battlenet finnes også på Google play (for Android enheter) og Play store (for Iphone).

Slik setter du opp foreldrekontroll

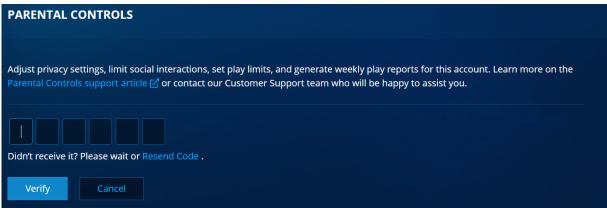




2. For å oppdatere foreldrekontrollen, må brukeren oppgi e-postadressen til forelderen, og en bekreftelseskode sendes da til denne e-postadressen. Under "foreldrekontroll" kan man administrere tillatelser for å kjøpe varer i spillet og få tilgang til betalingsmåter. Ved å slå på / av kjøp i spillet.







Her kan du:

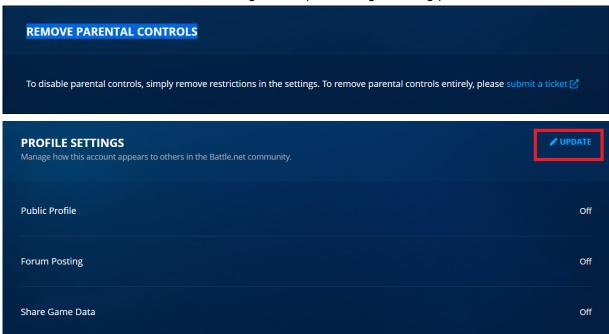
a) Oppdater foreldres e-postadresse.



b) Administrere innstillinger for spiller til spiller ved å aktivere eller deaktivere: "Konto Mute", "Stemmechat", "Real ID", "Blizzard-grupper", "Venn til venneforslag" og "Privat tekst chat".



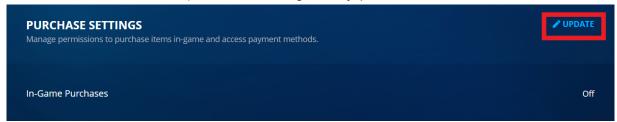
c) Administrer hvordan kontoen ser ut for andre i Blizzard-fellesskapet ved å aktivere eller deaktivere: "Forum Posting", "Del spilldata" og "offentlig profil".



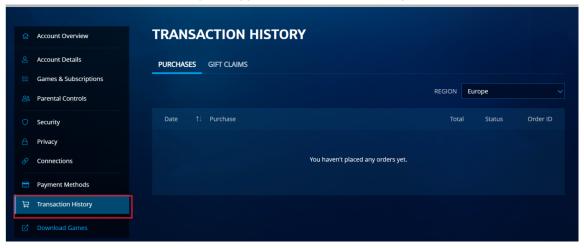
d) Innstilling for spill der du mottar ukentlige e-post-rapporter og sette tidsbegrensninger og tidsplan for spill, ved å aktivere eller deaktivere: "tidssone", "daglig grense", "ukentlig grense", "tidsplan", "motta ukentlig epost-rapport".



e) Endre innstillinger for kjøp



f) Du kan også overvåke transaksjonsloggen på denne kontoen ved å gå til transaksjonsloggen under kontoinnstillinger.



Informasjon samlet inn

Informasjon samlet inn etter samtykke fra personvernregler

Ditt navn, BattleTag, navn, fødselsdato, adresse, bostedsland, telefonnummer, e-postadresse, foreldres e-postadresse og passord, navn, telefonnummer, adresse, kredittkortnummer, utløpsdato, banknavn, bankkontonummer og / eller bankkonto eierens navn, alder, fødselsdato, kjønn og / eller spill- og plattform innstillinger, IP-informasjon, informasjon om datamaskinen din (evner, databehandling av spill osv.), Hvis du registrerer en konto som bruker Facebook-legitimasjonen din, kan følgende informasjon samles inn: (1) for- og etternavn og annen informasjon som er gjort offentlig tilgjengelig av deg, (2) vennelisten din og (3) e-postadressen som er knyttet til kontoen din. Lignende datautveksling vil skje når du kobler Blizzard-kontoen din til andre selskaper, for eksempel Twitch og konsoll plattformer.

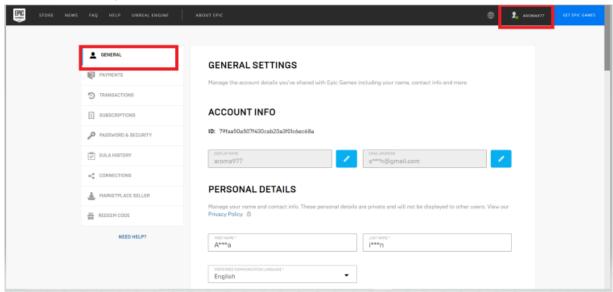
Mer informasjon finner du siden om Battlenet Personvernerklæringen.

Epic games

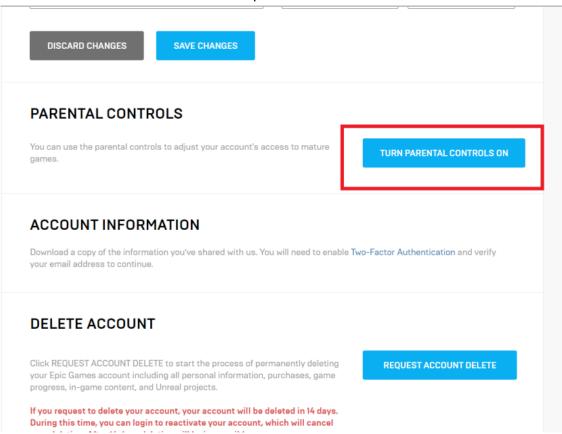
Foreldrekontroll på Epic Games er beskyttet med PIN-kode. Når du har fått tilgang kan du endre PIN-koden og endre aldersgrensene. Aldersgrense er basert på ESRB eller PEGI eller GRAC. PEGI er det aktuelle alternativet hvis du bor i Norge eller Europa.

Slik setter du opp foreldrekontroll

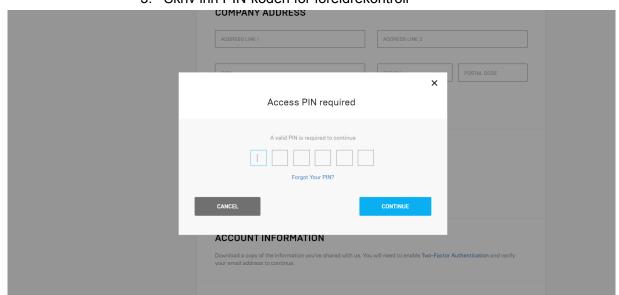
1. Når du har laget en konto klikk på konto> "Generelt" > bla ned til foreldrekontroll.



2. Slå deretter på foreldrekontroller.



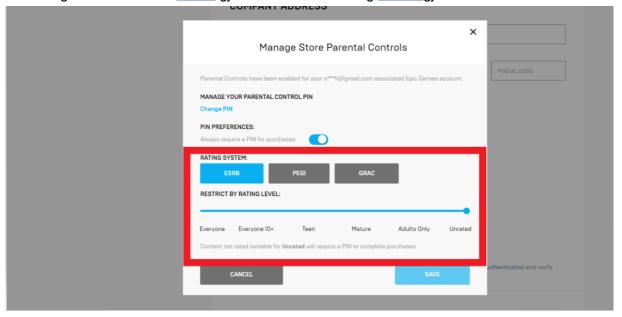
3. Skriv inn PIN-koden for foreldrekontroll



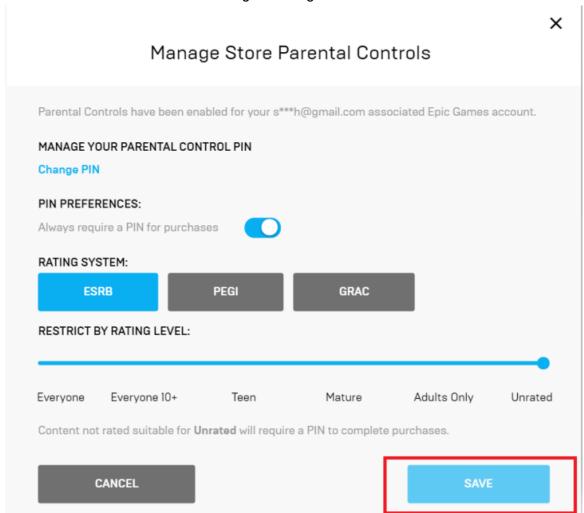
COMPANY ADDRESS × Manage Store Parental Controls MANAGE YOUR PARENTAL CONTROL PIN RATING SYSTEM: RESTRICT BY RATING LEVEL: Everyone 10+ Adults Only

4. Her kan du endre PIN-kode, og velge å alltid kreve PIN-kode.

5. Her kan du velge begrensninger på aldersgrenser basert på PEGI. PEGI gjelder EU og EU og EØS-land mens ESRB gjelder Nord-Amerika og GRAC gjelder Sør-Korea.



6. Lagre endringene.



7. For å endre allerede konfigurert foreldrekontroll klikk på "Manage store settings"

CITY

REGION

POSTAL CODE

DISCARD CHANGES

SAVE CHANGES

PARENTAL CONTROLS

Content not rated suitable for Unrated will require a PIN to complete purchases.

TURN PARENTAL CONTROLS OFF

MANAGE STORE SETTINGS

ACCOUNT INFORMATION

Download a copy of the information you've shared with us. You will need to enable Two-Factor Authentication and verify your email address to continue.

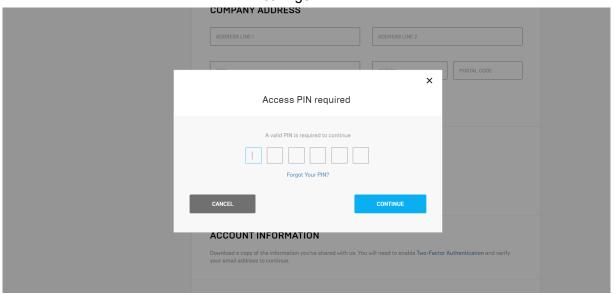
DELETE ACCOUNT

Click REQUEST ACCOUNT DELETE to start the process of permanently deleting

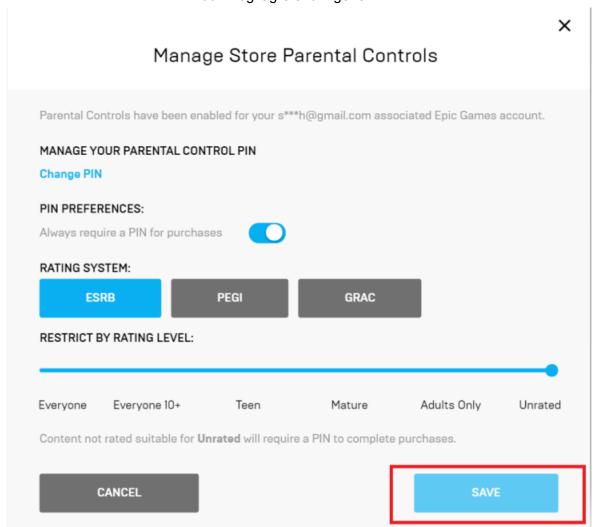
your Epic Games account including all personal information, purchases, game

REQUEST ACCOUNT DELETE

8. Du vil bli spurt om å legge inn kontopassordet for å få tilgang til foreldrekontroll innstillinger.



9. Etter du har lagt inn riktig passord og fått tilgang til innstillingene kan du endre det hvis du vil og lagre endringene.



Informasjon samlet inn

Informasjon samlet inn etter samtykke fra personvernregler

Ditt navn, visningsnavn, passord, hjemland og e-postadresse, foreldres e-postadresse, Epic-konto-ID, kortets betalingskort nummer og utløpsdato, telefonnummer, postadresse, faktureringsadresse og fødselsdato, informasjon som du deler med Epic-spill gjennom forespørsler om spiller støtte eller gjennom chat og foruminnlegg i spillet, din IP-adresse eller enhets merke og modell, informasjon om enhets operativsystemer og nettlesere, eller andre spesifikasjoner for enhet eller system, bruksinformasjon og statistikk om samspillet ditt med

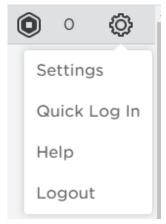
Epic-tjenestene, som kan omfatte nettadressene til nettstedene du har besøkt, nettadresser for henvisende og spennende sider, sidevisninger, tid brukt på en side, antall klikk, plattformtype, applikasjonen du brukte eller spillet du spilte, hvor lenge du brukte eller spilte det, og annen bruksstatistikk, krasj rapporter, som kan genereres automatisk når et spill eller et program krasjer og inkluderer informasjon om systemet ditt og krasj, informasjon som muliggjør en tryggere og mer personlig opplevelse, for eksempel visningsnavnet ditt eller annen brukeridentifikasjon gitt i forbindelse med applikasjonsbruk eller spill, lagrede preferanser, spill fremgang og enhets identifikatorer eller bruksinformasjon for autentisering og svindelforebyggende formål og plasseringen av enheten din, som kan være avledet fra enhetens IP-adresse. Mer informasjon finner du Epic games Privacy Personvernerklæring-siden. Epic Games personvernerklæring

Roblox

Roblox lar deg sette opp begrensninger som gjør at barnet kun kan spille på servere godkjent av spillutviklerne. I tillegg kan du sette opp restriksjoner på hvem barnet ditt kan kommunisere med. Fra ingen, til bare venner eller alle.

Slik setter du opp foreldrekontroll

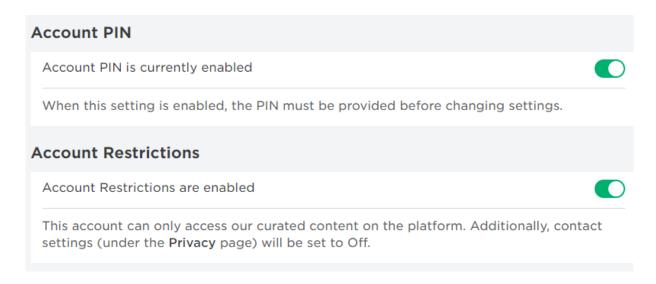
1. Klikk på tannhjulet øverst til venstre, deretter på "settings".



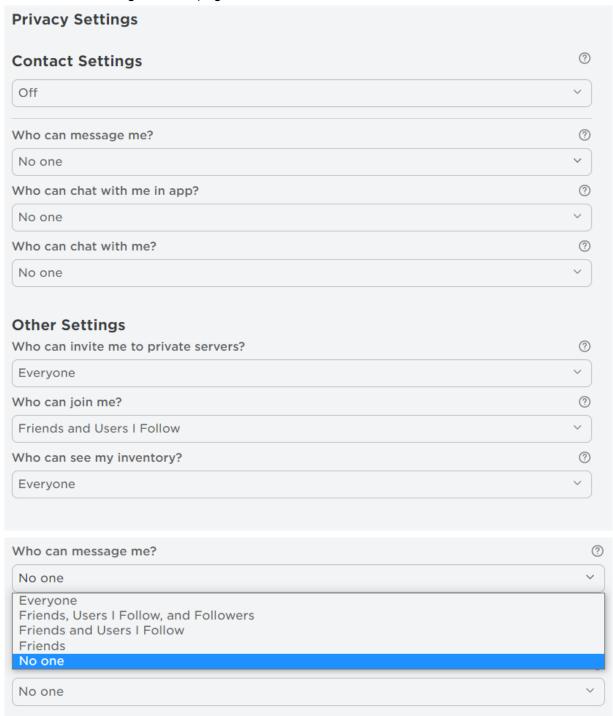
De relevante foreldrekontrollene finner du under "Security" og "Privacy".



2. Under security kan du sette opp en PIN-Kode får og aktivere noe som heter "Account restrictions". Når PIN koden er på må PIN-koden tastes inn for å kunne endre innstillinger. Når "Account restrictions" er skrudd vil barnet kun få spille kuratert innhold, i tillegg vil mulighetene for kontakt med andre spillere bli skrudd av.



3. Under "Privacy" kan du bestemme hvem barnet ditt skal kunne snakke med (alle, venner, følgere, etc...) og hvem som kan invitere barnet ditt til servere.



Informasjon samlet inn

Informasjon samlet inn etter samtykke fra personvernregler

Brukernavn og passord, alder eller fødselsdato, kjønn, regional beliggenhet eller språk preferanse, e-postadresse, foreldres e-postadresse, navn, faktureringsadresse, kredittkort eller annen betalingsinformasjon og fakturerings-e-post, transaksjonsdetaljer og kjøpshistorikk, dine kommentarer og meldinger, telefonnummer. Hvis du spiller Roblox-spill på en VR-plattform, vil du samle inn fysisk bevegelse informasjon. Mer informasjon finner du på Roblox-personvernerklæring.

Steam

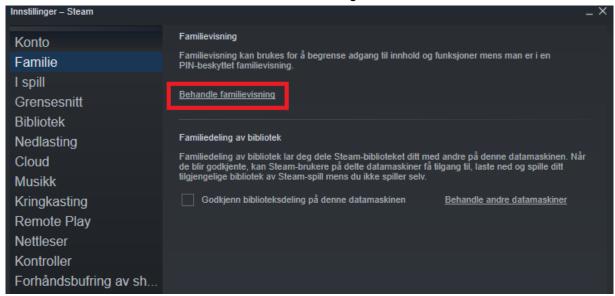
Steam gir deg mulighet til å manuelt velge hvilke spill barnet ditt skal få lov til å spille. Du kan i tillegg legge inn restriksjoner.

Slik setter du opp foreldrekontroll

1. I Steam-applikasjonen, klikk øverst til venstre der det står "Steam", deretter klikk på "Innstillinger".



2. I innstillinger klikker du på "Familie" i menyen til venstre. Deretter klikker du på "Behandle familievisning".

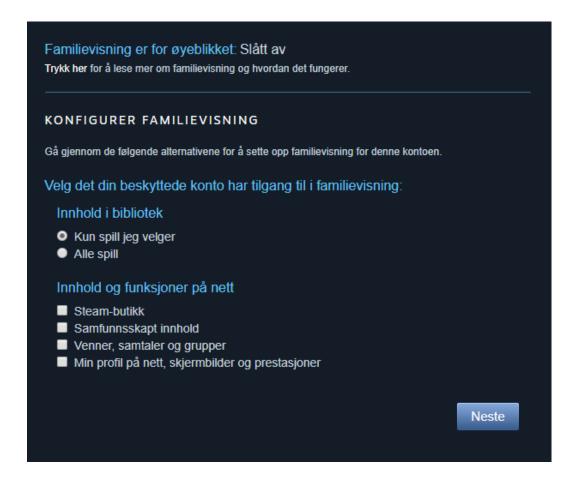


3. Her er det noen valg for hvordan du ønsker å konfigurere. Her kan du først velge om du ønsker at barnet ditt skal kunne spill alle spillene på kontoen, eller kun de spillene som du velger at han/hun skal kunne spille. I tillegg finnes det noen innstillinger for hva slags funksjonalitet barnet ditt skal ha tilgang til i spillet.

Steam Butikk: Hvis denne er skrudd på vil barnet ditt ha tilgang til å kjøpe spill i Steam-butikken. Er det et kort koblet til brukeren anbefales denne å være skrudd av. Samfunnsskapt innhold: Når denne er skrudd på vil barnet ditt ha tilgang til innhold laget av andre spillere.

Venner, samtaler og grupper: Hvis denne er skrudd på vil barnet ditt ha tilgang til å snakke med andre spillere gjennom grupper og vennelisten til brukeren.

Min profil på nett, skjermbilder og prestasjoner: Som tittelen sier gir denne tilgang til profilen din, skjermbilder og prestasjoner. Denne er relativt harmløs og kan som regel skrus på hvis du ikke har en spesifikk grunn til at han/hun ikke skal ha tilgang til disse.



Informasjon samlet inn

Informasjon samlet inn etter samtykke fra personvernregler

Din e-postadresse og bostedsland, brukernavn og passord, Steam-ID, kjøpsinformasjon (navn, kortnummer, utløpsdato og sikkerhetskode),Informasjon som du legger ut, kommenterer eller følger i noe av Steam innholdet og tjenestene; Informasjon sendt via chat; Informasjon du gir når du ber om informasjon eller støtte fra steam eller kjøper innhold og tjenester fra oss, inkludert informasjon som er nødvendig for å behandle dine bestillinger hos den aktuelle betalings forhandleren eller, i tilfelle fysiske varer, fraktleverandører; Informasjon du gir steam når du deltar i konkurranser, konkurranser og turneringer eller svarer på undersøkelser, f.eks. kontaktinformasjonen din.nettleser- og enhetsinformasjon, data samlet inn via automatiserte elektroniske interaksjoner og bruksdata for applikasjoner.informasjon om din aktivitet i innholdet og steam tjenestene, for eksempel spillstatistikk, Spore data og cookies,Mer informasjon kan bli funnet på <u>Steam Personvernerklæring</u>.

A.5 Information collected

A.5.1 Streaming platforms

Notes taken during the collection of information about the streaming platforms are presented in this section. The streaming platforms are listed in alphabetic order.

Amazon Prime Video

Amazon Prime video har en foreldrekontrollløsning, denne foreldrekontrollen lar deg sette aldersgrense på Alle, 7, 13, 16 og 18 år for filmene som spilles. En interessant ting med Amazon Prime video er at du kan sette begrensninger basert på enhet, så du kan ha andre begrensinger på en lpad en i nettleseren.



Når foreldrekontroll er på må en pin kode tastes inn for å se filmer/serie med høyere aldresgrense enn angitt.

Set up parental controls

To set up your parental controls profile click on your name in the top right corner. Then click on "konto and instillinger". There there should be an option called "foreldrekontroll" where you can configure your settings.

Escaping parental controls

With prime video it seems that it's possible to enter the parental control settings page without typing in any sort of password or PIN. Any child could just follow the steps in the part above an change the controls back to allow them to watch what they want.

Checklist (No comment = not relevant)

- Content filters
 - Ability to restrict by age rating? Yes

- Ability to restrict communication?
- o Protection against offensive usernames/pictures (e.g. profanity filter)?
- o Ability to restrict/allow specific content manually? No
- Restrict access to multiplayer?
- Usage controls
 - Purchasing restrictions?
 - o Permissions to comment/?
 - o Access to web browsing?
 - Separate kids functionality? Yes
 - Ability to go past parental controls? Yes
 - User friendly interface for parents and children and verification.?
 - Turn on/off autoplay (streaming)?
- Computer usage management
 - Setting time limits? No
 - Access to web browsing?
- Monitoring
 - Monitoring ability?
 - Purchasing monitoring?.
 - Playtime statistics?
 - o Ability to report to police / barnevern etc?

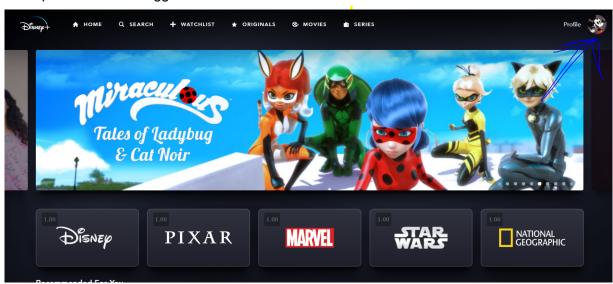
DISNEY PLUS

Disney plus is a streaming platform owned by the Walt Disney company, this platform is quite new since it was launched on 12 november 2019. But it's late creation has not affected its user registration, with it amassing up to 86+ million users to date. The service offers 5 famous franchises namely, Disney, Pixar, Marvel, Star wars and National Geographic. **no R rated movies and shows appear on the site** (instead, they are on Hulu), and movies, cartoons, and TV shows that feature smoking, swear words, violence, and stereotypical depictions of minority groups come with warnings.

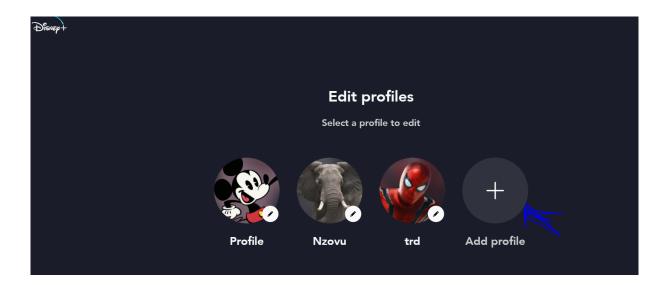
Nevertheless, Disney plus does have parental controls to further ensure the safety of your child when on the platform.

I tried to investigate this functionality to see if it really works,

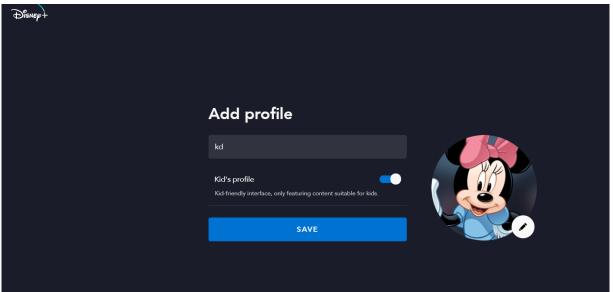
1) I set up account and i logged in



2) Click on my current profile and went to edit profile and choose add profile



3) While creating the new profile, toggle kids profile to on



4) This kids profile will only show you non PG and PG13 content

Observations

- 1) Your kid can easily log out of the kid profile and log in a non protected profile since the profiles are not protected but a pin
- 2) There is a lot of PG and PG13 content on Disney 13
- 3) The Parental controls are not flexible, you either disable or PG and PG13 content or you enable all.
- 4) The is no R rated content on the platform. So the platform could be ok for children above 13.

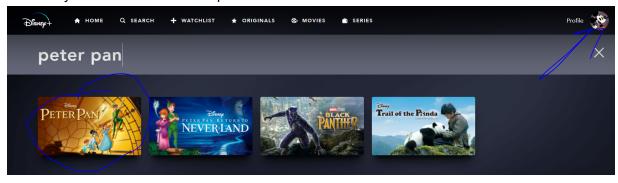
- 5) There are no time limits on the platform so your child can use the platform for as long as they want.
- 6) Disney having started in the 1920s, some of the content on the platform is outdated (in a cultural sense). Disney plus does give you a 12 second warning before watching it.For Example Peter pan..

This is what happened when i tried watching peter pan (original) from the kids profile

Couldn't find it on the kids profile.



So I easily switch to an unfiltered profile. And here it is.



I then tried watching it and got this warning.

This programme includes negative depictions and/or mistreatment of people or cultures. These stereotypes were wrong then and are wrong now. Rather than remove this content, we want to acknowledge its harmful impact, learn from it and spark conversation to create a more inclusive future together.

Disney is committed to creating stories with inspirational and aspirational themes that reflect the rich diversity of the human experience around the globe.

To learn more about how stories have impacted society visit: www.Disney.com/StoriesMatter

YOUR VIDEO WILL START IN 6

12 seconds later, the cartoon starts



Conclusion

The four categories within parental control:

- Content filters
 - Ability to restrict by age rating YES
 - o Ability to restrict communication No functionality for communication provided
 - o Protection against offensive usernames/pictures (e.g. profanity filter) no need
 - Ability to restrict/allow specific content manually no

- Restrict access to multiplayer no
- Usage controls
 - o Purchasing restrictions no need
 - o Permissions to comment no comment section
 - Access to web browsing yes
 - Separate kids functionality yes
 - o Ability to go past parental controls. Yes very easily
 - o User friendly interface for parents and children and verification. yes
 - o Turn on/off autoplay (streaming) no
- Computer usage management
 - Setting time limits no
 - Access to web browsing no
- Monitoring
 - o Monitoring ability none
 - Purchasing monitoring none
 - o Playtime statistics none
 - o Ability to report to police / barnevern etc no

Disney plus has amassed more than 86 million users as of 2021. This platform includes thousands of disney own shows and movies, and due to its recent rise, we would like to compare it with the other more established platforms in the field. And the disney brand being known for attracting kids and having little to no R-rated movies, its expected that a good number of the users are kids.

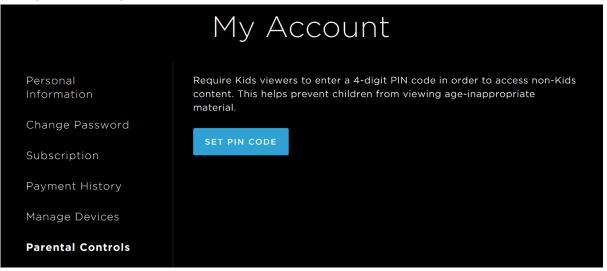
Disney Plus has the option of making different user profiles with one option being "kids profile".

HBO Nordic

HBO Nordic is a streaming platform which offers different types of entertainment such as movies, series, documentaries and even material for children. A lot of the content on HBO Nordic is classified as mature such as the series Game of Thrones, Euphoria and Westworld. The viewers of these classified mature content are offered everything from nudity, severe sexual content, drug and alcohol usage, severe violence including blood content and obscene language. This content is clearly not meant for the younger viewers. However, HBO Nordic does offer entertainment for children as well such as Pingu, Tom and Jerry and Sesame Street. Parents should therefore be free to feel confident in letting their children watch the appropriate content without fearing they will trip over the mature section.

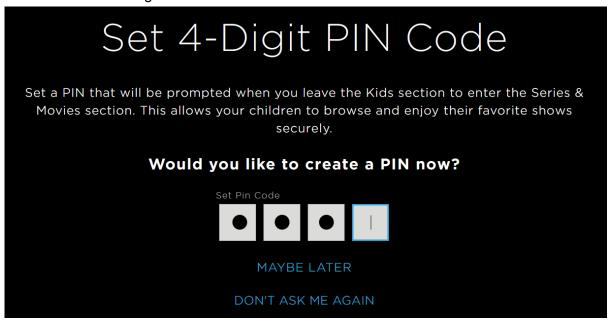
Parental control is what the parents need to feel confident in letting their children stream HBO Nordic freely. On the behalf of parents, I am testing how to set up parental controls.

I navigate to settings, and then to "Parental controls":



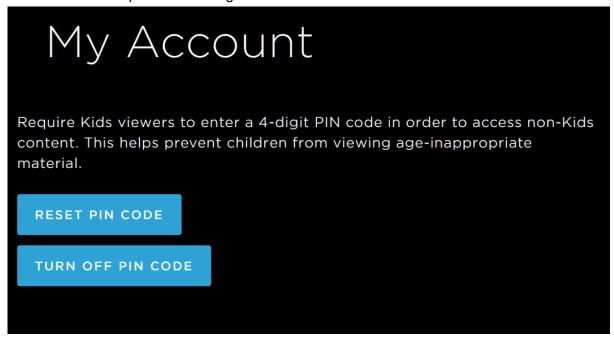
Parents are here offered a way to restrict access by creating a 4-digit PIN code which has to be typed before accessing any non-Kids content. As long as the children don't know the PIN code the parents set, they will have no access to age-inappropriate content.

I continue with creating a PIN code:



After creating the PIN code I am asked to confirm it, and after confirming again it's ready to go.

One also has the option to reset og turn off PIN code:



But then I'm having trouble with the functionality. Because as I test the parental control, I notice that it actually does not work. I tested by putting on an episode of Euphoria which has an age rating of 15, and I am not prompted to enter the PIN code I just created. I go back and forth a little bit, and then decide to chat with customer service to figure out why the functionality doesn't work. Here is the chat (in Norwegian and Danish):

Sara: Hej! Hvad kan jeg hjælpe dig med?

Meg: Hei! Jeg sjekker ut funksjonen til foreldrekontroll. Jeg har satt opp 4-digit kode, og det står at jeg blir spurt om koden hver gang jeg skal se på noe som ikke er ment for barn men når jeg testa det ved å sette på episoder av Euphoria ser jeg at jeg ikke blir bedt om å taste inn koden! Funker ikke foreldrekontroll?

Sara: Vores forældre kontrol burde virke helt fint

Meg: Hvorfor funker det ikke hos meg da? Jeg gikk til innstillinger -> foreldrekontroll -> sett pin code

Sara: Du burde ikke blive bedt om en kode, hver gang du skal se en ny film eller serie

Meg: nei nei, ikke ny kode, men å taste inn koden jeg opprettet nå

Sara: Du burde kun blive bedt om denne kode, når du skifter fra Kids afdelingen til voksen indholdet

meg: ahaaaa. Kan jeg holde deg på tråden mens jeg prøver det?

Sara: Ja selvfølgelig!

Meg: Jeg gikk nå inn på "kids" fanen og satte på despicable me også tilbake til "Home" fanen, og jeg blir fortsatt ikke bedt om kode når jeg prøver å se på materiale som ligger under "home" fanen

Sara: Okay, du skal huske at trykke på låsen oppe i hjørnet - kan du se denne inde i kids afdelingen?

meg: ahaaa, ok prøver nå

Sara: Super! Jeg krydser fingre

meg: ja nå låste det seg her! hahaha takk

Sara: Super! Det er bare det du skal gøre hveer gang, at dine børn skal se noget. Det var så lidt! Er der ellers andet, som jeg kan hjælpe dig med?

Meg: Jaaa se der ja! Nå funka det! Jeg ønsker bare å spørre et par spørsmål til

Sara: Du spørger bare løs

Meg: Er det bare jeg som hadde problemer med å sette opp foreldrekontrollen, eller er det fler? Vet du noe om hvor mange som benytter seg av foreldrekontroll funksjonen?

Sara: Vi har umiddelbart ikke nogle problemer med forældrekontrollen, men det kan til tider være lidt forvirrende med, hvordan man bruger det

Meg: Og har dere andre funksjonaliteter for foreldrekontroll annet enn koden?

Sara: Jeg ved desværre ikke hvor mange, der gør brug af forældrekontrol

Meg: Ok takk jeg skjønner, ja det var litt forvirrende det med låsen.

Sara: Forældrekontrollen gør kun til, at der kommer denne kode frem, og derfor "låser" for forældrekontrollen

Meg: Men veldig fint man har dere til hjelp!

Sara: voksent indholdet*

Meg: Ja ok ja, tusen takk! Det er en fin funksjonalitet.

Sara: Det var så lidt! Det er det nemlig 9'

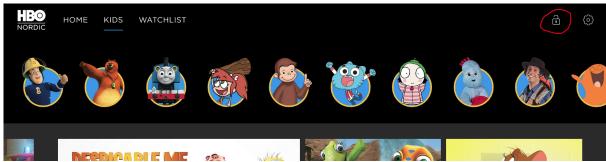
Meg: Da har jeg kun et lite spørsmål til! Er det mulig for meg å lagre denne samtalen?

Sara: Det er desværre ikke muligt... Men du kan altid tage et screenshot af samtalen eller tage et billede af den

Meg: Ok, da skal jeg prøve på det. Tusen hjertelig takk for hjelpen! Ha en fin kveld videre! :D

Sara: Det var så lidt! Du ønskes en rigtig god aften!

I finally understand how the parental control functionality works after chatting with customer service, and for me it was very helpful to have someone to walk me through the setup as it was unclear what I had to do to make it work. Conclusion is that you have to go to the kids page, and then click on the lock in the upper right corner:



The interface will then immediately change to this:

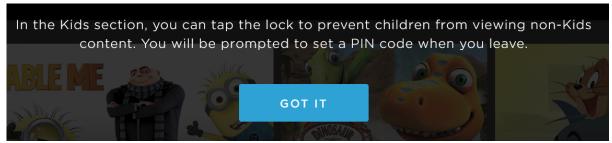


Not only does the color theme change, but the "HOME" and "WATCHLIST" pages disappear. Navigating to settings is not possible in the locked Kids section neither. Now to leave the Kids page, one has to click the lock button again to unlock. And then one will be prompted to type in the PIN code:



I took the opportunity to ask Sara from customer service if HBO offered any other type of parental controls. She told me access restriction with PIN code after leaving the locked Kids section was the only form of parental control they offered. I asked if she knew how many actually use parental controls on HBO, she did not know. When I asked if there were more people who got confused when setting up this parental control, she told me they didn't have any immediate trouble with it, however it could be confusing to set up from time to time. I don't know if she said that to make me feel better, but I believe I can't have been the only one who got confused. Thankfully customer service is there to help confused parents, and it was overall a pretty easy functionality to use when you first have understood how it works.

When checking it the day after, I saw this when visiting the Kids section:



The four categories within parental control:

- Content filters
 - Ability to restrict by age rating YES
 - Ability to restrict communication NO NEED, but customer service chat disappears.
 - Protection against offensive usernames/pictures (e.g. profanity filter) NO NEED
 - Ability to restrict/allow specific content manually NO
 - Restrict access to multiplayer NO NEED
- Usage controls
 - Purchasing restrictions NO NEED
 - Permissions to comment/ NO
 - Access to web browsing YES (can't browse other sections)
 - Separate kids functionality YES
 - Ability to go past parental controls (if kids know PIN code, yes)
 - User friendly interface for parents and children and verification. NO but YES
 - Turn on/off autoplay (streaming) NO
- Computer usage management
 - Setting time limits NO
 - Access to web browsing
- Monitoring
 - Monitoring ability NO
 - Purchasing monitoring NO
 - Playtime statistics NO
 - Ability to report to police / barnevern etc NO

https://www.ageratingjuju.com/westworld-age-rating-certificate-tv/ https://smartphones.gadgethacks.com/news/hbo-now-101-manage-parental-controls-block-mature-content-0179112/

NETFLIX



After YouTube, Netflix is the most used streaming service, it is however subscription based. Netflix invests in creating their own original content, and offers a lot more than just movies and TV shows. Documentaries, including true crime documentaries and comedy specials are found on Netflix, and they have experimented with interactive story lines such as in the show "Black Mirror". Netflix offers many profiles to one subscription, which makes it possible for kids to have their own profile on Netflix. Since Netflix is widely used and quite innovative in their ways we are choosing to investigate the parental controls they offer.

Parental controls

Netflix has a lot of child friendly content, but it also has a lot of age inappropriate shows which create a risk for underage users stumbling across them. In April 2020 Netflix undated its parental controls in order to give parents the ability to PIN protect each user profile. This enforces boundaries so that the child can not gain access to other user profiles which could contain inappropriate content. It is possible to enable parental controls through the Netflix app but you get more options by going to the account on the web browser.

On Parent account

Log in in your Netflix account, click on your profile icon and then click Account then scroll down to settings and then click on Parental controls, you will be then asked to provide your Netflix password, enter your password, then go to your profile and using the drop down decide what maturity ratings you want on your account, then check the box under profile lock and enter a PIN.

On the child's profile

go to your child's-profile, or create one if it hasn't been created before. In the drop down proceed to choose the most appropriate ratings: TV-Y; TV-Y7; TV-G; TV-PG; etc. These restrictions are set according to the MPAA and TV rating system. You can also enable Nettflix Kids experience if you expect your child to be interacting on Netflix independently. This functionality gives your child a simplified interface and prevents access to all settings, enable Profile lock and choose a pin that you can share with your child so that he can gain access to this user account, and then finish by clicking apply at the bottom of the page.

You also have an option to restrict specific titles regardless of their maturity ratings on Netflix. To do this, go to your account page and click the profile you want this to apply on, then scroll to viewing restrictions and log in, then type the titles you want to block into the entry under " Title Restrictions" and then click save. This will remove any content with this title in the database of that specific account.

Thing you should remember

Remember to enable profile lock on all accounts and to make sure that your PIN is unique and different from the one on the child's profile. Don't share your pin or Netflix password with your child because if you do then they will have all the privileges that you have and can therefore watch anything they desire to watch.

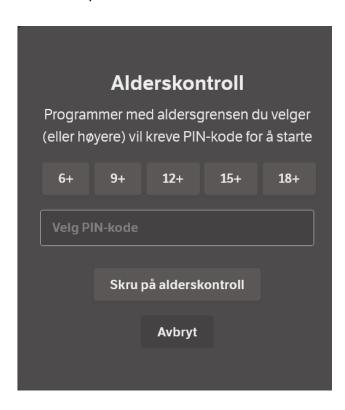
NRKTV

Norsk rikskringkasting AS, in everyday speech and marketing best known as NRK, is a Norwegian state-owned broadcasting company that offers media content on radio, TV, streaming service and the internet. NRK TV is NRK's video streaming service for the broadcaster's TV broadcasts and TV series.

NRKTV has a wide range of content, some mature and some for children. They therefore also offer a form of parental control through restricting material based on age limits.

Setting parental control (age control)

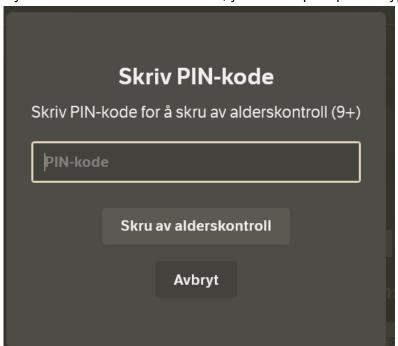
- 1. After creating an account you go to "My account".
- 2. navigate to "age control" at the bottom of the page and restrict age to: **6+, 9+, 12+, 15+, 18+** and set a PIN code.



Now, if you wish to watch something above the age limit set you will have to type in the PIN code to get access:



If you click "skru av alderskontroll", you will be prompted to type in PIN code:



Here the PIN code is not restricted to be a 4-digit PIN code as on some other streaming services, but it has to be at least 4 characters.

TV2 Sumo

On TV 2 Sumo one can watch all TV 2's channels live, new episodes of famous programs, whole seasons of series, news, and the best of live sports every week. TV2 is a Norwegian channel which is financiated by advertisements unlike NRK. The channel is a commercial public broadcaster that offers news, current affairs programs, sports and entertainment. TV2 Sumo offers both domestic content and content from abroad. On TV2 Sumo you can watch all TV2's channels directly in addition to recording broadcasts, TV series and sports. C More is available through TV 2 Sumo, and offers TV series, movies and content aimed at children, young people and adults. In addition, TV 2 Sumo offers content from SF Kids, which includes over 500 titles for children.

Parental Controls on TV2 Sumo allow you to restrict access to content that has an age limit. In order to view content that is protected by parental controls, you must enter a code of your choice.

To set up parental control:

- 1. Log in to the TV2 Sumo website and select "My account".
- 2. In the drop-down menu, there is a separate option for Parental Control. Here you can choose restrictions on **age limits from 6, 9, 12, 15 and 18 years.**
- 3. Selecting a four-digit code activates parental control.
- 4. The restrictions also take effect immediately on mobile and tablets connected to the account.

Parental control is off by default, but here you can activate it:

ForeIdrekontroll

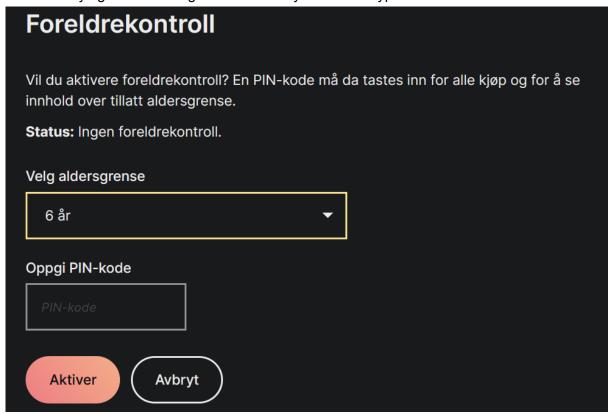
Foreldrekontroll lar deg begrense tilgang til innhold med aldersgrense og mulighet for kjøp.

Status

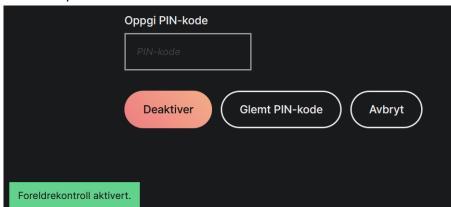
Ingen foreldrekontroll.

Aktiver foreldrekontroll

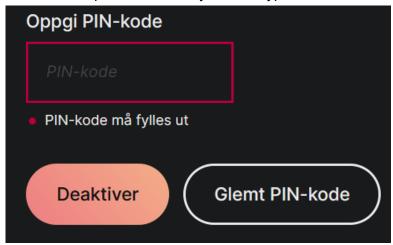
For both buying and watching on TV2 Sumo you have to type in the PIN code created here:



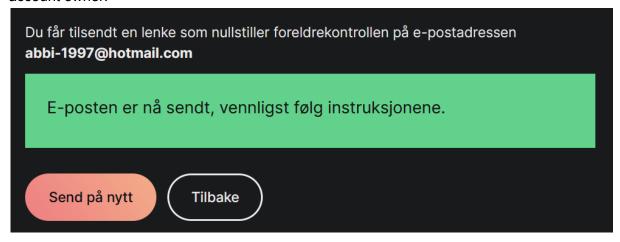
Activated parental control:



To deactivate parental control you must type in PIN code:

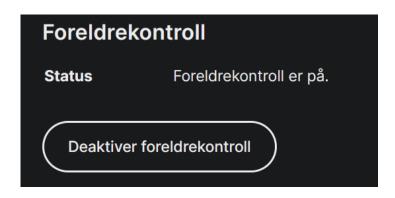


If you click "forgot PIN code", a mail with instructions to reset the code will be sent to the account owner:



This means that children can use the account of their parents but cannot stream all content. Sumo also offer to create own accounts for children.

TV2 Sumo offered a Playstation app but this is being discontinued from Mars 15th due to old versions of PlayStation with very few updates from Sony. The technology in the machine makes it difficult to maintain and further develop a good quality of service. So TV2 Sumo will focus on their streaming services and let go off old technologies to welcome new technologies.

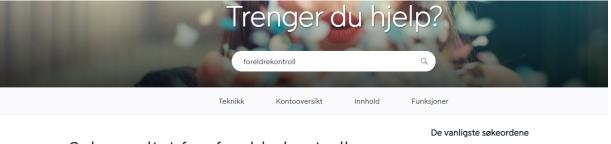


Viaplay

Viaplay has a function for restricting a specific profile to only be able to watch children's content. You can let the child watch all children's content or restrict it to those that have an age limit no higher than 7. There is no setting to restrict the age limit to 3, despite viaplay having the ability to search for content with this age rating. You can also put restrictions on whether to autoplay the next part of a series.



The main problem with the viaplay parental control is that the child can easily change the profile to the main profile (or another non-children's profile) that has full access without typing any sort of PIN/Password, the child can even change their own profiles to allow them to watch adult content. With some research I found out it at least did exist a PIN code, but following the instructions provided I was unable to find any way to set up a PIN code for a children's account. If you search "foreldrekontroll" (parental controls in Norwegian) on viaplay's website it returns no results.

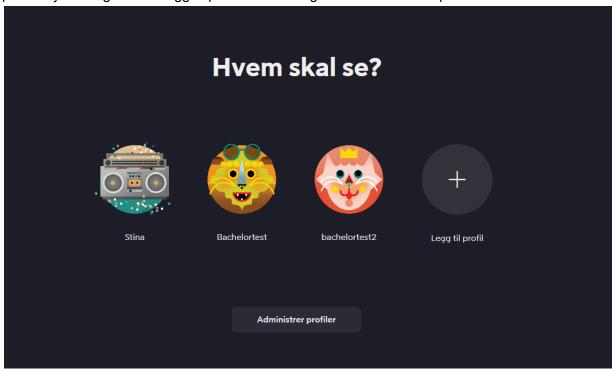


Søkeresultat for: foreldrekontroll

De vanligste søkeordene

5.1 abonnement Aktivitetslisten android Android

To create a children's profile you must click on the your profile's icon in the top right corner, then you must click on the "administrer profiler" option. From here you can create a new children's profile by clicking on the "legg til profil" and setting it to "Barn" in the options.



Checklist (No comment = not relevant)

- Content filters
 - Ability to restrict by age rating? Yes
 - Ability to restrict communication?
 - Protection against offensive usernames/pictures (e.g. profanity filter)?
 - Ability to restrict/allow specific content manually? No
 - o Restrict access to multiplayer?
- Usage controls
 - o Purchasing restrictions? No, or at least easily circumvented

- o Permissions to comment/?
- o Access to web browsing? Disabled by default, can't be enabled.
- Separate kids functionality? Yes (but not secured)
- o Ability to go past parental controls? Yes
- User friendly interface for parents and children and verification.?
- Turn on/off autoplay (streaming)? Yes
- Computer usage management
 - Setting time limits? No
 - o Access to web browsing?
- Monitoring
 - Monitoring ability? No
 - Purchasing monitoring? No.
 - Playtime statistics?
 - Ability to report to police / barnevern etc?

https://www.barnevakten.no/hvordan-gjoere-viaplay-barnevennlig/#:~:text=Logg%20inn%20p% C3%A5%20Viaplay%20i,Velg%20ForeIdrekontroll.

YouTube Kids

73% kids in the age group 5-15 use YouTube. 37% of preschoolers watch YouTube regularly, and more than 11 million children launch the app weekly. YouTube is as mentioned the biggest free streaming platform, where anyone can upload their videos. 300 hours of video is uploaded each minute, and almost 5 billion videos are being watched every day. Although there is a vast number of educational and child-friendly entertainment videos to be found on YouTube, not everything on YouTube is meant for children. There is a need for parental control due to the many mature videos found on the platform. YouTube have considered their youngest users and their parents and have therefore created another version of the platform meant for kids which is called YouTube Kids. It offers videos exclusively for kids and offers the parents different types of parental control mechanisms. YouTube Kids can be downloaded as an application or navigated to by browser.

The question now is: Is the parental controls found on YouTube Kids effective?

To answer that question, it is necessary to investigate the controls. YouTube Kids provide parents who sign in information about privacy:

When logging in to YouTube Kids, the parent can create accounts for each of their children and manage content and other customized preferences. It is said that unless one has YouTube Premium, ads are inevitable for children. Information about the device, app used to access service and another app activity will be collected. What the information will be used for is also mentioned here, it will not be used for interest-based advertising as it is on the ordinary YouTube and personal information of the child will not be allowed to be shared to third parties or to the public eyes. Information will however be shared if the parent consent or for legal purposes. Through collecting watch and search history YouTube Kids will recommend videos to the child that they are more likely to enjoy. Parents can delete this and Recommended videos will then be reset.

YouTube Kids is clear that if one chooses to sign in, they will get access to more controls, whether they want to allow lots of videos or hand pick their own. One can also block any videos and channels one does not like. Whenever signing into a new device, the kids' profiles will be ready to go. When logging in with the Google account, the chosen parental controls and customized preferences associated with each child profile in the app will be used on all devices.

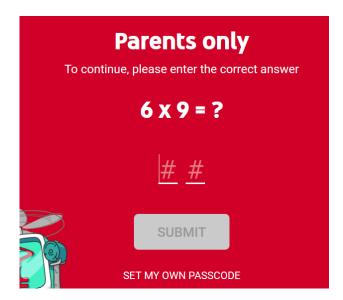
Trying to set up an account:

I created a kid profile named "test" who was born in November and is now 7 years old and this information I give to YouTube Kids as well. YouTube Kids give an option of choosing between three age categories. 4 and less, between 5 and 7, between 8 and 12. I click on 5-7 and I am told that the kid will be able to search through and find music, animations, hobbies and more that is relevant for a kid that is maximum 7 years old. However, not all videos are inspected manually, so the child might still find explicit content. I – a parent – is told to block or report the material I find inappropriate for the age group and assured that YouTube Kids

will review the report as quickly as possible. To be able to allow videos manually, I am told to download the mobile app.

Further I am given the option of either turning on or turning off the possibility to search in the app. If I turn off, the child will only have access to stream channels YouTube Kids recommend and believe is appropriate for the age. If I turn on, the child can search through the millions of interesting videos available on YouTube Kids. I turn on as I go further.

The profile is created, and I navigate to the settings so I can look at what options I have for restricting further. I am given a mathematical problem to solve, which YouTube Kids does not seem to believe a 7-year-old can solve. What is 9x6? 54. However, to actually change settings on the test-account, I have to type in the Google password:



The four categories within parental control:

- Content filters
 - Ability to restrict by age rating: YES, three age groups.
 - Ability to restrict communication YES, there's no comment section
 - Protection against offensive usernames/pictures (e.g. profanity filter) YES, I tried searching for "Whore" and "Bitch", and was told to search for something else.
 - Ability to restrict/allow specific content manually YES
 - Restrict access to multiplayer NO not relevant on YouTube Kids
- Usage controls
 - Purchasing restrictions NO need for it here.
 - Permissions to comment/ NO Can't comment, no comment section
 - Access to web browsing -
 - Separate kids functionality YES
 - Ability to go past parental controls YES (more on this later)
 - User friendly interface for parents and children and verification. YES, asked for mathematical problem and password for logging in and changing. easy to set up user and just have to type in age group.
 - Turn on/off autoplay (streaming)
- Computer usage management

- o Setting time limits
- o Access to web browsing
- Monitoring
 - Monitoring ability
 - Purchasing monitoring
 - o Playtime statistics
 - o Ability to report to police / barnevern etc

https://fortunelords.com/youtube-stats/

https://www.protectyoungminds.org/2018/05/22/youtube-kids-parental-controls-guide/

https://en.wikipedia.org/wiki/YouTube_Kids

https://www.youtubekids.com/

A.5.2 Gaming platforms

Notes taken during the collection of information about the gaming platforms are presented in this section. The gaming platforms are listed in alphabetic order.

EPIC GAMES

Epic games has amassed over 108 million registered users over the past year. With over 471 games as of 2020, and it being the owner fortnite a very popular game amongst gamers, this gaming platform is expected to have a considerable amount of under age users, this is why we have decided to examine its parental controls.

Epic games parental control setup:

Make account > Click on account > General > scroll down to parental controls > turn parental controls on.

Epic games has a parental control functionality that limits the user from acquisition on mature content using a pin. Epic games uses a rating system to do this, the rating systems are;

- 1) ESRB (Entertainment Software Rating Board rating is based on age-appropriateness content and interactive elements.)
- 2) PEGI (Pan European Game Information uses recommendations based on age suitability of a game.)
- 3) GRAC (Game Rating and Administration Committee is the South Korean video game content rating board based on the nature of game contents.)

It also has restrictions based on rating levels like;

- 1) Everyone,
- 2) Everyone 10+
- 3) teen
- 4) Mature,
- 5) Adults only
- 6) Unrated whereby content that is not rated will always require a pin for purchases.

You also have the option to **always require a pin** for purchases. Therefore from my observation of the categories of parental controls namely, Content filters, Usage controls, computer usage management, and monitoring, Epic games only gives you Usage controls. It seems like Epic games expects you to combine its parental controls with those of the devices and also in-game parental controls.

THE PIN

This pin is required to be six digits and should be known to only the parent. To change the pin or even edit the parental controls the pin is required. If one is to forget the pin, a reset option is sent to the parent account which was used to create the account.

Additional parental controls you can add to what Epic games provides

In addition to parental controls within epic games, there are additional controls available on playstation, xbox, nintendo and ios. The common parental controls you can add on are;

1) Screen time, where by you limit the time the gamer/ child can play

2) Control if or how much your child can purchase.

Apple iOS allows you to block or limit specific apps and restrict the settings on an iPhone, iPad, or iPod touch, including for purchases and downloads, access to explicit content, and privacy. While On Android, you can use the in-game parental controls to restrict or allow specific types of behaviour. The Google Play parental controls do not apply to Fortnite. Example and most probably other epic games- games. In-game purchasing restrictions for Fortnite on Android are available via a PIN restriction.

"A poll hosted from This Morning asked if parents are worried about the effect the game Fortnite has on their children and 59% voted no as opposed to 41% who said yes."With Fortnite having about 350million players by 2020 and it being the most used epic games game, lets look at an example of in-game parental controls you can have in fortnite. In fortnite you can;

- 1) Set parental controls
- 2) Filter mature language
- 3) Hide names from non squad members
- 4) Hide non squad members name
- 5) Privacy settings where you control who can send your child a friend request.
- 6) Turning on and off voice/text chat
- 7) Weekly playtime reports
- 8) And reporting on fortnite

Epic games does have parental controls does restricts purchases of games based on the named parameters above but as showcased by fortnite, there is also an option to add in game parental controls in combination with epic games parental controls. Epic games are also hosted on different consoles which also have their own parental controls which you as a parent can deploy in order to have maximum effect.

Essential parental control steps for a parent with a child using epic games are therefore;

- 1) Set parental control on the child's device/ console/ operating system such as windows 10, nintendo switch, playstation, Xbox etc.
- 2) Take good care of your Epic games Pin and make sure the child can't crack it.
- 3) Take time to know which games your child is using (whether it has good parental controls) and set in-game parental controls like in fortnite.

List of most popular epic games , games https://www.epicgames.com/store/en-US/collection/most-popular-top-20

Links / resources

https://www.internetmatters.org/parental-controls/gaming-consoles/fortnite-chapter-2-battle-royal e-parental-controls-guide/

https://www.epicgames.com/help/en-US/epic-accounts-c74/parental-controls-c111/how-do-i-set-up-parental-controls-for-the-epic-games-store-a3170 https://www.epicgames.com/store/en-US/

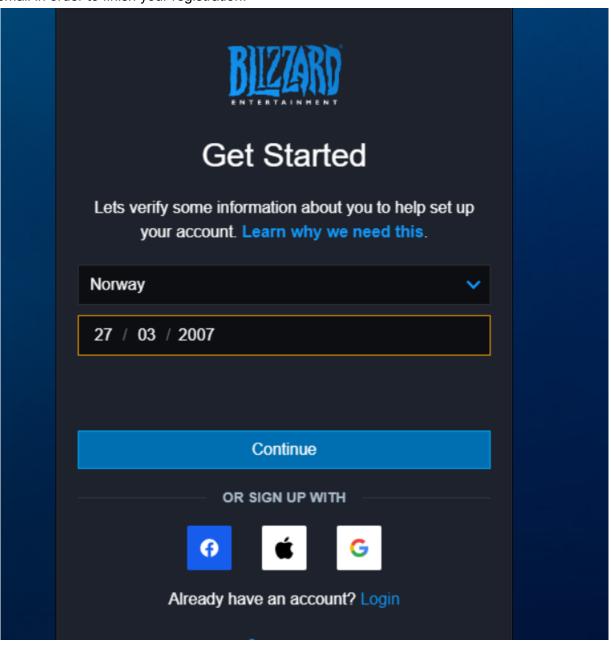
Ratings

https://www.esrb.org/ https://pegi.info/ https://www.grac.or.kr/english/

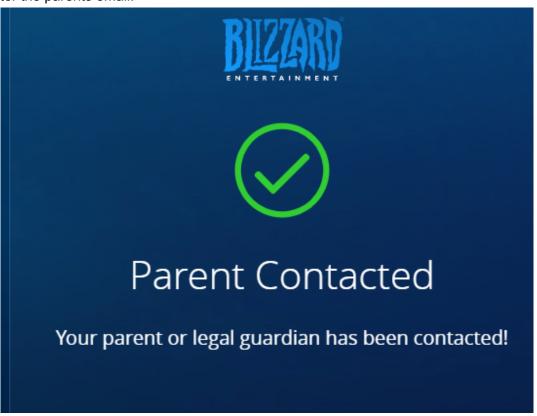
Battlenet

Creating a Battlenet account.

If you are under 18: when making an account you are required to put in your date of birth. This is the first parental control of the app. If your age is under 18 you are the required to provide a parent email in order to finish your registration.



You enter the parents email:



And this pdf is sent to you with a link where the parent can go on to register the childs account.

https://mail.google.com/mail/u/0?ik=06e0a4c2f1&view=pt&search=all&permmsgid=msg-f%3A1692576423494035298&simpl=msg-f%3A16925764234

Pdf contains; "You must create the account in your own name. During the process, you will need to provide an email address that will be used as the account name, and another that will receive instructions on how to use Blizzard's Parental Controls features. You may use the same email address."

Once you enter the registration link:





Child Account Creation

Welcome parent or legal guardian! Please proceed through the following steps and fill out all required fields on behalf of your child.

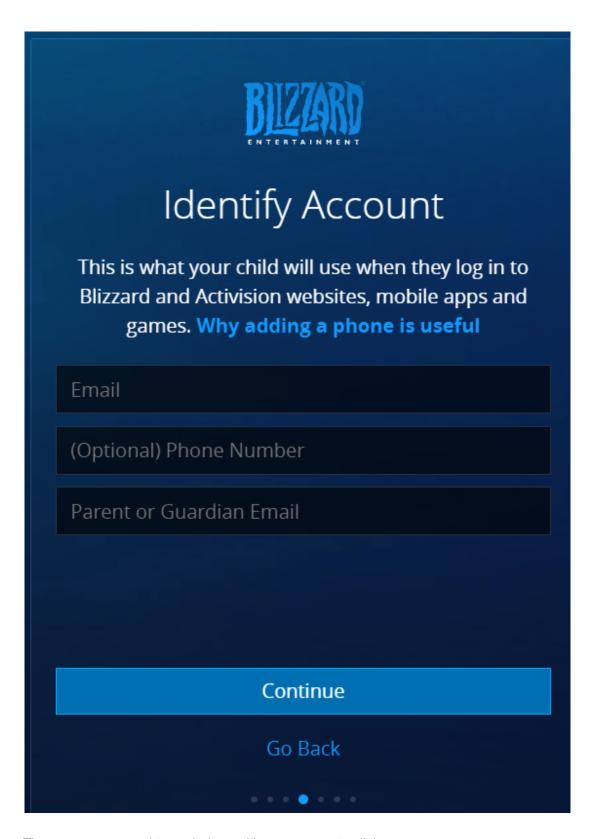


By clicking "Continue", I acknowledge that I am the legal guardian responsible for creating a Blizzard Account on behalf of my child, and that information collected during Blizzard Account creation will be subject to the Blizzard Entertainment® Privacy Policy .

Continue

I'm not creating a child account

After you continue, you are then required to register your fast and last name and then you are popped up to a page asking you to provide the child and parent email (best to make them separate



Then you are popped to a window asking you accept policies



Review Terms

Please review the terms and opt-ins below.

- Receive carefully selected news, event information and special offers about third-party products and services.
- (Child) I have reviewed and understand the Privacy Policy. For more information about how we use information and your rights to object, see our Blizzard Entertainment® Privacy Policy 🖸
- I have reviewed and understand the Privacy Policy. For more information about how we use information and your rights to object, see our Blizzard Entertainment® Privacy Policy 2

By clicking on "Continue", I agree to the Blizzard End User License Agreement 🖸 , Chat Agreement 🖸 and Anti-cheating Agreement 🖸

Continue

Go Back

Policies:

https://www.blizzard.com/en-sg/legal/41e60b3d-244d-4776-be75-e2c6b3eba9a3/blizzard-entertainment-privacy-policy

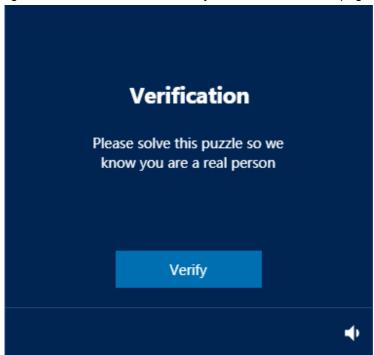
https://www.blizzard.com/en-sg/legal/41e60b3d-244d-4776-be75-e2c6b3eba9a3/blizzard-entertainment-privacy-policy

https://www.blizzard.com/en-sg/legal/08b946df-660a-40e4-a072-1fbde65173b1/blizzard-end-user-license-agreement

https://www.blizzard.com/en-sg/legal/966f03a4-29e1-440c-b142-e54ee091e52d/chat-agreement

https://www.blizzard.com/en-sg/legal/cd5930c0-2784-420c-a23d-1e0d6ff8599b/anti-cheating -agreement

I tried to see if I can continue without accepting either the child agreement or the other agreement. And i was immediately sent to a verification page



NB: All agreements have to be agreed!



Review Terms

Please review the terms and opt-ins below.

Receive carefully selected news, event information and special offers about third-party products and services.

(Child) I have reviewed and understand the Privacy Policy. For more information about how we use information and your rights to object, see our Blizzard Entertainment® Privacy Policy
I have reviewed and understand the Privacy Policy. For more information about how we use information and your rights to object, see our Blizzard Entertainment® Privacy Policy Policy Policy Policy Policy Policy

All documents must be accepted to continue.

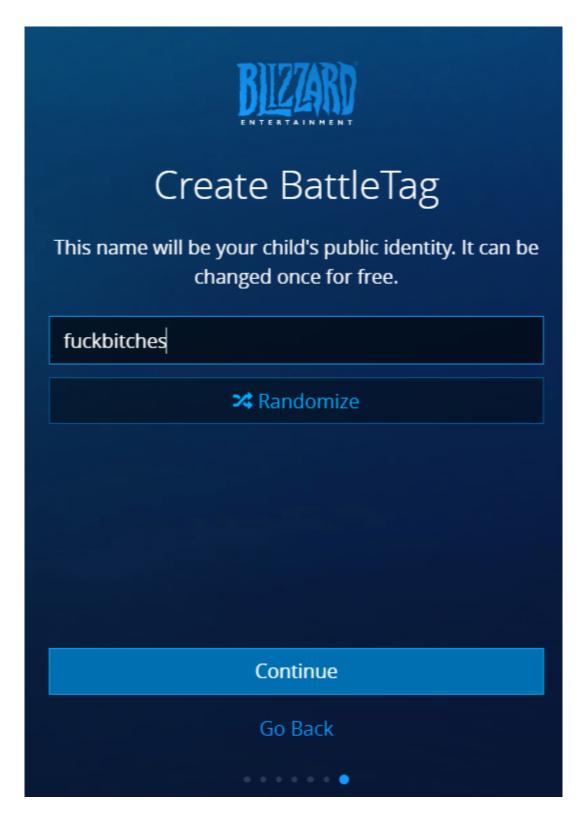
By clicking on "Continue", I agree to the Blizzard End User License Agreement 2 , Chat Agreement 2 and Anti-cheating Agreement 2

Continue

Go Back

You are then sent to verify again.

And then, Create a battletag Experimenting with battletags



I tried an insulting game tag



Create BattleTag

This name will be your child's public identity. It can be changed once for free.

fuckbitches

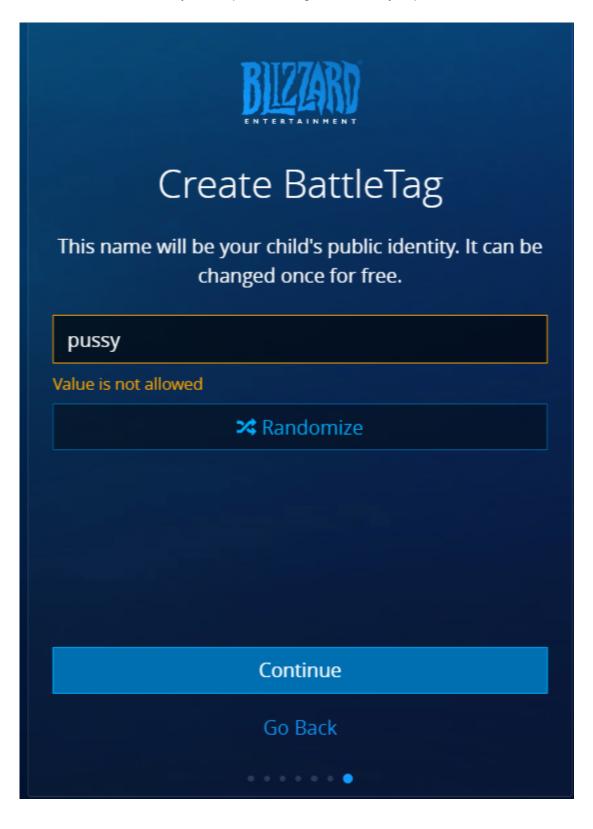
Value is not allowed

≭ Randomize

Continue

Go Back

It looks like it sensor what you can put in the tag, one more try to prove.



NB: i also tested a violent tag "Murder" and it seems to not be sensored since it got registered with no issues.



Examining parental controls

I click on "murder" user profile. Then went on to "view account", then clicked "parental controls"



More on parental controls:

https://eu.battle.net/support/en/article/32243

To update the parental controls the child you need to enter your "parent" email address and a verification code is sent to that email (this why you should register different email account to parent and child.

Here you can

- 1) Update the parent email address
- 2) Manage player to player settings by Account Mute(on / off), Voice Chat (on/ off), Real ID (on / off), Blizzard Groups (on / off), Friend of Friend Suggestions (on / off) and Private text chat (on / off).
- 3) Manage how the account appears to other on the Blizzard community. by; Forum Posting (on / off), Share Game Data (on / off) and public profile (on / off)
- 4) Game play setting whereby you receive weekly email reports and sent time limits and schedule for game play. Via Time Zone, Daily Limit, Weekly limit, Schedule, Receive Weekly Email Report

% \item \textbf{Signing up}\\ Enter the location and the date of birth.As stated above the user is asked to enter the parents email -> On the parents email an email is sent informing the parent that their Child Would Like them to Create a Blizzard Account.-> if the parent want the child to create an account a link to registration is also sent in that email with instructions to create the account under the parents name. A link to Battlenet support team is also sent to the parents email should there be any questions.

%\textbf{Once the parent enters the registration link}\\ they are then prompted to the child creation page where they are provided with the Blizzard Entertainment policies[link here] and required to accept them before proceeding. Once they have red and accepted, they are then required to register their fast and last name and then they are popped up to a page asking them to provide the child and parent email. It is highly recommended to make them separate.

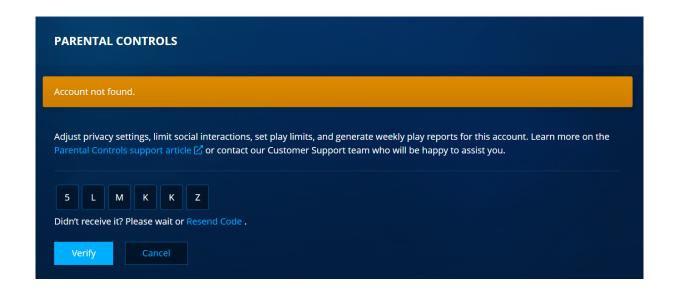
%\textbf{Accepting policies}\\ They are then provided with 1 policy and 3 agreement documents which they have access to read namely the; BLIZZARD ENTERTAINMENT PRIVACY POLICY, BLIZZARD END USER LICENSE AGREEMENT[link here], CHAT AGREEMENT[link here] and ANTI-CHEATING AGREEMENT[link here].All agreements have to be accepted to continue. The user is then verified to see if they are human.

% \textbf{Selecting battle tag}\\ The battle tag is what the user is seen as in the game environment. it it therefore necessary that this battletag is censored. We decided to test out a few profane battle-tags like "Fuckbitches", "pussy" and "Murder". Two of them where disallowed namely "Fuckbitches" and "Pussy" but "Murder" was accepted.

% \textbf{Examining parental controls}\\ Click on user profile. Then go on to "view account", then click "parental controls" and then click update. To update the parental controls the user needs to enter their "parents" Email address and a verification code is sent to that email and this why the parent should register different email account to parent and child.

5) Manage permissions to purchase items in-game and access payment methods. By turn on/off In-Game Purchases.

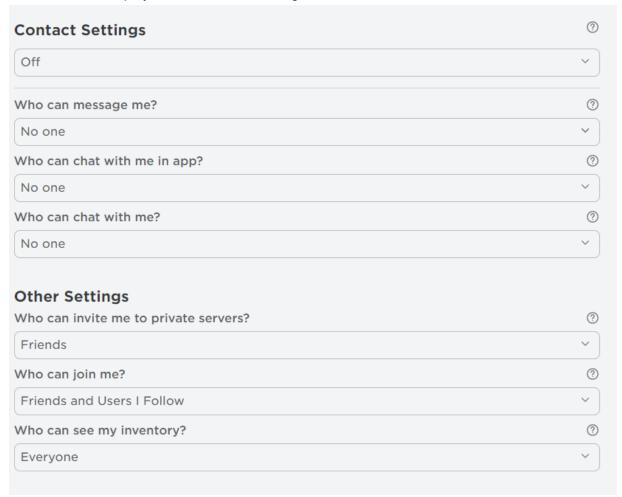
Tried to enter the child email address instead of parent email inorder to enter parental controls



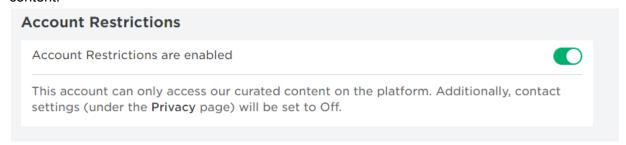
NB: DUE TO FINANCIAL PROBLEMS (HAVING TO BUY AGAME TO PLAY),I WAS NOT ABLE TO TASTE THESE PARENTAL CONTROLS INGAME

Roblox

The Roblox parental controls allows the parents to control who the child is allowed to chat with and which server the child is allowed to join. Most of the controls relate to privacy, there is no function to control playtime or other such things.



The account restrictions settings can be turned on to only allow your child to access curated content.



To turn on parental controls you need to go to the settings (cogwheel in the topright corner). Then click on the security tab which allows you to set up a pin and turn on the only curated

content acting. The privacy tob allows you to change in which wave and who your shild is
content setting. The privacy tab allows you to change in which ways and who your child is allowed to communicate with other people.

Steam

Steam has a parental controls functionality called "family view". Family view lets you choose which games your child should be allowed to play, you can choose whether to let your child play all the games on your account or choose the specific games you want them to play. Family view has no function to filter games by their age rating or other characteristics. With family view you can also choose whether your child should have access to the steam store, community generated content, "friends, chat and groups" and "their online profile, screenshots, and achievements". After configuring all of this you must choose a pin code that you will use to exit family view.

Family View will automatically turn itself on when you log into your account, to exit you must click on the family view icon in the top left corner and enter the 4 digit pin code. You can easily re-enable family view by clicking on the same top right icon you used to exit family view. Since family view is automatically turned on when logging onto your steam account, a child could have their own account which they know the password to (with parental oversight). As long as the child does not know the pin they should not be able to access content against their parents wishes.

The picture below shows what appears when you first configure family view.

Family View is currently: Enabled

Disable Family View

MANAGE FAMILY VIEW

To manage Family View for this account, step through the following options.

Select what your protected account can access while in Family View:

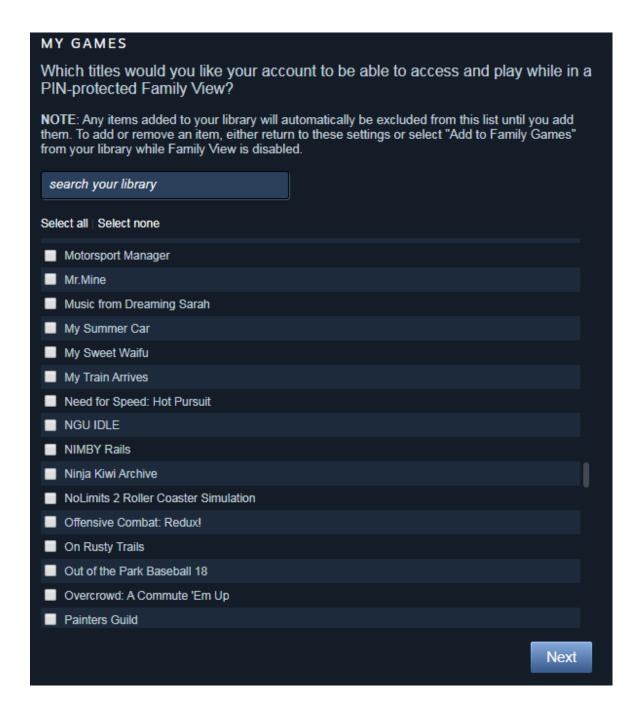
Library content

- Only games I choose
- All games

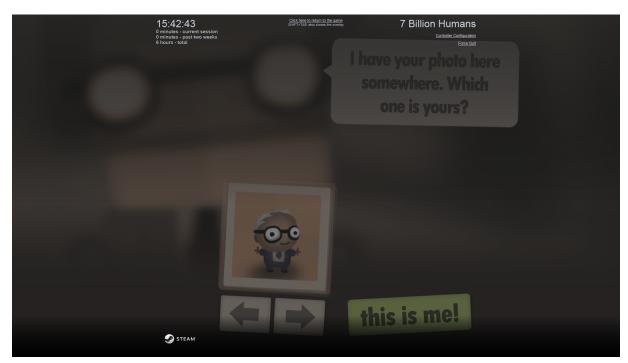
Online content & features

- Steam store
- Community-generated content
- Friends, chat and groups
- My online profile, screenshots, and achievements

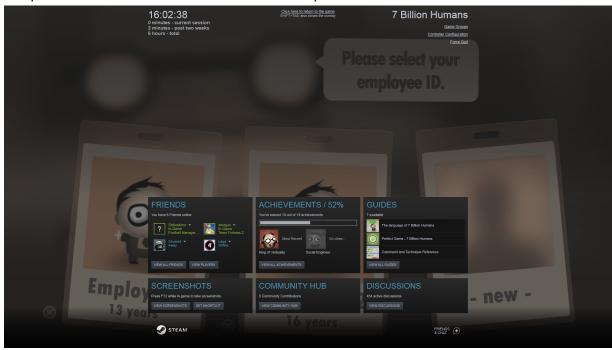
Next



With all of the options turned off your ingame overlay will look like the picture below.



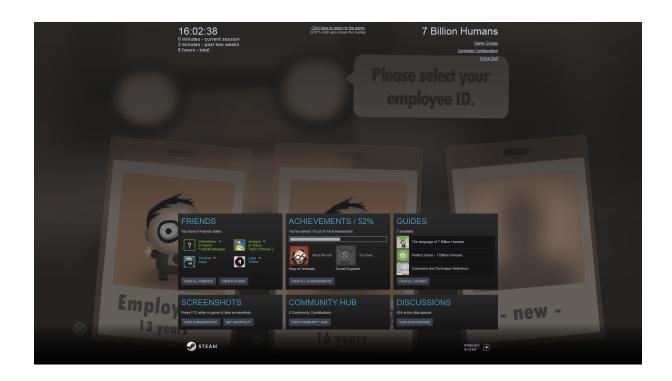
The picture below show how it looks with all the options turned on.



Lastly the picture below show what the steam ingame overlay looks like without parental controls.



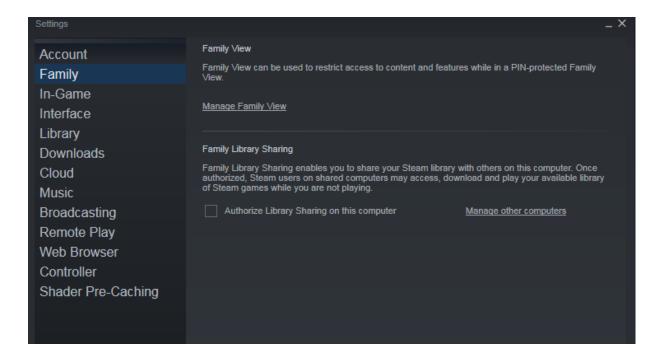
As we certain functions such as access to web browser and settings are always turned off and cannot be turned on when using family view.



Set up Familt view.

To set up family view, you must click on the Steam tab in the top left corner then go to the settings tab in the Steam application. Further you must go to the family tab and choose the "Manage family view option". From there you can configure Steam Family View for you child.

Simple steps: Steam>Settings>Family>Manage Family View



Checklist

- Content filters
 - o Ability to restrict by age rating? No
 - Ability to restrict communication? Yes
 - o Protection against offensive usernames/pictures (e.g. profanity filter)? No
 - Ability to restrict/allow specific content manually? Yes
 - Restrict access to multiplayer? No
- Usage controls
 - Purchasing restrictions? Yes
 - Permissions to comment/? Yes
 - o Access to web browsing? Disabled by default, can't be enabled.
 - Separate kids functionality? Yes
 - Ability to go past parental controls? If you can guess the PIN
 - User friendly interface for parents and children and verification.?
 - Turn on/off autoplay (streaming)?
- Computer usage management

- o Setting time limits? No
- Access to web browsing? Disabled by default, can't be enabled.

Monitoring

- o Monitoring ability? No
- o Purchasing monitoring? Maybe, You can view your purchasing history on Steam.
- Playtime statistics?
- Ability to report to police / barnevern etc?

A.5.3 Ubisoft Connect

On the next page, you can find information about Ubisoft Connect, including chat history with a customer service representative.

Ubisoft connect

Created an account for a 16-year-old. Then after realizing that the age limit we set for our thesis was 6-12, I tried to change the age setting, but was told to contact support to do this. The settings were not intuitive. Searched Google, did I find pages that talked about parental controls on playstation and xbox via Ubisoft. Help was needed, and the only way out was to contact support and explain the intention and hope to get further.

Ubi-Voiha (2/24/2021, 1:15:31 PM): Hello.

Me (2/24/2021, 1:15:37 PM): Hi

Me (2/24/2021, 1:16:20 PM): I am a student who has gotten a task to create a guideline for parents on how to have effective controls of children

Me (2/24/2021, 1:16:50 PM): I am fairly incompetent on this website, as gaming is not something I have been doing before.

Me (2/24/2021, 1:17:16 PM): I am therefore contacting you to ask if you could help me with my issue, as I don't understand how to navigate here

Me (2/24/2021, 1:17:53 PM): Streaming services was much easier for me, haha

Ubi-Voiha (2/24/2021, 1:18:41 PM): Of course, I will be more than happy to assist you with this. Ubisoft's primary goal is security, which is tightly implemented into our systems.

All of the available information for a young player Ubisoft account you can locate on the following FAQ link.

https://support.ubisoft.com/en-GB/Article/000079310

In this following FAQ, you can find information on how you can create a young player account with the limitations and requirements.

https://support.ubisoft.com/en-GB/Article/000079318

Me (2/24/2021, 1:19:39 PM): Thank you very much! Is it okay if I contact through chat again if I find myself uncertain again?

Ubi-Voiha (2/24/2021, 1:20:11 PM): Yes, of course, do not hesitate to contact us again if an issue or uncertainty occurs, we will be more than happy to assist you!

Ubi-Voiha (2/24/2021, 1:20:36 PM): Good luck with the assessment!

Me (2/24/2021, 1:20:47 PM): Thank you very much! Have a wonderful day.

Ubi-Voiha (2/24/2021, 1:20:52 PM): Thank you, you too!

I talked to customer service to change the DOB to 1990 (a parent) before continuing.

Parental access section

During creation of the account of the child it will have to be associated with the parent or the guardian. By associating the account to the parental account, the parent/guardian will gain access to the "Parental access section".

Directly from

page(https://support.ubisoft.com/en-AU/Article/000079338/Parental-Access-section-for-young-player-accounts):

"During account creation, the Ubisoft account of the parent or legal guardian is associated with the young player account. This gives the parent or legal guardian access to the <u>Parental Access section</u> of the account.

In this section, parents and legal guardians have access to an overview of the settings applied to all young player accounts associated with their account. They can also view the email reports they have received to have visibility on their child's gaming activity. These have been set with the safety of the young person in mind.

The safety settings are:

Restricted chat to friends only

Young player accounts can only use the Ubisoft Connect and Hyper Scape in-game chat systems to communicate with users they have accepted as their Ubisoft friends. This prevents them from receiving messages from unknown users.

Ubisoft Avatar protection

Young player accounts cannot add new photos as their Ubisoft Avatar. They will have access to a specially curated selection of Ubisoft Avatars for young players to choose from.

Privacy and data protection

The personal data of a young player account is never used for marketing purposes.

As a result:

- No personalised emails about Ubisoft news, community content and special offers will be sent to young players.
- No personalised communications about Ubisoft news, community content and special offers through Ubisoft Connect, Ubisoft apps and sites will be displayed to young players.
- No young player's information will be shared with Ubisoft external partners.

Please note that these privacy and data protection parameters only apply to young players on <u>Ubisoft Connect</u>. If you have young players on console, we suggest to make yourself familiar with parental controls for <u>Google Stadia</u>, <u>Nintendo Switch</u>, <u>PlayStation</u> and <u>Xbox</u>.

The email reports are:

Monthly activity report

A monthly email is sent to the parent's or legal guardian's Ubisoft account email address with information on the young player's play time in *Hyper Scape* over the past month.

They will also receive an overview of other users that were added as friends to the young player account.

Purchase notifications

An email is sent instantly to the parent or legal guardian whenever the young player account makes a purchase in the Ubisoft Store or the *Hyper Scape* in-game store.

Feel free to get in touch if you have any further questions."

Creating young player account

On this site I found:

Please note that you need to be at least 13 years old to create a Ubisoft account. Less than 13? Kids accounts must be created. Then the name and mail of the parent must be written.

https://support.ubisoft.com/nn-NO/Article/000079321 https://support.ubisoft.com/en-GB/Article/000079318

Apparently the website has outdated information, so it seems the "parental access section" does not exist anymore. I found this out after contacting support:

Ubi-Kayee (2/25/2021, 8:12:28 PM): Thanks for contacting Ubisoft Support. You're now connected with Ubi-Kayee, please allow a few moments for the agent to acquaint themselves with your case. Our team are working hard to provide support to as many players as possible during these difficult times. Abusive language towards our agents will not be tolerated and will result in the chat session being terminated.

Me (2/25/2021, 8:12:32 PM): Hello!

Me (2/25/2021, 8:12:47 PM): I need some help with changing the DOB of my account

Me (2/25/2021, 8:12:56 PM): You see, it's meant for a child.

Me (2/25/2021, 8:13:09 PM): So the year should be 2013

Me (2/25/2021, 8:13:15 PM): I just verified the mail as well.

Ubi-Kayee (2/25/2021, 8:13:17 PM): No problem to what does your Date of Birth need changing?

Me (2/25/2021, 8:13:26 PM): only the year, to 2013

Ubi-Kayee (2/25/2021, 8:14:13 PM): So that be 24-06-2013

Me (2/25/2021, 8:14:17 PM): yes

Ubi-Kayee (2/25/2021, 8:14:45 PM): That is changed now.

Ubi-Kayee (2/25/2021, 8:14:55 PM): Is there anything else I can do for you?

Me (2/25/2021, 8:15:21 PM): Thank you! I'm just wondering just one more thing, can I start applying parental controls on this account now?

Ubi-Kayee (2/25/2021, 8:15:41 PM): No we do not have parental controls on this accounts.

Me (2/25/2021, 8:15:42 PM): Does it work? or is there more steps I should take with you first

Ubi-Kayee (2/25/2021, 8:16:02 PM): In our terms it does say you need to be 16 or older to create an account

Me (2/25/2021, 8:16:07 PM): I see you offer "parental access section"?

Me (2/25/2021, 8:16:26 PM): Then how come you allow it to be changed to 2013?

Ubi-Kayee (2/25/2021, 8:16:27 PM): This is outdated and will not be possible.

Ubi-Kayee (2/25/2021, 8:16:34 PM): Because you asked

Me (2/25/2021, 8:16:41 PM): really....

Me (2/25/2021, 8:16:54 PM): so there is no parental control anymore? Why is it outdated?

Me (2/25/2021, 8:17:20 PM): if you only let 16+ to create accounts, shouldn't it be impossible for those under 16 to create accounts?

Ubi-Kayee (2/25/2021, 8:17:23 PM): To answer this question I advise you to read the full terms and services of creatign a Ubisoft account.

Me (2/25/2021, 8:17:53 PM): I talked yesterday

Me (2/25/2021, 8:17:57 PM): with a support person

Me (2/25/2021, 8:18:06 PM): and he told me you have parental controls

Me (2/25/2021, 8:18:09 PM): I'm confused

Ubi-Kayee (2/25/2021, 8:19:23 PM): I can understand that it can cause confusion specially with all legal rules about online account also constantly changing.

Me (2/25/2021, 8:19:35 PM): yes...

Ubi-Kayee (2/25/2021, 8:19:45 PM): Maybe if you explain to me what your preferred end result is and I can advise you correctly

Me (2/25/2021, 8:22:05 PM): Yes that would be great. You see I'm actually working on a school project, where I have to research what kind of parental controls exist on different gaming platforms. Now I'm checking yours, and I see on your website that you offer "parental access section". So I followed that to create a child account now with you (my mail being the "parent mail" for the 8 year old child), and then set it up so I can "view" what the child does and such. I think it's weird your website says something else, and you supporters say something else.

Me (2/25/2021, 8:23:06 PM): I only wish to go through the steps of setting up a child account and see how a parent could control the use of this site.

Me (2/25/2021, 8:23:29 PM): So my preferred end result is really a report

Ubi-Kayee (2/25/2021, 8:26:05 PM): I see that is what you would like.

I can confrim the website might have some outdated infromation in there.

For any creation of a Ubisoft account you require to be 16 years or older. This is covered in teh Terms of the account.

Me (2/25/2021, 8:26:20 PM): Yes I know

Ubi-Kayee (2/25/2021, 8:26:55 PM): So I can say we do not have the option to have an account for children in that way, this is to meat the regulations that are there. Me (2/25/2021, 8:27:03 PM): but I saw in the same place it says that a parent can create an account for the child using their own email, so the child under 13 would use the mail of their parent to create an account.

Ubi-Kayee (2/25/2021, 8:27:49 PM): Yeah like I said this is autdated information. You need to be 16 or older to create an account.

Me (2/25/2021, 8:28:11 PM): could you send me the link where I can read this myself?

Me (2/25/2021, 8:28:36 PM): Why don't you update your pages?

Ubi-Kayee (2/25/2021, 8:30:20 PM): We try to always update our websites.

Ubi-Kayee (2/25/2021, 8:30:33 PM): I will flag to get this information updated.

Me (2/25/2021, 8:30:58 PM): good. cause I feel like I've been wasting my time right now to be honest. Due to outdated information.

Me (2/25/2021, 8:31:14 PM): But don't you offer games for children under 13? Ubi-Kayee (2/25/2021, 8:31:32 PM): That is why i ask what you would like to know. Ubi-Kayee (2/25/2021, 8:32:00 PM): These games are on consoles yes and they can be played without accounts

Ubi-Kayee (2/25/2021, 8:32:46 PM): I will raise this information to be reviewed an hopefully it should update soon.

Me (2/25/2021, 8:33:01 PM): oh okay...

Me (2/25/2021, 8:33:04 PM): thanks.

Me (2/25/2021, 8:33:18 PM): I have no more questions then

Me (2/25/2021, 8:33:22 PM): good bye

The information on this site: https://support.ubisoft.com/nn-NO/Article/000079318 is outdated in others words. As when you try to create an account, it does not ask your parent's name and email. The support said the games meant for those under 13 could be played without creating an account, usually console games.

But terms of use say this:

- 9 <u>Hva med tilgang til våre tjenester av mindreårige?</u>
- ▼ Denne artikkelen forteller hvordan mindreårige kan opprette en konto og få tilgang til våre tjenester, med hjelp av foreldre / formynder.
 - 9.1 Dersom du er mindreårig i henhold til loven i det landet du bor, skal du lese disse vilkårene sammen med dine foreldre eller din formynder.
 - 9.2 Dersom du er en forelder eller en formynder, anbefaler vi at du overvåker den spillaktiviteten dine barn har, spesielt online, og at du gjør deg kjent med foreldrekontrollfunksjoner som kan stilles til disposisjon av oss og/eller av våre partnere. Vi anbefaler deg å avlegge et besøk på "foreldrenes hjørne", en side som vi har utviklet i samarbeid med eksperter, spillere og foreldre, og som du finner på https://ubisoft.com/en-us/company/parents.aspx. Der finner du svar på en del ofte stilte spørsmål som vi får, samt en del tips og råd.
 - 9.3 Vi kan begrense tilgangen til visse tjenester på grunn av alder, og for mindreårige under en viss alder, kan det hende at vi gir tilgang til visse tjenester utelukkende med samtykke fra foreldre eller formynder.
 - 9.4 I den grad loven gir rett til det, vil vi ikke akseptere noe ansvar for aktiviteter som blir gjort av mindreårige uten at foreldre eller formynder har gitt sin tillatelse. Bruk av tjenestene av mindreårige er under alle omstendigheter et ansvar som hviler på foreldrene eller formynderne. Dersom du er forelder eller formynder og du gir tillatelse til at ditt barn kan registrere seg på våre tjenester, betyr det at du godtar de betingelsene som gielder barnets bruk av tjenestene.

On the website I'm told to create an account with child name and parent email. When trying to create a new account with the birthdate of the child I get(2013):



Sorry, you do not meet the requirements to create a Ubisoft account.

RETURN TO LOGIN

I created an account with 1990 as my birth year. Unfortunately, it did not have the option to put a child under it for control.

Therefore after talking to support and checking the websites and trying to set up parental control, I am concluding that Ubisoft does not offer parental control anymore.

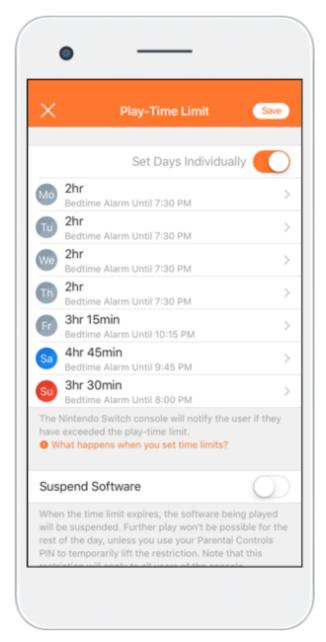
A.5.4 Console gaming platforms

Notes taken during the collection of information about the gaming consoles are presented in this section. The gaming consoles are listed in alphabetic order.

Nintendo Switch

Nintendo Switch has an app with extensive parental controls settings.

The app allows the parent to set time limits everyday which either results in the child getting a notification or the system automatically shutting down.



When it comes to games, the parent can restrict games based on their age rating and whitelist specific games if they believe the child should be allowed to play it despite it's age rating. There's also restrictions on online features, such as in game chatting.

Source: https://www.nintendo.com/switch/parental-controls/

PlayStation

What are the PlayStation 4 parental controls?

In order to set parental controls, you will need your own account for PlayStation Network and an account for each child. If you set up the child accounts, you will automatically be the family manager. If someone else sets up the child accounts, they can appoint you as a "guardian" to enable you to set parental controls and spending limits.

Set play time restrictions

Play time management gives family managers (and adult family members who are set as guardians) the ability to set limits on when, and for how long, each child can access PS4 systems.

Set monthly spending limits on PS4

If you set a spending limit for a child account, we will let that child spend up to that amount each month on PlayStation Store. The funds are taken from the family manager's wallet.

Please note, if you are a "guardian" but not the family manager, let the family manager know what you are doing. If you are family manager, be aware that anyone you appoint as guardian can change the spending limits you have created.

Restrict communication and user-generated content on PS4

You can prevent child accounts from communicating with other players via chat, messages and game invitations. This setting also restricts viewing content created by other players on PS4. You can block videos, images, and text created by other users.

Note: Child accounts can <u>request an exception</u> to use communication features in a specific game.

Set age rating levels for games, Blu-ray[™] and DVD on PS4

Games and videos are rated by age level to help parents figure out whether the content is appropriate for their child. Learn about age ratings before you adjust this setting.

• Restrict use of Internet Browser

 Restrict use of PlayStation® VR: PlayStation® VR is not for use by children under 12 years.

almost directly from:

https://www.playstation.com/en-us/support/account/ps4-parental-controls-and-spending-limit s/

Xbox is a video gaming brand that is created by Microsoft. Xbox includes gaming consoles with games, Streaming services, an online service called Xbox live and a development arm called Xbox gaming studios. Microsoft's Xbox One consoles and Windows 10 PCs play pretty well together. It is possible to stream Xbox console games onto ones PC but this requires that you have Xbox one connected in the same network as you. Xbox has release 4 generations of console namely,Xbox, Xbox 360, Xbox one and the Xbox series X and S.Xbox sales were projected to be 68.5 million by november 2020. This is gave us a reason to study xboxes parental controls. This study was carried out using only online resources due to the limitations that where suggested.

https://www.statista.com/statistics/1005403/global-xbox-one-console-unit-sales/

Parental Control functions

Content filters

Xbox Family features help manage access to mature content. Parents can filter or allow games, apps and websites based on the age of their children to ensure they are interacting with age-appropriate content. Children can also request access to content which parents can then approve or decline. Xbox uses the ESRB rating system to do this. Through the privacy settings, one also has the ability to manage what personal information others can see and who is permitted to engage with the account. Additionally, one can also manage who can communicate with their child, select who can see what their child watches or plays, and decide what profile information others can see. It is also possible to block or mute a user. Muting means that an account can not communicate with the child in-game or in a chat session while blocking prevents the child from receiving that person's messages and game invites, removes them from your friends list, and hides the child's online activity from them.

Usage controls

Xbox provides the Ask a Parent feature which requires the parents approval for things the child wants to buy in the Microsoft Store, except what they get with gift cards or money in their Microsoft account. The parent can also allow or block the child's ability to join multiplayer online games, create and join clubs, broadcast their gameplay, add friends and chat with other users. They can also set up an allowance whereby the child can only use the money that the parent adds in inorder to limit the child's purchases on xbox. The parent can also manage how much time is spent each day of the week and when the device can be used.

XBOX

The screen time countdown starts once the person is signed in and stops when signed out. It is also possible to set a time limit for a specific game or app in the Xbox family account.

Monitoring

On Xbox family one can get an activity report on the child's Microsoft account and view a summary of their activity on Xbox consoles and Windows 10 devices.one can also View their Microsoft Store order history online or from theXbox console in order to see if the child hasn't purchased any game or application without consent

https://www.xbox.com/en-US/apps/family-settings-app

