

Y Nhu Camilla Tran

Developing a web-based gamified application to increase physical activity throughout monetary incentives

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Y Nhu Camilla Tran

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Supervisor: Michail Giannakos

Co-supervisor: Ilias O. Pappas

Norwegian University of Science and Technology
Department of Computer Science

Summary

Cardiovascular diseases are the leading cause of death worldwide (McKay, Eliasziw, Chen, & Blumberg, 2018) and are highly correlated with obesity and general weight issues. In 2016, 1.3 billion people were measured as overweight worldwide (Abarca-Gómez et al., 2017). To reduce cardiovascular diseases, at least 150 minutes of moderate intensity physical activity per week, for adults aged 18-64 years, is recommended. (WHO et al., 2015). However, there is a threshold to begin and sustain these routines (Richard, Christina, Deborah, Rubio, & Kennon, 1997).

In the world of technology, there has been efforts to inspire people to get active and change their lifestyles through new software and products. These products usually use motivational design and often adopt a combination of these tools: gamification, quantified-self, and social networking. However, other services like sticKK.com and Waybetter Inc use monetary incentive like individual deposit contracts for motivating the users to be active.

This study investigates whether a gamified exercise application, called Goalkeeper, positively influences users' motivation to workout. Goalkeeper is a startup company from the NTNU School of Entrepreneurship (NSE) that uses deposit contracts as a monetary incentive to motivate people to do physical activity in social groups through a web-based gamified exercise application. The users of the Goalkeeper app can create challenges where they choose the amount of money to deposit, the duration (in weeks), and the required number of exercise days per week. A workout has to be at least 30 minutes to be considered valid. However, this study relied upon pre-made challenges to ensure consistent data.

The method used in this study is triangulation. There were a total of 48 participants separated into 12 groups; some that had a monetary incentive, and others that did not use money. Each group consisted of 3 to 6 participants, and received a pre-made challenge that lasted between 2 to 6 weeks. The challenges required three exercise days each week, and a deposit of either 0 kr, 150 kr, or 500 kr. The participants that completed all exercises during each week of the challenge earned their deposit money back, in addition to money from those who failed the challenge. The dropout rate for the different deposit money groups in this study were 79% for 0 kr, 21% for 150 kr, and 6% for 500 kr. Thus, this study shows that deposit contracts are a motivational factor for completing a challenge.

Keywords: Monetary incentive, physical activity, gamified application, motivational design, gamification, quantified-self, social networking

Sammendrag

Hjerte- og karsykdommer er den ledende dødsårsaken verden over (McKay et al., 2018). I 2016 ble det dokumentert at 1,3 milliarder mennesker hadde problemer knyttet til overvekt på global basis. (Abarca-Gómez et al., 2017). Det finnes flere handlinger en kan gjøre for å redusere hjerte- og karsykdommer. En handling folk kan gjøre for å redusere hjerte- og karsykdommer er å utføre fysisk aktivitet. Det har blitt utviklet flere teknologiske produkter og programvarer med et felles mål om å motivere, og endre, brukernes livsstil og aktivitetsnivå. Disse produktene bruker vanligvis motivasjonsdesign og det består av tre felter: gamification, kvantifisert selv og sosiale nettverk. I dag bruker tjenester, som sticKK.com og Waybetter Inc, monetære incentiver som individuelle depositums kontrakter for å motivere brukerne til å være aktive. Denne studien forsøker på hvordan depositums kontakter kan brukes som et monetært insentiv i en gamifisert treningsapplikasjon, kalt Goalkeeper, og hvordan den påvirker brukerens motivasjon til å øke deres fysiske aktivitet i sosiale grupper.

Goalkeeper er en tjeneste som tar form i en nettbasert applikasjon. Goalkeeper tar i bruk depositums kontrakter som et monetært insentiv og virkemiddel til å motivere folk til å øke sin fysiske aktivitet i sosiale grupper. Tjenesten er skapt og utviklet av et oppstarts-selskap fra Entreprenørskolen på NTNU. Goalkeeper gir brukerne mulighet til å lage en "Goalkeeper utfordring" hvor brukerne selv kan velge (1) hvor mye innskuddspenger de vil legge inn; (2) varighet av utfordringen (antall uker), og (3) antall treningsdager i løpet av ukene utfordringen pågår. Studien tar for seg 48 deltakere der de ble delt opp i 12 grupper, hvor hver gruppe er på 3-6 personer, og fikk utdelt en forhåndslags utfordring. Med tanke på at denne studien skal undersøke hvordan depositums kontakter kan brukes som et monetært insentiv i en gamifisert treningsapplikasjon, og samtidig undersøke hvordan applikasjonen påvirker brukerens motivasjon til å øke deres fysiske aktivitet i sosiale grupper, ble de 12 gruppene delt inn i to kategorier: (1) seks grupper som ikke la inn et pengeinnskudd i applikasjonen; (2) seks grupper som la inn et pengeinnskudd i applikasjonen. Av de gruppene som la inn et pengeinnskudd var det satt to nivåer av pengeinnskudd: 150kr og 500kr.

Etter en nærmere statistisk analyse av resultatene er det påvist en trend som viser at antall "frafalte" personer synker avhengig av størrelse på pengeinnskuddet. Resultatene i studien viser at brukere av Goalkeeper i løpet studie-perioden hadde et frafall på 79% dersom brukere hadde et pengeinnskudd på 0 kr, 21% frafall av brukere som hadde et pengeinnskudd på 150 kr og 6% frafall av brukere som hadde et pengeinnskudd på 500 kr. Dette studiet foreslår at depositums penger er en motivasjonsfaktor for å fullføre en utfordring.

Nøkkelord: Monetær insentiv, fysisk aktivitet, gamifisert applikasjon, motivasjonsdesign

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Abbreviations

CSS	= Cascading Style Sheets
FTS	= Fitness tracking services
HTML	= Hyper Text Markup Language
JS	= JavaScript
NCD	= Non-communicable diseases
NoSQL	= Not only Structured Query Language
ODM	= Object Data Modeling
QS	= Quantifies-Self
SPSS	= Statistical Package for the Social Sciences
SQL	= Structured Query Language

Variables

ATT	= Attitude
BEH	= Behavioral intention
CIE	= Continuance intentions for exercise
CIU	= Continuance intentions for system use
EXE	= Exercising together
HAB	= Habits
MOT	= Motivation
NEG	= Negative emotions
NET	= Network exposure
PEB	= Perceived behavioral control
POS	= Positive emotions
REB	= Reciprocal benefits
REC	= Recognition
SUB	= Subjective norms
SUS	= System usability
VAL	= Value
WOM	= Word-of-mouth intentions

Introduction

Cardiovascular diseases are the leading cause of death worldwide (McKay et al., 2018). These diseases correlate to people that struggle with their weight and obesity. According to Abarca-Gómez et al. (2017), there were 125 million obese children and adolescents between the ages 5 and 19, and 213 million who were overweight worldwide in 2016. Nevertheless, in the same year, there were 671 million obese adults and 1.3 billion overweight worldwide (Abarca-Gómez et al., 2017).

Many people have inactive lifestyles and find it challenging to establish routine physical activity because of a lack of motivation. The recommended level of physical activity for adults aged 18-64 years is at least 150 minutes of moderate intensity during the week (WHO et al., 2015). However, there is a threshold to begin and sustain routines (Richard et al., 1997). Consequently, it is a challenge to find ways to motivate people to be active and change their habits. An important motivation to solve this problem is to improve people's inactive lifestyle and give them the motivation to prevent the risk of obesity and diseases.

Nowadays, there exists a great deal of technology that contributes to reducing this problem in the form of wearables, websites, and mobile applications. Apple/Samsung's watches and Fitbit/Garmin's wristbands are examples of wearables. Many of these wearables have associated mobile health applications, such as Google Fit and Apple's health app. More community-based sites are Strava, Fitocracy, and MyFitnessPal.

One of the central commonalities across all of these technologies is the use of gamification to motivate people. That being said, a deposit contract can be used as a monetary incentive to increase people's physical activity, which may reduce the problem. Goalkeeper is a start-up company that has developed a web application that does just that, and this study presents its design, testing, and development process.

1.1 Motivation

Many people often struggle to find the motivation to do physical activity. It may be that their goals are too high or unreasonable, given their actual performance. Consequently, it often leads to failing the goal. That can be explained by inactive lifestyles and people not prioritizing physical activities in their day to day routine. A study by Heath et al. (2012) asserts that "individuals need to be informed and motivated to adopt physical activity".

Furthermore, because of inactive lifestyles and obesity, it is essential to find ways to motivate people to become more active. A study by Shin and Biocca (2017) examines the user's motivation and attitudes towards quantified-self. Quantified-self "refers to engagement in the self-tracking of any kind of biological, physical, behavioral, or environmental information, either as individuals or in groups, with the aim to improve self-sensing, self-awareness, and human performance within the digital health industry." (Shin and Biocca (2017), Wang, Weber, and Mitra (2016)). There exists tons of workout applications and wearable devices that help to motivate people to be active. These are popular tools that contribute to a quantified-self, and some examples include Fitbit, Garmin, Samsung, and Apple devices. Fitness tracking services (FTS), such as Strava and Fitocracy, track data about health, exercise, and bodily processes (Hamari & Koivisto, 2015).

Moreover, the similarities between these applications and the wearable applications are the use of gamification elements and social community, which is called motivational design. Fitocracy rewards users with points, badges, and leveling, and Fitbit's application does the same with the use of some gamification elements as badges. Both applications have a social community where people can share their achievements and goals. According to Chen, Zdorova, and Nathan-Roberts (2017), "combining gamification with a social community is optimal for designing an FTS that will increase user engagement and empowerment". However, these applications may also be called a gamified exercise application because they use gamification in different ways to motivate people to exercise. For example, the WayBetter, Inc (waybetter.com) application utilizes deposit contracts as a monetary incentive to motivate the users.

Physical activity improves health in many different ways. Several studies suggest that physical activity positively affects health, mood, and often results in a longer life (Foster & Armstrong, 2018). Thus, people benefit from exercise and may be more conscious about their lifestyle and diet.

Above all, we only have one body and so it is important to take care of it through physical activity and a healthy diet. This study aims to prevent the problems discussed in this section, provide motivation for users to get active, and change their lifestyle. The researcher of this study has a great interest in games and exercise, which has influenced this research. The goal was to design, test, and develop a web-based gamified exercise application that utilizes deposit contracts as a monetary incentive to motivate and change habits of users.

1.2 Context

The task description of this master's thesis is as follows:

Gamified exercise application is a field which combines exercise applications and gamification in varying ways to motivate the users of the application to adapt and get fit. Furthermore, analytic (and various user-generated data) is an emerging field in which analytic tools are used to improve the user experience. The proposed project is an empirical study of a prototype application named and made by Goalkeeper. The student is expected to collect and make sense of the derived analytics. The goal of this proposed project is to find different factors that positively influence user habits through analysis of user-generated data within the application.

This thesis consists of three phases of effort. The first phase is a theoretical study of exercise applications, motivational design, and deposit contract. The second phase is the iterative implementation and testing of a prototype application. Finally, the last phase is to collect and analyze the user-generated data from the experiment with the prototype.

This work is a part of a concept by a start-up company called Goalkeeper at the NTNU School of Entrepreneurship (NSE). Their main goal is to motivate people to do physical activities in a fun way and change their lifestyle. Goalkeeper uses deposit contracts as a monetary incentive through a web-based gamified exercise application where challenges with different goals can be made by the users and motivate them to be active. Furthermore, this thesis will contribute research knowledge to Goalkeeper, which they can benefit from.

1.3 Research Questions

This study has one research goal and two research questions. Moreover, the research questions are constructed from the research goal. A more detailed description of the research questions can be read in section 4.1.

Research goal

Examine if deposit contract as a monetary incentive in a gamified exercise application impacts positively on user's motivation in regards to increasing physical activity in social groups.

From the research goal, two distinct research questions have decomposed.

RQ1

How does a gamified exercise application increase the motivation to perform physical activity in social groups by using a deposit contract as a monetary incentive?

RQ2

How does monetary incentive influence the user's cognitive and affective domain for the

gamified exercise application used?

1.4 Research methods

This study has several research methods to generate data, and Figure 1.1 shows all the research methods for this study. Firstly, conducting a literature review is necessary to discover theories and definitions. Secondly, defining the research questions after what is lacking in the field. Thirdly, a triangulation of several methods and strategies to result in different data for the research questions. This triangulation includes designing, testing, and implementing a prototype where an experiment is going to be conducted to see if monetary incentive will increase people physical activity in different length and deposit money amount of a Goalkeeper challenge. Finally, SPSS is going to be used to analyze the user-generated data from the questionnaires, and Google Analytics will track the user behavior from the website. The research methods are described more in detail in Chapter 4.

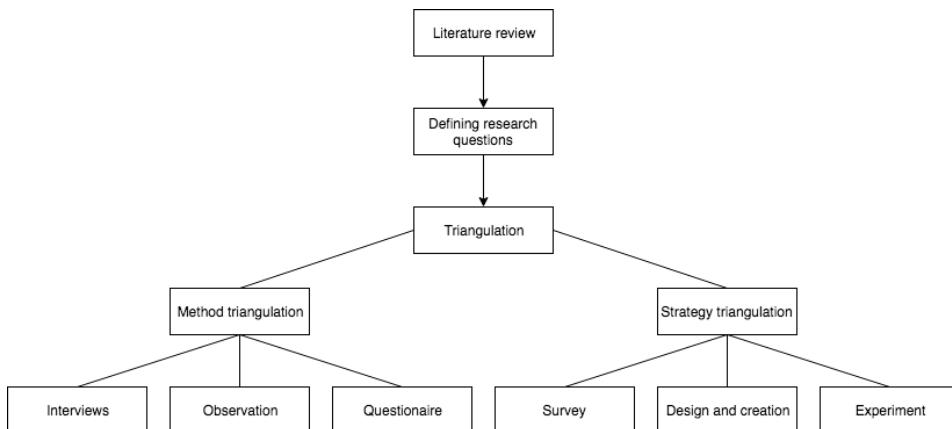


Figure 1.1: Research methods for this study

1.5 Results

The results generated from the triangulation from the research methods were both qualitative and quantitative data. Referring to Figure 1.1, qualitative data is going to be generated from interviews and observation, while the questionnaires are generating the quantitative data. Furthermore, Google Analytics will also be a part of the results and will report the descriptive statistics of the usage from the users on the Goalkeeper website.

Moreover, both qualitative and quantitative data will contribute to answering the research

questions if deposit contracts as a monetary incentive in a web-based gamified exercise application will increase people's physical activity. Chapter 5 describes more about the results in detail.

1.6 Report Outline

This thesis consists of seven chapters, and the outline below gives a summary of each chapter in the report.

Chapter 1: Introduction

This introduction chapter will present the thesis motivation and context. In addition to this, the research questions and research methods will be described.

Chapter 2: Background

This chapter presents different definitions and related works for this study. Furthermore, a description of the lack of literature is given here.

Chapter 3: System Design and Implementation

This chapter presents the web-application Goalkeeper and will describe the journey from paper ideation, to the conduction of two design iteration. Moreover, there will be a description of the architecture and user-scenario, along with requirement specifications and use cases. This implementation chapter will introduce the technology stack and the solution for Goalkeeper.

Chapter 4: Methodology

Chapter 1 mentioned the research method, and this methodology chapter will describe the study's method in more detail.

Chapter 5: Results

This chapter will present and evaluate the results from the empirical study. This chapter will also analyze the Google Analytics data collected from the study, and the data collected from the three questionnaires.

Chapter 6: Discussion

This chapter gives a summary of the results, gives a critical reflection, and a great discussion.

Chapter 7: Conclusion

This chapter states the conclusion for this study, and gives suggestions for future works.

Chapter 2

Background

This chapter will present different fields of research that are relevant to this study. A combination of different elements from each field will aid this study in the investigation of options for new motivational ways to perform physical activity. Section 2.1 describes the field of motivational design, whilst Section 2.2 describes different gamified exercise applications and how they use motivational design. Furthermore, Section 2.3 describes what deposit contacts are and Section 2.4 outlines the arguments for the definition of Goalkeeper in this study.

2.1 Motivational design: gamification, quantified-self and social networking

The primary cause of disability and death is non-communicable diseases (NCDs), according to WHO (2018). Non-communicable diseases result from different lifestyle factors and biological characteristics such as physical inactivity, use of alcohol, unhealthy diets, and tobacco use. Furthermore, NCDs have resulted in the death of 41 million people each year, which is 71 percent of all deaths globally (WHO, 2018). Fifteen million peoples between 30-69 years die of NCDs each year, and with these high fatality rates, an important motivation is to find a way to prevent people suffering the effects NCDs. This study will focus on physical inactivity and present different ways to prevent it.

In the modern-world, there exist many forms of technologies that contribute to the reduction of physical inactivity such as different wearable, websites, and mobile applications. Examples of wearables are Apple Watch, Fitbit, and Garmin clocks/wristbands, whilst some health websites are Strava, Fitocracy, and MyFitnessPal. Moreover, examples of mo-

mobile health applications are Lifesum, Google Fit, and Apple Health. However, all of these technologies use at least some form of motivation design to encourage users to perform physical activity and to improve their health. Motivation design consists of gamification, quantified-self, and social networking (Hamari, Hassan, & Dias, 2018).

2.1.1 Gamification

There are multiple co-existing definitions of gamification. Deterding, Dixon, Khaled, and Nacke (2011) was the first who defined the term according to Kari, Piippo, Frank, Makkonen, and Moilanen (2016) and defined it as “use of game design elements in non-game contexts.”. Another definition based on the goals of gamification is “a process of enhancing a service with affordances for gameful experiences in order to support the user’s overall value creation” (Huotari & Hamari, 2012), and this study, as previously mentioned, will be focusing on health. More specifically on physical activity, and will be based on the definition by Huotari and Hamari (2012). Table 2.1 shows an overview of different definitions of gamification from separate researches.

Over the past years, game elements have been used frequently in different applications in order to motivate people to use the product efficiently, especially in the sports and wellness industry (Kari et al., 2016). A lot of different mobile health applications are described as gamified exercise applications and are described in Section 2.2. Moreover, gamification involves different game mechanics such as gaining points and acquiring badges (Stieglitz, Lattemann, Robra-Bissantz, Zarnekow, & Brockmann, 2017) for the purpose of giving the user motivation to continue. In other words, gamification contributes to self-improvement as the users get a visualization of their progress through elements such as progress bars, points, and achievements (Hamari et al., 2018).

Gamification has been tested in different fields within various contexts such as health (e.g Pyky et al. (2017)), sustainability, government (e.g Bista, Nepal, Paris, and Colineau (2014)), and education (R. N. Landers and Landers (2014); Robson, Plangger, Kietzmann, McCarthy, and Pitt (2015)). According to R. N. Landers, Auer, Collmus, and Armstrong (2018), gamification itself is not a product as one creates a game. “Instead, one adds game elements to change a process that already exists to change how that process influences people.” (R. N. Landers et al., 2018).

Table 2.1: Definitions of Gamification

Author(s)	Definition
Deterding, Dixon, Khaled, and Nacke (2011)	Use of game design elements in non-game contexts.
Zichermann and Cunningham (2011)	The process of game-thinking and game-mechanics to engage users and solve problems.
Huotari and Hamari (2012)	A process of enhancing a service with affordances for gameful experiences in order to support the user's overall value creation
Robson, Plangger, Kietzmann, McCarthy, and Pitt (2015)	The application of lessons from the gaming domain to change behaviors in non-game situations
Kari, Piippo, Frank, Makkonen, and Moilanen (2016)	Process Using a set of activities with the aim to implement game elements to non-game context Experience A use experience in non-game context that the user perceives as gameful.

2.1.2 Quantified-Self

The Quantified-Self (QS) movement is a growing field where people use new mobile and wearable technologies to obtain personal data about everyday activities automatically (Lee, 2013). Using QS in different ways helps people to gain motivation and be more self-aware of health, sleep, fitness, time management, understanding moods, and improving their productivity (Fotopoulos and O'Riordan (2017); Smith and Vonthethoff (2017)). Furthermore, QS designs involve features such as logs, diaries, performance graphs, and other statistical analyses (Hamari et al., 2018). Popular tracking devices, like Fitbit and Apple Watch, can be recognized for using these designs. More examples of different devices are described in Section 2.2. However, not all QS devices are wearable according to Lee (2013) where he states that specialized and custom apps use mobile device's accelerometer or GPS units.

In regards to personal data, the data is collected by businesses and agencies to track the user's behavior and analyze them to use it for marketing and the further improvement of their products (Lee (2013); Lupton (2016)). However, people continue to use these products with more-or-less no knowledge about these data collections. Several studies show that QS works for self-improvement. A recent study illustrates a greater understanding about self-tracking among the members of QS Community by Didžiokaitė, Saukko, and Greiffenhagen (2018) coming to the conclusion that the use of MyFitnessPal resulted in temporary and particular incremental changes, and that self-tracking affected the way people perceive and take care of their lives.

2.1.3 Social networking

Social networking draws from social networking services like Facebook, Instagram, and Twitter (Krasnova, Widjaja, Buxmann, Wenninger, and Benbasat (2015); Hamari et al. (2018)). Some examples of social networking features are messaging, virtual cheers in the form of likes and comments, friending, and discussion forums (Richter & Koch, 2008). Furthermore, people receive feedback, social support, and encouragement from these social network services to stay motivated, whilst communities and social groups are important factors in fulfilling this motivation (Hamari & Koivisto, 2015). Fitocracy and Bodyspace are some examples of social networking services targeting physical activity.

A study by Hamari and Koivisto (2015) about working out for 'likes' using Fitocracy shows that such feedback leads to social reciprocity and motivates the users to continue to exercise and engage in contributing to the community. Another study by Althoff, White, and Horvitz (2016) shows that Pokemon Go significantly increases the user's physical activity. Thus, these studies prove that social networking features increase people's motivation to perform physical activity.

2.2 Gamified exercise applications and exergames

A gamified exercise application is an application that uses gamification in the context to motivate users to perform physical activity. Examples of different gamified exercise applications and online websites are Nike+, Fitbit, and Fitocracy. All of these services use motivational design in some way to engage the users. Moreover, there is extensive research as to how gamification encourages people not to have an inactive lifestyle. A study by Goh and Razikin (2015) researches whether gamification is effective in motivating exercise. The findings were that gamification improves both attitude and enjoyment towards exercise, and has an impact on increasing their physical activity. Similarly, another study by Kari et al. (2016) explores how the use of an exercise application affects the users exercise motivation and behavior. The results showed that the motivation increased as did the awareness of one's physical activity and progress.

In regards to exergames. Sinclair, Hingston, and Masek (2007) defined exergaming as "the use of video games in exercise activity.". Once again, there are multiple definitions of what a game is. Dempsey, Haynes, Lucassen, and Casey (2002) defines it as "a game is a set of activities involving one or more players. It has goals, constraints, payoffs, and consequences. A game is rule-guided and artificial in some respects. Finally, a game involves some aspect of competition, even if that competition is with oneself.". Table 2.2 shows different definitions of what a game is from other studies.

Table 2.2: Definitions of Games

Author(s)	Definition
Abt (1968)	Any contest (play) among adversaries (players) operating under constraints (rules) for an objective (winning, victory pay-off).
Dempsey, Haynes, Lucassen, and Casey (2002)	A game is a set of activities involving one or more players. It has goals, constraints, payoffs, and consequences. A game is rule-guided and artificial in some respects. Finally, a game involves some aspect of competition, even if that competition is with oneself.
Brown (2004)	Games are algorithmic entertainment.
Aarseth (2007)	Games are facilitators that structure player behavior, and whose main purpose is enjoyment.
Frasca (2007)	A game is a form of play where players agree on a system of rules that assigns social status to their quantified performance.

Furthermore, exergaming is a field which combines exercise and games with different approaches and technologies to engage the user to do various physical activities and to promote health benefits through the system use (Matallaoui, Koivisto, Hamari, & Zarnekow, 2017). Exergames often include factors of motivational design. Examples of exergames are Pokemon Go, Wii Sports, and XBOX Kinect, which are social games where the user can be active together with others and be affected by gamification and social network. Moreover, most of these exergames use quantified-self measurements as statistics which inform the user's health and progress. The study by Althoff et al. (2016), as mentioned earlier, shows that Pokemon Go increases people's physical activity. To further this point, the research was conducted in 30 days with 1420 Pokemon Go users and increased 1473 steps a day on average as a result. There was added a total of 144 billion steps to US physical activity. Thus, exergames have powerful features that can change one's behavior and physical activity.

That being said, this study will primarily focus on how a gamified exercise application, called Goalkeeper, is going to motivate the users to perform physical activity with the use of deposit contract as a monetary incentive in a game with social groups. Believing that monetary incentives have an impact on the user's motivation may encourage them to be active. Chapter 3 describes the system design and implementation for Goalkeeper.

2.3 Deposit contract as a monetary incentive in applications

To get control of one's self-discipline, people may commit their goals by voluntarily accepting deadlines with consequences (van der Swaluw et al., 2018b). Deposit contracts lead to pre-commitment strategies that commit peoples future selves to certain behaviors (Strotz (1955); Thaler and Shefrin (1981)). However, deposit contracts are a strategy from behavioral economics to help individuals achieve self-defined goals in a period (Lesser, Thompson, and Luft (2018); Halpern, Asch, and Volpp (2012)). Costa, Carvalho, and Moreira (2019) claim behavioral economics are "aims to incorporate psychological aspects into the economic and financial decision-making processes, concatenating as well forecast models that would incorporate the subjectivity evidenced by in real contexts.". Deposit contracts are the use of monetary incentives where individuals invest with their own money to complete the goal. That is to say, that individuals that do not achieve the goal will inevitably lose their money.

Furthermore, several recent studies have researched the field of how financial incentives can motivate people to reduce alcohol consumption (Murphy et al. (2012); Yurasek, Dennhardt, and Murphy (2015)), reducing tobacco use (Halpern et al. (2012); Higgins et al. (2014); Ierfino et al. (2015)), improving nutrition (Loewenstein, Price, and Volpp (2016); Dolan, Galizzi, and Navarro-Martinez (2015); Thorndike, Riis, and Levy (2016)), and increasing physical activity (Berg, Stratton, Giblin, Esiashvili, and Mertens (2014); Patel et al. (2016)) which shows its vast diversity. However, this study is going to focus on how deposit contracts increase physical activity, and Table 2.3 gives an overview of some studies that research into different financial incentives for motivation. A study by Burns and Rothman (2018) compares different types of financial incentives for how they affect walking behavior. The study had $n = 153$ and randomized four groups with different incentive conditions based on meetup at lab sessions. Participants in the deposit contract group were told that they had a bank account containing \$50 and that over the next five weeks they would lose money from their bank account each week if the goal was not met. In the end, the observed effect on walking did not differ across incentive conditions. Deposit contracts were no more effective than cash rewards at increasing the frequency or likelihood of meeting a walking goal. However, exploratory analyses indicated that the perceived value of the incentive was associated with walking behavior over time.

Lesser et al. (2018) examined how deposit contracts could reduce weight by using a website called sticKK.com that used deposit contracts as a motivation factor. The participants made individual deposit contract and could choose to add a deposit or not. The amount of deposit, weeks, and goal each week of weight loss could be decided by themselves. After setting the goal, they could select four types of contract: anticharity - money goes to a charity/organization opposing what the individual supports, charity - money goes to a general charity fund, friend - money goes to participants designated "friend" and no deposit - no money is paid if the goal is not met (not paying deposit). The outcome of this study was that the type of contract and size of deposit mattered little. Based on this study's analysis, individuals motivated to use commitment contracts appear to have lost weight. Notably,

behavioral economics theory suggests anticharity is the most effective motivator, with "no deposit" as the least effective, and the other two are intermediate. The conclusion was that voluntary use of commitment contracts might be a useful tool to assist weight loss.

Table 2.3: Overview of studies about different financial incentives

Author(s)	Purpose/Goal	Conclusion
Burns and Rothman (2018)	Determine if properties of financial incentives deferentially affect walking behavior.	Deposit contracts were not more effective than cash rewards at increasing the frequency or likelihood of meeting a walking goal.
Lesser, Thompson, and Luft (2018)	To examine the characteristics of voluntary online commitment contracts that may be associated with greater weight loss.	Individuals motivated to use commitment contracts appear to lose weight.
McGill et al. (2018)	To investigate the acceptability of financial incentives for maintenance of weight loss in mid-older adults	Results of in-depth discussions found overall low support for any financial incentive, but particularly deposit contracts and lotteries.
Savani (2018)	Test the effectiveness of commitment devices on weight loss.	The finding argues against the idea that the act of monthly pre-payment for the online tools is a financial commitment device, it is more likely a reflection of initial motivation which is unaffected by a temporary reduction in payment for the service.
van der Swaluw et al. (2018a)	Examined if lottery-based deadlines that leverage regret aversion would help overweight individuals in attaining their goal of attending their gym twice per week	After 13 weeks, participants in the lottery arms attained their attendance goals more often than participants in the control arm. After 26 weeks, we observe a decline in goal attainment in the short-term lottery arm and the highest goal attainment in the long-term lottery arm.

Furthermore, the deposit contract has been used in different applications that as sticKK.com, SPAR!, and waybetter.com. All of these services make it possible for the users to make deposit contracts with themselves and with others. However, stickK.com and SPAR! allows the users to make deposit contracts in groups about any goals. Speaking of waybetter.com, they have four distinct applications called DietBet, StepBet, RunBet, and SweatBet, which focus on specific goals about diet, walking, running, and exercising. Waybetter's apps provide different global betting games the users can invest their money on and gets the money back if they complete the game. A game can, for example, be four weeks and three exercise days each week, with the participants that accomplish all the weeks are winners.

However, there is a gap in the studies where there is a lack of research on the effect of the use of deposit contract in social groups. Few studies mention that the amount deposited has something to do for the motivation and the studies neglect if people workout after the duration of the experiment so as to observe if peoples behavior changed permanently. Regardless, this study proposes to look at how to use deposit contracts as a monetary incentive in a gamified exercise web-application called Goalkeeper. Goalkeeper has similar rules as Waybetter's app but the games, referred to as challenges, are only focused on physical activity in social groups and are not global in design. Notably, social groups in this study are a group of people that are friends or acquaintances.

2.4 Deposit contract or betting?

In Section 2.3, it was mentioned that Goalkeeper was going to be based on Waybetter's concept, but instead of global challenges, it will be creating challenges within social groups. However, Waybetter promotes their games as betting games whilst, alternatively, Goalkeeper's challenges are not defined as betting, gambling, or lottery even though the game has a monetary inclusion. The definition of the word betting, according to Oxford Dictionaries, is "the action of gambling money on the outcome of a race, game, or other unpredictable event.". Moreover, the definition for lottery is "a means of raising money by selling numbered tickets and giving prizes to the holders of numbers drawn at random." according to Oxford Dictionaries. On the other hand, the definition of deposit contract according to US Legal is "an agreement between a financial institution and its customer".

The Norwegian Gaming Authority has accepted that Goalkeeper is not a lottery because every participant has a chance to get their money back if they want to, with the relevant email being in Appendix A. Goalkeeper's challenges have no unpredictable events except sickness or death. Nevertheless, the experiment in this study will not take sickness or death into account but will not call Goalkeeper as betting or lottery since the Norwegian law does not define the concept in that way. The questionnaires will include questions about betting to see if the testers have joined a commitment with money from before, and the term "bet" will be used in the system as "Place your bets" when paying the deposit money. Furthermore, Chapter 7 suggests to include a mechanic that can refund people when ill is in further development. In conclusion, Goalkeeper's definition is deposit contract.

Chapter 3

System Design and Implementation

This chapter will consist of seven sections and is going to present the system design and implementation for the prototype. The system design are presented from Section 3.1 to Section 3.5. Section 3.1 describes the systems requirements specification, Section 3.2 presents the use cases, and Section 3.3 describes the paper ideation. Furthermore, the conduction of the iterative design process are described in Section 3.4 and 3.5, where there are detailed description of the first and second iteration. More details about the iterative design process can be found in Chapter 4. Moreover, the architecture and the implementation of the prototype are described in Section 3.6 and 3.7 respectively.

Furthermore, Goalkeeper hired a designer for one week, which was a freelancer and a student at the Department of Design at NTNU, that this researcher could cooperate with the design. Also, this researcher was a part of Goalkeeper's developer team for implementing the prototype, and there was in a total of three members. In this chapter, "we", "the design team", and "the developer team" is referred to the cooperation with the designer and developers. Table 3.1 shows an overview of the referring to how the different roles in this study are mentioned in the text. Moreover, the design team consisted of two persons and used each other as a sparring partner that made design decisions together. After the paper ideation and creation of the first version of the high-fidelity prototype, this researcher took over the design before the user-tests. Thus, this researcher had the flexibility to make changes after each iteration.

Table 3.1: Roles in this study

Reference in text	Role
This researcher	The author of this thesis
The designer	Design student
The developers	The two developers from Goalkeeper including this researcher
The design team	The design student and this researcher
We	The design team or the developer team depends on the context

3.1 Requirements Specifications

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119 (Bradner, S. (1997)).

Making the requirements as a guideline for what to include in the prototype is essential to have to know how to design the application, both graphically (Section 3.3 to Section 3.5) and in code (Section 3.7). Moreover, each requirement was broken down to use cases and are described shortly in Section 3.2.

The application **must**:

1. Provide registering and sign in through Facebook
2. Support Vipps for paying and pay out the deposit money and receive transaction confirmation through Vipps.
3. Be able to make a new challenge
4. Start and end the challenge at the planned time
5. Be able to send and fetch all the challenge and user data from mLabs
6. Be able to sign out a user and quit the session.
7. Connect with Strava and fetch its exercise data
8. Provide a generated invite link to the respective challenge to recruit more participants
9. Be able to add new participants in a challenge

10. Make it able for users to join a challenge
11. Display the exercise progress for all participants and an overview of challenge information
12. Be aesthetics and user-friendly on both mobile and web, but it should be mobile-first.

The application **should**:

1. Make it easy for users to copy the link
2. Display the total pot
3. Make it able for users to abort a challenge before challenge start

The application **may**:

1. Have a sorted leaderboard
2. Have rewards and badges
3. Provide chat in the pre-game lounge
4. Make it able for participants to report strange activity
5. Remind participants of exercise goal
6. Prompt user to create a Strava profile

Conceptually, Goalkeeper works as follows: (1) The creator sets a start date and choose how many weeks the challenge should last, (2) after that decide how many exercise days the participants should complete during each week, and the amount of deposit money every participant is going to pay. (3) At last, the creator invites friends to join the challenge before the challenge starts. As mentioned in Chapter 1, 150 minutes of moderate intensity each week is recommended for adults between 18-64 years. However, to motivate people to begin to be active, each exercise session has to last at least 30 minutes for being approved with any variant of physical activity. That means 30 minutes of walking, yoga, strength, and running can be approved.

3.2 Use-cases

The use-cases were made out of the requirements stated in Section 3.1. However, the use-cases describe three different roles: participant, initiator, and administrator. Table 3.2 describes these roles.

Table 3.2: The use-case roles

Role	Description
Initiator	An actor that creates a challenge, invite participants, and have the responsibility for the challenge.
Participant	A person that is a part of a Goalkeeper challenge and can invite more participants.
Administrator	An employee in Goalkeeper that makes sure that the challenges are trustworthy for the participants.

For instance, this is an example of a use-case for "must" requirement number 8:

"As an initiator, I want to invite my friends to a challenge I have created. I want to browse and select between existing friends on Goalkeeper. I also want to be able to invite new friends with a personal message through SMS, Messenger, or Email. When this is done, I want to see my friends accept the challenge. When friends have joined, I want to communicate with them in a pre-game lounge."

However, an overview of all of the use-cases is in Appendix B.

3.3 Paper Ideation

Before heading to designing the first high-fidelity prototype of Goalkeeper, the design team had an ideation phase on paper. Due to the lack of time, there was decided only to test the high-fidelity prototype and not test the paper prototype.

The paper ideation implied a sketch of the different flows for the application. For instance, Figure 3.1 shows the paper ideation of the flow "Create a challenge". The rest of the sketches can be found in Appendix C. These sketches made it easier for the design team to get an overview of which screens to include in the prototype.

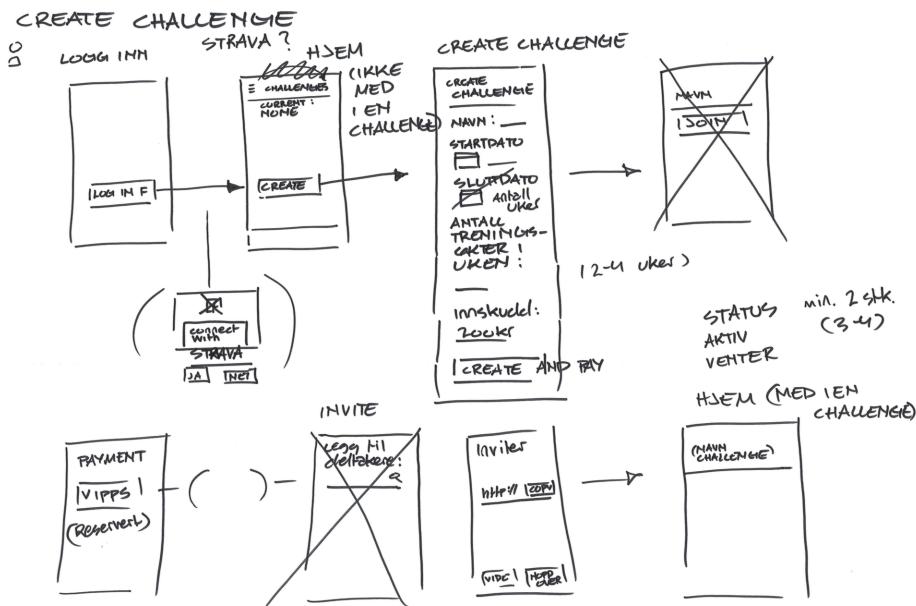


Figure 3.1: Sketch of the flow for "Create a challenge"

Further is a list that shows the most critical actions for the application. The numbers in the parenthesis imply the "must" requirements from Section 3.1. Notably, some of the actions consisted of several requirements and were taken into account when making the high-fidelity prototype.

- Sign in / Register (1)
- Make a new challenge (2,3,4,5,7,8)
- Invite people to a challenge (8,9)
- Join a challenge (10)
- Overview of the challenge you are in (11)
- Overview of the participants in the challenge (11)
- Sign out (6)

3.4 The First Iteration

This section is going to describe the three steps for the first iteration that was performed by the iterative design process (Chapter 4). Moreover, this first iteration came after the paper ideation, and Goalkeeper was a high-fidelity prototype at this point. The next three

subsections are going to describe the design step, the testing, and the evaluation of the testing.

3.4.1 Design

This subsection is going to describe the design decisions and present the first mockups for the high-fidelity prototype. Moreover, the implementation of the design is described in Chapter 3.7.

Sketch 2 was used to make the mockups and converted them to pictures for including them in this report. However, Goalkeeper decided that the design should be mobile-first because they were thinking it was easier for people to use Goalkeeper from their phone when they were exercising, and it was easier for developers to adapt React instead of React Native. See Appendix D for the full mockups for the web-design.

Color and Font Decisions

The designers chose the colors: white, black, yellow, grey, and orange as a part of the palette. The neutral colors were white, black, grey, and these colors were often used in the application. Yellow was used as an active color, and orange was used as action color. However, Strava button had to be the colors of Strava to signal the users that this was Strava and not Goalkeeper.

Three different fonts were used: Paraluent, Franklin Gothic, and a neutral font like Helvetica. Paraluent was used for the logo because it seemed professional for Goalkeeper and was clean. Franklin Gothic was used as headers because it matched with the professional image that Goalkeeper wanted to express. The rest of the text was just a readable font as Helvetica.

Menu and Footer

There was decided that the menu and the footer should be as simple as possible, and therefore, it was not necessary to have a hamburger-menu. Moreover, the menu consisted of a classic “go back to home logo”, and a toggling between “sign in/register” and “sign out”. The footer consisted of two links: “Terms of Service” and “Support”. Figure 3.2 illustrates the menu and footer.

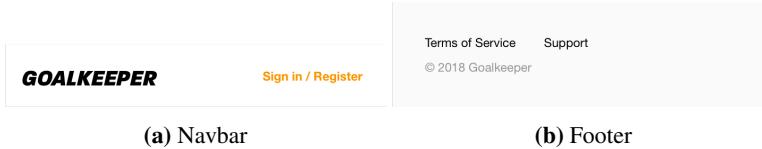


Figure 3.2: Menu and footer

Landing page and Sign in

Since Goalkeeper is a motivation web-application for increasing physical activity, having

photos of people exercising may give motivation. Moreover, some motivation quotes may give an impression for the users. The blue Facebook sign in button is in focus, and an overview of the rules for the challenge comes after that. A small detail is an arrow that hints the user to scroll down. Figure 3.3 shows the landing page and sign in.

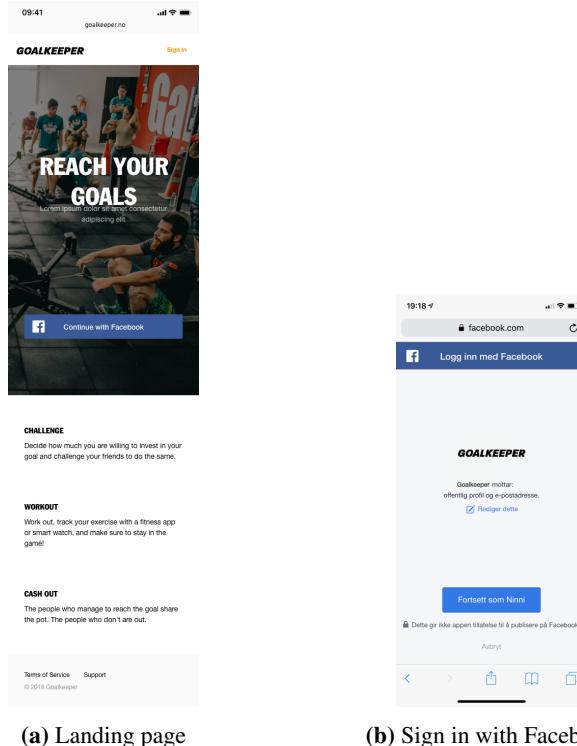


Figure 3.3: Landing page and sign in

Home page without challenge

This page appears only if the user is not a part of a current challenge, and Figure 3.4 shows this. However, this page gets replaced with “Challenge overview” page when the user is a creator or participant for that challenge, and Figure 3.6 illustrates this.

New Challenge Form and Payment

The user has to fill a form to create a new challenge. The new challenge form consisted of five steps: title, date, weeks, days per week, and deposit money (Figure 3.5a). The design also has a condition that there have to be at least **two** participants in the challenge to start it. After submitting the challenge form, the creator gets redirected to Vipps payment (Figure 3.5b).

Chapter 3. System Design and Implementation

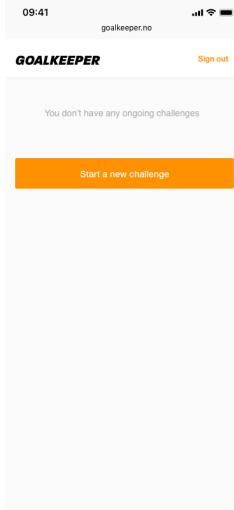


Figure 3.4: Home page without challenge

The figure consists of two side-by-side screenshots of a mobile application interface.

(a) Create challenge form: This screenshot shows the initial steps of creating a challenge. It includes fields for the challenge name ('Trondheim Challenge'), start date ('03.12.18'), duration ('How many weeks do you want the challenge to last?'), frequency ('How many times do you want to exercise per week?'), and bet amount ('How much do you want to bet?'). A note at the bottom states: 'You need a minimum of 2 people to start a challenge. If not enough people commit to the challenge, you will get a full refund of your deposit.' A large orange button at the bottom reads 'Create challenge and place your bets'.

(b) Vipps payment: This screenshot shows the payment screen for the challenge. It displays a QR code for payment via Vipps, the amount 'Betalt kr 200.00', and a note: 'Vipps Tid inn maksimumet sann er tilbake din bønn'. Below the QR code is a green button labeled 'Betalt'.

Figure 3.5: New Challenge Form and Payment

Challenge overview (new homepage)

After paying in Vipps, the user gets a new homepage that is the challenge overview. Figure 3.6 shows the challenge overview, and consists of seven parts in this order: banner, header, details, invite link, Strava connect, leaderboard, and earnings. Moreover, the choices for this order is that the challenge details have to stand in focus. However, the invite link and the Strava connect parts will vanish when the challenge starts, which will result in less scrolling for the user. Notably, the state for these parts has different content after what is fulfilled for the user. Some of these parts may vanish from the screen, for instance, the invite link part vanishes when the challenge starts.

The banner (a) shows different content and color depending on the state. In this first mockup, there are three different states: before getting more than **two** participants, after getting enough participants for the challenge and during the challenge. **The header (b)** is right beneath the banner and contains a motivating exercise picture.

The details (c) consists of information about the challenges' duration, exercise days per week, total participants, and deposit money. Also, there is a “Join and place your bets” button appearing if the user gets an invitation or is not a part of the challenge. If the user is a part of this challenge, the button will not appear.

The invite link (d) part only appears when the user is logged in, and the challenge has not started yet. It consists of a generated invite link and a copy-button.

Connect with Strava (e) is the essential button the user has to click because the progress bar depends on each log that comes from Strava. When clicked, the user gets redirected to strava.com to log in and permit Goalkeeper to fetch the Strava data. How-

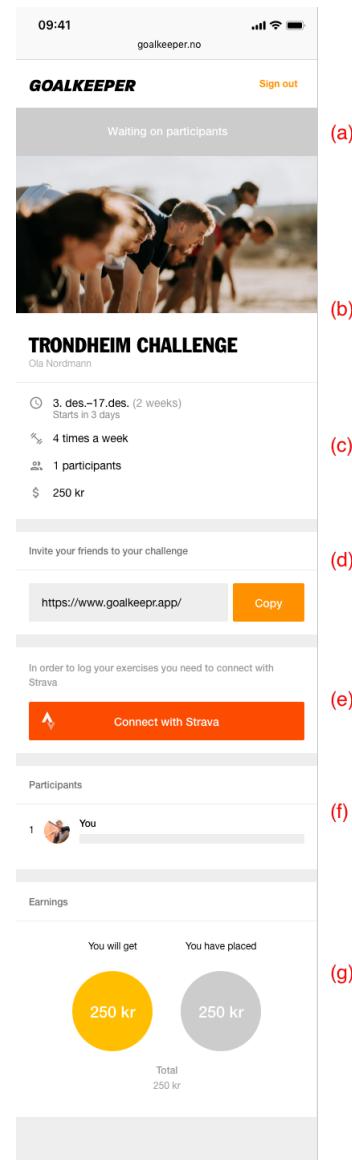


Figure 3.6: Challenge overview

ever, the whole part vanishes after the user has connected their Strava account.

The leaderboard (f) only shows the top five persons and is sorted after how many valid workouts people have done in the challenge. Moreover, the users get redirected to another page with a full overview of all the participants if there are more than five persons in a challenge.

The earnings overview (g) consists mainly of two circles where the leftmost shows how much the user have deposited and rightmost shows how much the user earns. Additionally, the circles grow after how much the user may get back and how much they have placed in the challenge and was a significant factor in motivating people by visually showing the value of the money. The total pot is shown below the circles.

3.4.2 Prototyping

The conduction of the testing of the prototype was performed by two cases where the first case was from a creator's perspective, and the second case was from an invitee's perspective. However, there were six scenarios in total, and these are described in Section 4.3. Moreover, Chapter 4 describes the methods more in detail.

For the first iteration, there were two testers, where both were Android users. Both testers were tested separately and will be called T1 and T2. These two persons did not talk to each other before the test and was separately tested. However, T1 will be described first, and then T2 will be described in each scenario. Both testers knew a little bit of what Goalkeeper was from before, but have never joined a challenge before or seen the design.

Case 1 (Creator's perspective - Create a challenge)

Scenario 1

Both T1 and T2 was skeptical about signing in with Facebook but did it because there were no other options. However, T1 wished that there were some other possibilities to make a new account without Facebook.

Scenario 2

Both T1 and T2 got confused when it came to inviting people during the creation of a challenge because there was no option to invite friends at the same time as filling out the form. Moreover, both thought the choice of "7 times" was confusing because "8" was not an option.

T1 liked the detail "easy" and "hardcore". Another comment was that it was hard to understand "times" and "days" of workout. In addition, the rules for the challenges are not described anywhere and T1 really wanted to know where the money is "disappearing" to. Like, who wins, who is going to get what and so on was really important to know

before paying. Another problem for T2 was that there was no “back button” since the tester clicked on “start a new challenge” by a mistake.

Scenario 3

T2 though it was intuitively enough to copy the link and had no other comments. T1 observed the page, asked what Strava is, and observes that there exists no information about how to log the workouts or rules for the challenge. However, T1 finds the link, clicks on copy, and sends the link to a friend on messenger. Moreover, T1 also noticed wrong calculation in the circles for earnings that caused a little bit of confusion.

Scenario 4

Both testers managed to sign out without problems.

Case 2 (Invitee's perspective - Getting an invite)

Scenario 5

T1 thought the text “place your bet” was misleading. This tester understood that it was possible to choose the amount of deposit money. However, T1 also noticed there existed a sign out button without making an account.

T2 noticed it was hard to understand that Ola Nordmann had created the challenge. However, the information about 250 kr was misleading. This tester did not understand if there was 250 kr in total, or that the deposit money applied to everybody in the challenge. However, the person found more information in the circles in the bottom and tried to click on them because they seemed like buttons.

Scenario 6

T1 observed that the challenge starts in three days, did not understand the circles for earnings, and though this was misleading. Also, T1 noticed how many participants were in the challenge and how they were doing it.

T2 still reacted on the Facebook login and that Vipps page seems like a virus page. Also, T1 though it was weird that there was no verification or terms before paying to vippes, and missed the feedback for confirmation for the payment.

3.4.3 Evaluate

The user-test went well, and much feedback was gathered.

Both testers thought the design was user-friendly, seemed nice, and that it was a minimum of chance that people were going to click on wrong buttons in regards to their actions. However, T1 did not know it was possible to scroll down on the landing page and also really wished that there existed an easy way to withdraw from the challenge and get the

money back. Moreover, it has to stand clearer somewhere if there was not possible to withdraw after paying.

T1 noticed that the period did not stand in weeks, but from date to date, and wished that it should stand in weeks. Additionally, there was expected from T1 that the creator of a challenge had some admin rights. Also, T1 wanted to see if others had used Goalkeeper from before, maybe add the opportunity to invite people with mobile number, have a Goalkeeper community with friends, and take advantage of Strava features. In the end, T2 meant there is essential to use correct words in the description to not confuse people.

The most critical feedbacks from the test are listed below:

Case 1: From a creators perspective - Creating a challenge

- There are no other options for sign in than Facebook
- Missing other options like a real Goalkeeper account or Google sign-in or other services.
- Confusing when and where it is possible to invite friends (referring to the screen where the challenge is made)
- Confusing word-choice “times” and “days” when they are going to choose how many workout days in a week.
- No back-button
- Better information of what Strava is and how to use it
- Easy to copy the link and send it
- Log out was easy. Accessible all the time.

Case 2: From an invitee perspective - Getting an invite

- Misleading text “place your bet”. Thought it was possible that each participant could choose a specific amount.
- Confusing that Ola Nordmann had created this challenge
- The circles for earnings at the bottom was a bit misleading and was mistaken for buttons.
- No terms and condition before paying
- Wished it was possible to withdraw from a challenge easily. If not, there has to be a clearer description.
- The period should stand in weeks, and not just start to end date.
- The lack of description of rules was big and stood nowhere except from the landing page. One of the testers did not understand that it was possible to scroll on the landing page.

3.5 The Second Iteration

This section is going to describe the three steps for the second iteration and is an improvement of the first iteration. Furthermore, the next subsections describe the improved design, the testing of the new design, and the evaluation of the testing.

3.5.1 Design

This researcher evaluated the testing from the first iteration and did some changes in this second iteration. The list below gives an overview of the changes from the first iteration.

Fixes

- Added more sign-in opportunities
- Edited some texts and did it more informative.
- Added back-button
- Added terms and condition for payment
- Added “withdraw” button for the challenge
- The creator can cancel the **whole** challenge and refund to every participant **before** a challenge starts
- Each participant can withdraw and get a refund **before** a challenge starts
- Added space for rules description on the challenge page

Sign in / Register page

One of the main finding for the user-test for design from the first iteration is that people did not like to be forced to sign in with Facebook. As a result of this, it was made an option to make a native Goalkeeper user in the sketches, and Figure 3.7 illustrates this.

Home page without challenge

This page consists of the rules with a simple descriptive banner on top and a “Start a new challenge!” button. The reason for the button is that since people are depositing money and thus have to make sure the user understands the rules before using the service. Figure 3.8 shows this change.

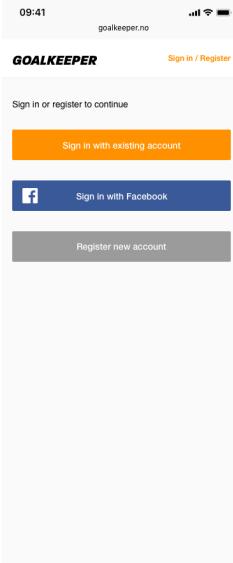


Figure 3.7: Sign in page with options



Figure 3.8: More detailed home screen before making a challenge

The invite link

The copy button look disabled when clicked, and Figure 3.9 shows this.

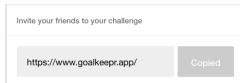


Figure 3.9: Copied button

3.5.2 Prototyping

Two testers were tested in this iteration and will be referred to as T1 and T2. T1 was an Android user, and T2 was an iPhone user. Both of the testers had not heard about Goalkeeper before or deposit contract concept associated with motivation for exercise.

Case 1 (Creator's perspective - Creating a challenge)

Scenario 1

Both testers made a new Goalkeeper-user and did not log in with Facebook. However, T1 reads everything and understands the rules and recognize Strava from the description. Unlike T1, T2 skipped to scroll down in the landing page.

Scenario 2

Both testers managed to click on create new challenge and reads everything and understands the rules and payment before paying it. T1 reacts that there are no descriptions of where the money is going when paying, and T1 had a perception that the money goes to Goalkeeper. Further, T2 did not read the rules good enough or the text was not clear enough and assumed that the person that workout the most wins.

Scenario 3

T1 was thinking to copy the link and send it on Facebook messenger. Moreover, T1 did not know anything of what was going to happen when friends click into the link but assumed that they would register.

T2 thought that it was possible to click on the grey tab in the browser and copy URL at the top to invite friends. However, T2 thinks the information was precise. This tester realized that it was possible to invite friends through a link when scrolling down, connecting to Strava was intuitively, and thought that the overview at the bottom was excellent.

Scenario 4

Both testers managed to sign out without problems, and T2 had no further comments. T1 felt that it lacked some information about how to use Strava, like functions, type of information Goalkeeper takes from Strava, and how to log with Strava to get one exercise day approved. Also, it was unclear if the logs were based on heart rate. Generally, T1 expressed that the rules were a little bit unclear, like what happens if everyone loses or if everybody wins, and wanted a general description of what happens with the money. In

the end, T1 pointed out that the only feedback to the users about money was that it came through Vipps.

Case 2 (Invitee's perspective - Getting an invite)

Scenario 5

Both testers thought it was good that the content of rules for the challenge was available clearly. T2 liked the information about the total pot, and it was positive that the user that got invited could also invite other friends.

T1 noticed it lacked the information about how many friends the creator had invited like Facebook events do. Another feedback from T1 was that the information about the intensity and the minimum of minutes should be more precise in some form and liked the sentence: "gets the money back or more". At last, T1 wanted a more detailed description of the challenge all the time, like when the challenge is created with no participants.

Scenario 6

T1 though it lacked information about which account the money disappeared to, and there was unclear if the participant or the creator can cancel the whole challenge **before** it starts. T2 managed to click on join and wanted to connect Strava. Notably, T2 registered with Facebook because it was easier not to write the complete email address.

Scenario 7 (new scenario after the previous iteration, see Section 4.3 for more details)

T1 wants better feedback if the person is out of the challenge and have received the money back. Moreover, T2 clicks on "cancel and refund" but thought the button had a misleading color and though it was not a button.

3.5.3 Evaluate

There was more textual lack than the design itself in this iteration. However, none of the testers failed to navigate or find something, and T2 thought it was easy to join/pay a challenge. Nonetheless, from the testing, this researcher concluded that the most important from the rules should be represented as bullet-points or have a more simple layout.

Tester T2 realized after the testing that there was some information about what the total pot is, what the participant has deposited, and what the participant will receive. The reason was that this tester was too lazy to scroll down to the bottom after seeing the participant overview. This feedback was good because it gave insight into how to prioritize the most relevant content and which content the user should see the most.

Both testers thought it was easy to use the web application, and there was easy to navigate. Moreover, they also thought it looked professional, and the design was clean/intuitively. The overview of the rules was appreciated, but as mentioned, some of the text could be

clearer like how to log from Strava and the most important rules from the challenge. Also, an essential text that has to be more precise is where the money is disappearing.

The feedback from this testing also leads to other design decisions like asking “are you sure?” before refunding the money to the users when they withdraw, and how the challenge should look after the challenge is ended.

Feedback

- Mostly textual misunderstanding
- Much text of the rules, so the user do not remember everything, maybe write the most important info in bullet points instead
- Intensity and minimum of minutes, maybe bold
- How to win = You complete the challenge
- Everybody wins = All the money back
- Winners = Deposit money back + the losers' money
- Losers = The losers money gets split between the winners
- Everybody loses = All the money goes to Goalkeeper
- No information of which account the money is going to except that it is paying with vippes
- Lacking some information about how to use Strava, like functions, type of information it takes from Strava to Goalkeeper, and how to log with Strava to get one exercise day approved. There was also unclear if the logs had to be based on heart rate to be approved.
- Unclear that the participant and the creator can cancel the whole challenge **before** it starts.
- Missing how many friends the creator has invited like Facebook events shows.
- Wants better feedback if the person is out of the challenge and have gotten the money back. Misleading color on the button.

Fixes

- Red color on cancel challenge and withdraw from challenge button
- Green color on the banner when the participant withdraws for indicating a successful action.

3.6 Architecture and user-scenario

This section presents the system's architecture and user-scenario. Subsection 3.6.1 describes the architecture and Subsection 3.6.2 describes the user-scenario.

3.6.1 Architecture

The Goalkeeper system consists of a front end and back end where the front end consists of a client and Redux, and the back end consists of a server, API fetching/sending, and database communication. Figure 3.10 shows the architecture for Goalkeeper. Subsection 3.6.1 describes Redux more in detail.

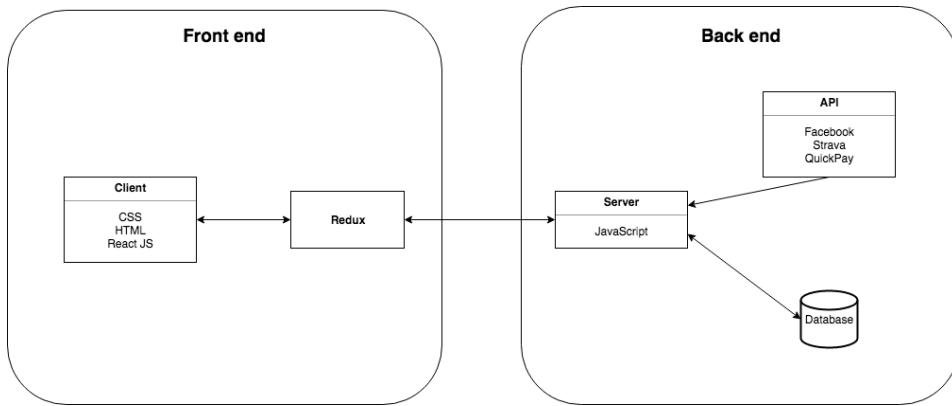


Figure 3.10: System architecture

As mentioned, the front end consists of a client and Redux. The reason for that Redux is in front end and not back end is that this is the most common practice, but it is also possible to have it in the back end. However, the client consists of all the front end code that displays the web application. Moreover, Goalkeeper used HTML, CSS, and ReactJS in the front end. Subsection 3.7.1 describes the decisions more in detail.

Furthermore, the back end consists of a server written in JavaScript code. The server communicates with three different APIs: Facebook, Strava, and QuickPay. Also, the Facebook API makes it possible to sign in with Facebook, and the Strava API makes it able to fetch the user's exercise log to show their progress in Goalkeeper. However, the user has to allow both their Facebook and Strava profile so that Goalkeeper can fetch their profile picture, name from Facebook, and the number of exercise logs above 30 minutes from Strava. Moreover, QuickPay is used to support Vipps Payment when creating and joining a challenge.

In addition to communicating with the APIs, the server is also talking with a database on mLabs. mLabs is a Database-as-a-Service for MongoDB, and Goalkeeper's mLabs database stores data for challenges, invites, payments, and users. More about the structure of the database is described later in this section.

Redux

”Redux is a predictable state container for JavaScript apps.” (Abramov, 2016), and means that Redux takes care of the states in the application. Lobera (2018) explains Redux with ”the box metaphor” where the box organizes the state and may be asked for the current state. Moreover, the state of the box can describe the changes, and the box will notify changes to subscribers.

Figure 3.11 shows how Redux works. The UI consists of the client code in the front end and is where the user interacts. The users interact with the UI that triggers actions, and the reducer receives the actions. Additionally, the reducers update the actions in the store which contains states.

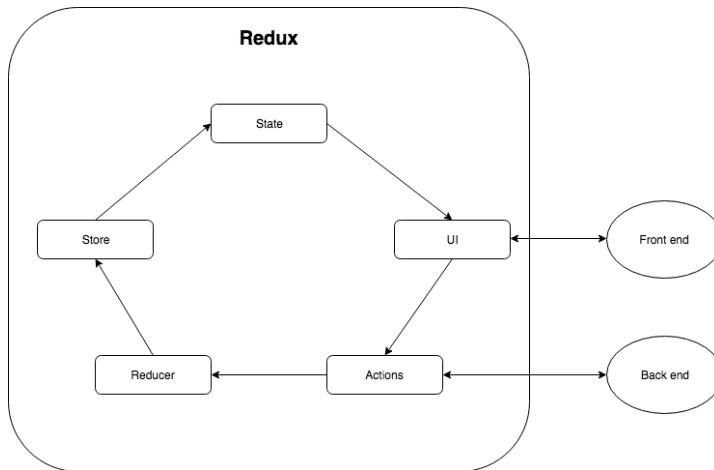


Figure 3.11: Redux architecture

Database structure

Goalkeeper used mLabs database from MongoDB, which is a NoSQL database. More about MongoDB can be found in Subsection 3.7.1. Figure 3.12 shows the structure of Goalkeepers NoSQL database.

As the figure shows, the database consists of four collections: Challenges, Invites, Users, and Payments. Each of them stores different keys and values. For instance, the Invites collection contains three attributes: id - the invitations id, inviter - who invited, and challenge - which challenge the invite represents. Notably, generating each invite leads to a new document in the collection.

Furthermore, the Challenge collection contains an array of participants that keeps track of the participants in the particular challenge and if they are still in the challenge. However, it

also stores all the data for the challenges as name, buying, and the challenges duration and exercise amount. The Users collection keeps track of each users information like name, email, the most recent challenge, and if they have authorized with Strava. Also, it stores different data if the user creates a Goalkeeper profile with Facebook or creates a native Goalkeeper user. The last collection, Payments, keeps track of the user's payment for the challenge.

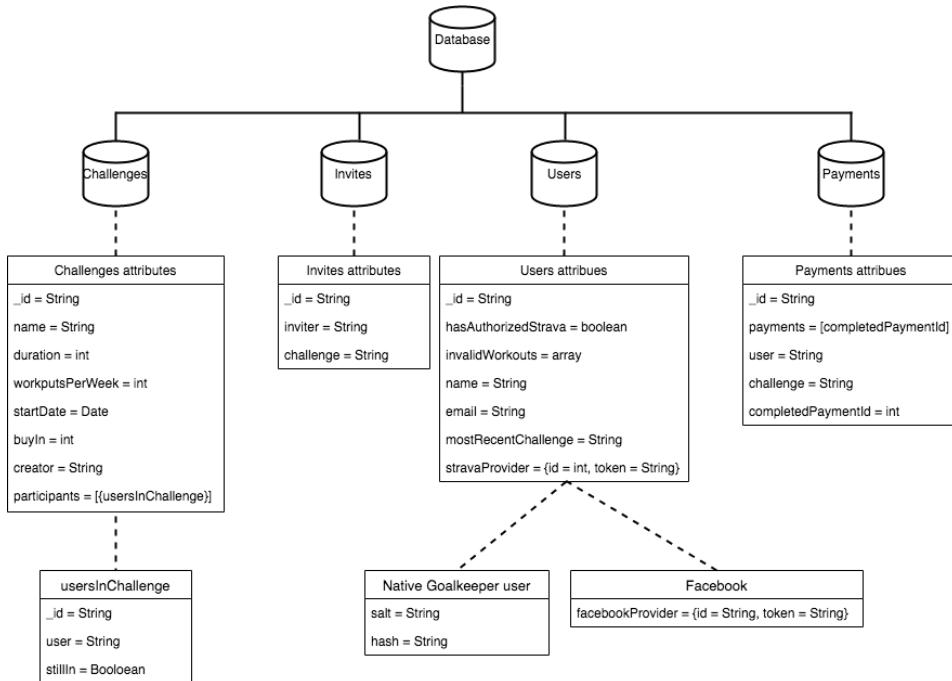
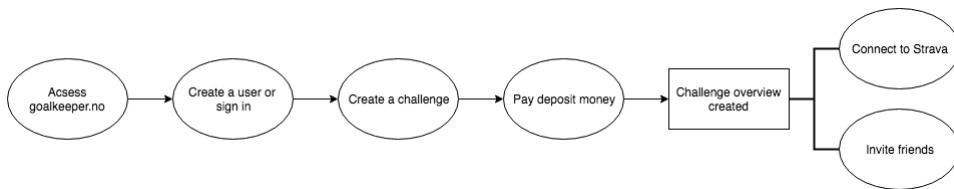
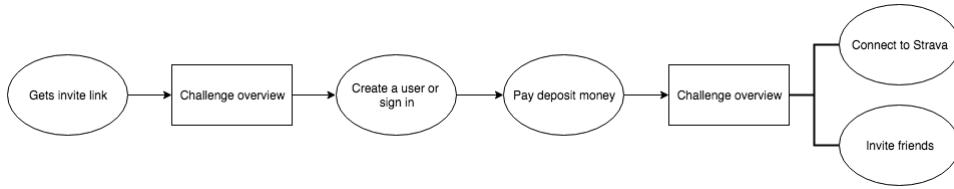


Figure 3.12: Database architecture

3.6.2 User-scenario

Goalkeeper has two user-scenarios: one as a creator and one as an invitee. The user-test from Section 3.4 and 3.5 tested both of the user-scenarios. Figure 3.13 shows the user-scenario before challenge start from a creators perspective, while 3.14 shows from an invitee's perspective.

**Figure 3.13:** Before challenge start, from a creator**Figure 3.14:** Before challenge start, from an invitee

3.7 Implementation

This section is going to present the technology stack in Subsection 3.7.1 and the solution in Subsection 3.7.2. Additionally, there will be explained the choices under the implementation of the code for Goalkeeper in detail.

3.7.1 Technology Stack

Goalkeeper was decided to be a web-application because it was the easiest for the users to access and for the developers to code the solution. Websites are mainly often built with HTML, JavaScript, and CSS. That said, the decision after some research was that a Node-React-Redux stack was the most common to use, and easy to learn because of easy access to resources on the Internet. The code-editor used for coding was Atom version 1.34.0 on macOS High Sierra. The paragraphs below will present the technologies used in the front end and back end.

Front end: ReactJS, Redux, Material-UI

As mentioned, Goalkeeper is a web application, and the front end consists of ReactJS, Redux, and Material-UI. Moreover, HTML, CSS, and regular JavaScript were taken in use because these are mandatory for web development. However, this researcher's task was to

code in the front end because of the knowledge with HTML, CSS, JavaScript, Redux, and ReactJS from before.

ReactJS is an open-source JavaScript library from Facebook Inc (ReactJS, 2019). Moreover, the main reason for choosing ReactJS was that it is easy to learn in regards that two of the developers in Goalkeeper did not know any ReactJS from before. However, this researcher joined the team after the decision about using ReactJS, but luckily did this researcher has knowledge of ReactJS from before. Other reasons are that the code renders fast with Virtual DOM and the components can be reused and can manage states/props. Further, it is easy to convert this web-application to React Native if a native mobile application is needed.

Redux is used for handling and fetching the states in the React components (Abramov, 2016). It was necessary to use Redux in Goalkeeper because the web-application contained many states. Thus, it was more convenient to let Redux handle the states. Section 3.6.1 describes Redux more in detail.

Material-UI is a React UI framework from Google where it provides React components that implement Google's Material Design (Material-UI, 2019). Google Material Design is "a visual language that synthesizes the classic principles of good design with the innovation of technology and science." (Google, 2019). Goalkeeper used Material-UI's Grid system, components and the icons from Material Design. The reason for taking this in use was that this framework had a compatible design that fits the Goalkeeper's UI and code. There exist proper documentation and resources for this framework, which is an essential argument for using it.

HTML, CSS and JavaScript are the traditional technologies to build a website. HTML stands for Hyper Text Markup Language and is the standard markup language for creating Web sites (W3Schools, 2019a). CSS stands for Cascading Style Sheets and forms the styling for the HTML elements on the screen (W3Schools, 2019b). JavaScript makes HTML sites more dynamic and interactive (W3Schools, 2019c), but Goalkeeper used mostly ReactJS for this.

Back end: MongoDB, Node.js, framework, libraries and APIs

Section 3.6 presented the architecture for the back end for the system. The technologies used in Goalkeeper's back end are MongoDB and Node.js, the Express framework, libraries as Mongoose and ESLint, and QuickPay API.

mLabs from MongoDB is used as Goalkeeper's database and is a NoSQL database. Moreover, NoSQL stands for Not only SQL and is an alternative to traditional SQL, which is relational. NoSQL is not relational and have not a schema as SQL. "NoSQL databases are built to allow the insertion of data without a predefined schema." (MongoDB, 2019). However, Goalkeeper is using a document database where each document is independent units. Each document stores keys and their values. The representation can somehow be

similar to JSON objects in each document. The reason for using MongoDB is its high performance, automatic scaling, and high availability.

Node.js is an open source server environment and makes it possible to run JavaScript on the server. It also uses asynchronous programming, which allows multiple actions to happen at the same time. Node.js also make the page content dynamic and eliminates waiting by continuing with the next request. However, Goalkeeper chose Node.js because of all of the characteristics mentioned above, its speed, have proper documentation, and additional libraries that can be used well together for developing a web application.

Express is a Node.js web application framework and provides features like routing and organize the web-application to a model-view-controller architecture on the server side. However, Goalkeeper used this for routing and handling requests and views.

Mongoose is an Object Data Modeling (ODM) library for MongoDB and Node.js. It manages relationships between data and provides schema validation. Goalkeeper used it to translate between objects in code and the representation of those objects in MongoDB. (Karnik, 2018).

ESLint is an open source JavaScript linting library that analyses the code frequently to find problematic patterns or code that does not match with the style guidelines (ESLint, 2019). Goalkeeper used this to write tests for the web application, made sure that the code has no errors, and followed the linting rules so that all of the code has the same pattern.

QuickPay API is a service that allows transferring money from account to account and accepts different payment method (QuickPay, 2019). Goalkeeper used this API to support payment through Vipps. To inform, Vipps is a Norwegian paying solution where people can pay money to others with their mobile number, and there are 3 million peoples that use Vipps today.

3.7.2 The solution

This subsection is going to describe the implementation for the most important screens in the web application. See Section 3.4 and 3.5 for more details about the design process.

Moreover, the whole design from the mockups was managed to be implemented. The paragraphs below are going to describe some technical choices for the selected screens and what differed from the mockups from the design iteration. However, the most repeating changes were the content in the text.

Landing Page

As a result of the user-test, the decision was made that a more detailed description of the rules should be shown since there is money involved in the challenges. As a solution, the rules were written more detailed and placed in the same place in the mockups and several places for reminding the user. However, the arrow animation was made in CSS since there

was not obvious that it was able to scroll on the landing page. Figure 3.15 shows the final landing page.

Log in and sign up

One of the main finding for the user-test for design (Section 3.4 and 3.5) is that people do not like to be forced to sign in with Facebook. As a result of this, there was implemented an option to make a native Goalkeeper user. The user data was sent to mLabs and validation for the register, and the sign-in form is used. Figure 3.16 shows the implemented login page.

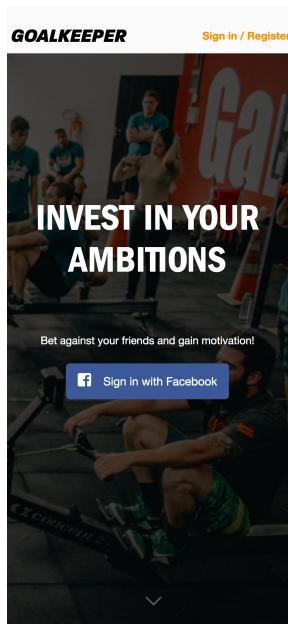


Figure 3.15: Implemented landing

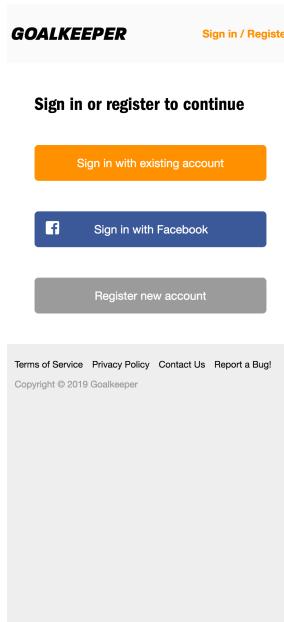


Figure 3.16: Implemented login page

New Challenge Form

The new challenge form looks the same as the mockups from the design phase in the first iteration, except that the requirement of a minimum of **two** people are removed. The reason for the removal is that it was time-consuming to spend time on this requirement regarding having the deadline for the experiment to start. However, some technical choices were the usage of validation for the form so that every field are required. The JavaScript library formik (Palmer, 2019) was used for this. However, the input data to the form are sent to the mLabs database after submission. Figure 3.17 shows the actual form from the web application.

The screenshot shows a web form titled "CREATE A CHALLENGE". At the top right is a "Sign out" link. Below it is a "Back" link. The main title is "CREATE A CHALLENGE". There are several input fields and dropdown menus:

- Name your challenge:** A text input field with placeholder text: "e.g. Ingrids sweettest 2019, Get ripped before juleribba, Active august, etc."
- When do you want the challenge to start?** A date input field with placeholder text: "dd.mm.åååå".
- How many weeks do you want the challenge to last?** A dropdown menu showing the value "1".
- Active days per week?** A dropdown menu with options from 1 to 7. It includes a note: "Track at least 30 minutes of continuous exercise." Below the dropdown are two buttons: "Easy" on the left and "Hardcore" on the right.
- Invest in your ambition! How much do you want to bet?** A dropdown menu with the value "kr".
- Please note:** A note stating: "You can invite people to join after creating the challenge. By creating a challenge you agree to Goalkeepers Terms of Service and Privacy Policy, you also agree to the challenge rules. (notlink both PP, TOS and Rules)"
- Create challenge and place your bets**: A large orange button at the bottom.

At the very bottom of the page, there is a footer with links: "Terms of Service", "Privacy Policy", "Contact Us", and "Report a Bug". Below that is the copyright notice: "Copyright © 2019 Goalkeeper".

Figure 3.17: Implemented form

Payment

During the user-test in the second iteration, the user was not comfortable to deposit money without paying conditions. As a result, a “Paying and refund” page was made with an “Accept” button. Figure 3.18 shows the implemented version and payment steps.

As mentioned in section 3.7.1, QuickPay API is used to support Vipps payment. Moreover, QuickPay appears when the user accepts the “Paying and refund” conditions. After writing in the phone number, a Vipps request appears on the mobile phone, and the user can pay and get a receipt. The user gets redirected to a new homepage that is the challenge overview page.

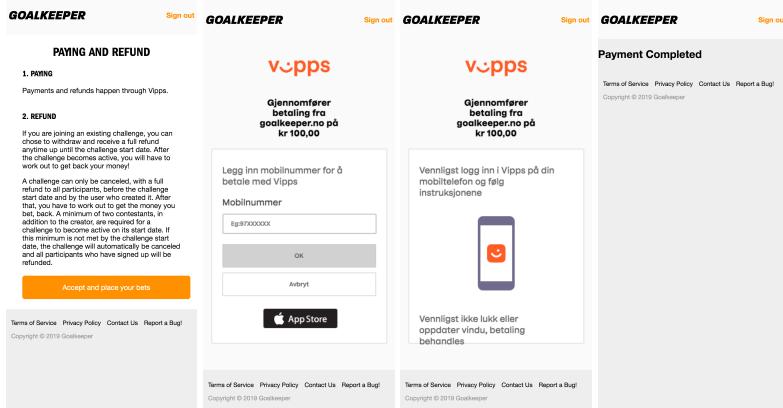


Figure 3.18: Pictures of payment

Challenge Overview

The challenge overview is the user's homepage after the user has created or joined a challenge. All of the information of the challenge is fetched from the create challenge form. This overview consists of eight parts: banner, header, details, rules, Strava connect, invite link, leaderboard, and earnings. All of the parts are placed in a Grid. Some of these parts have their state where there are different content, and if they vanish from the screen. All of the content switches are solved with a conditional (ternary) operator that checks the state of the challenge and if the user is authenticated (signed in). Each paragraph below describes the parts in more detail, and Figure 3.19 shows the implemented page.

The banner (a) shows different content and color depending on the state. There are in total five states: if a user is **not** authenticated, before the challenge starts, during a challenge and still in, during a challenge and out, and when a challenge ends. **The header (b)** contains a picture that is not replaceable in this prototype. However, the title is fetched from the create challenge form, and the create user is fetched from mLabs.

The details (c) consists of information about the challenges' duration, exercise days per week, total participants, and deposit money. As mentioned earlier, all of this information is gathered from mLabs where the form is sent. Also, there is a "Join and place your bets" button appearing if a person gets an invitation or is not a part of the challenge. If the person is a part of this challenge, the button will not appear. The code is checking if the user is a part of the challenge and is authenticated.

The rules (d) are an expanding panel that

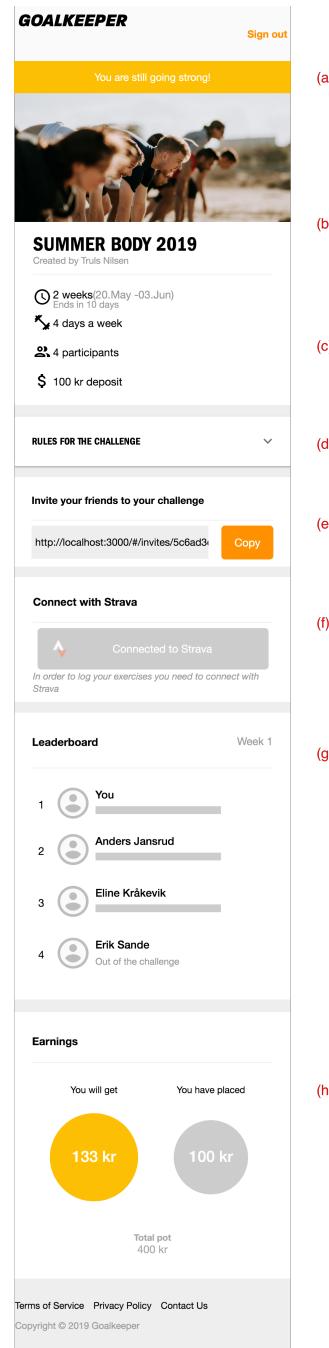


Figure 3.19: The implemented challenge overview

is possible to toggle. The reason for an expanding panel is that it consists of much content and findings from the user-test was that the user does not necessarily want to have them available all the time, and takes time to scroll down. The ExpandingPanel component was used from Material-UI.

The invite link (e) part is only appearing when you are logged in, and the challenge has not started yet. However, this part shows in the figure to illustrate the implementation. It consists of a generated invite link and a copy-button that gets disabled when clicked.

The connect with Strava button (f) are fetching data from Strava, and is solved with actions in Redux (Figure 3.11). The button gets disabled after the user has connected their Strava account.

The leaderboard (g) only shows the top 5 persons and which week of the challenge. It is not sorted in any kind in the prototype but gives an overview of who is still in the challenge or not, and how many exercises they have left. The users get redirected to another page with a full overview of all the participants if there are more than five persons in a challenge. Notably, each log for exercise has to be at least 30 minutes to be approved as a valid session.

The earnings overview (h) consists mainly of two circles and is solved with math formulas, and fetches the amounts from the database.

Methodology

Previously, Section 1.3 and 1.4 introduced the research questions and research method for this study. This chapter will describe the whole methodology for this study in greater detail. Moreover, this will be explained through three sections: Section 4.1 will describe the research questions, Section 4.2 describes the research method, and Section 4.3 describes the research design.

4.1 Research questions

This section will describe the research questions for this study in detail. Since Goalkeeper's objective is to motivate the users to increase their physical activity with a monetary incentive through different challenges with goals, it is interesting to see the impact of the usage in regards to the deposit contract. That leads to this research goal:

Research goal

Examine if deposit contract as a monetary incentive in a gamified exercise application impacts positively on user's motivation in regards to increasing physical activity in social groups.

From the research goal, we can compose two distinct research questions, and below each research question is a more detailed description of how this study is going to investigate and collect the data.

RQ1: How does a gamified exercise application increase the motivation to perform physical activity in social groups by using a deposit contract as a monetary incentive?

This research question investigates how social groups impact on each other in a challenge with the gamified exercise application. However, there may be a social influence and not all of the participants have the same motivation level or the same economic perspective to complete the challenge. Also, it is a possibility that people simply do not want to lose their money to their friends. To collect data for this, all of the test groups will be individual social groups where everybody is friends. Also, questionnaires and interviews will be used to return quantitative and qualitative data for the purpose of answering this research question.

RQ2: *How does monetary incentive influence the user's cognitive and affective domain for the gamified exercise application used?*

This research question investigates the users cognitive and affective domain for the used gamified exercise application when there is a monetary incentive. To measure this, some of the groups will be in money-group and no-money-group. The money-group will consist of two different amount of deposit money, 150 kr, and 500 kr. However, by doing this, this researcher can investigate if the amount of the deposit money is a motivational factor. Nevertheless, the balance of the amount of the deposit money and the challenge itself may have an impact on the person's commitment to complete the challenge. Questionnaires and interviews will be used to return quantitative and qualitative data in the answer to this research question.

4.2 Research method

In Section 1.4 the research method for this study was mentioned, where Figure 1.1 showed the study's methods. This study started with a literature review of defining Goalkeeper, and Google Scholar was mostly used for finding literature about motivational design, physical activity, and deposit contracts. One example of a query was "deposit contract" AND "physical activity". After that, the research questions were defined and are described in the previous section. The conclusion was to use triangulation to generate useful data because this study is an empirical study consisting of designing, testing, and developing a prototype to figure out the research questions. Also, this study is going to see how the prototype influences the users and will generate both qualitative and quantitative data.

The triangulation methodology is the approach for combining more than two theoretical perspectives, methods, or data sources (Mitchell, 1986). This method is useful to get both varying and consistent results for the study and allows us to approach the research questions in different ways. However, different types of triangulation exist (Oates, 2005, p. 37), but this study will endeavor to use method triangulation and strategy triangulation.

The method triangulation is the approach to combine two or more data generation methods (Oates, 2005, p. 37). The data generation methods used in this study are interviews, observation, and questionnaires. Moreover, the individual semi-structured interviews and observation are going to generate qualitative data, whilst the questionnaires are generat-

ing quantitative data. Section 4.3 describes how the interviews and questionnaires are conducted.

The strategy triangulation is the approach to combine two or more research strategies for the purpose of answering the research question (Oates, 2005, pp. 35-37). Furthermore, the strategies used in this study are survey, experiment, design and creation. However, the survey includes questionnaires and interviews that are described in Section 4.3, while design and creation is the process of making the prototype which is detailed in Chapter 3. The experiment planning is described in Subsection 4.3.2 and observations are going to be conducted along with the aforementioned methods above.

4.3 Research design

This section will describe the research design for this study. After a literature review and defining the research questions, the study starts with an iterative design process followed up with a pre-questionnaire. Following this, the experiment with challenges is conducted where two questionnaires are sent out as a follow-up. The interviews were conducted at the end of the study. Figure 4.1 illustrates which data is generated from strategies and data generation methods conducted in the course of this research. The next subsections will describe the methods in more detail.

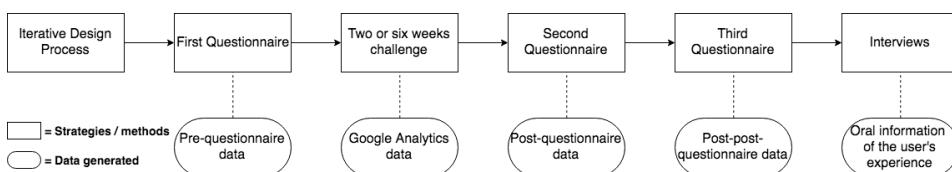


Figure 4.1: Data generated from the strategies / methods

4.3.1 Iterative Design Process

The iterative design process is a part of the User-Centered Approach and is a cycle consisting of three steps: Designing, Prototyping, and Evaluating (Gould & Lewis, 1985). Figure 4.2 illustrates this cycle. Some of the reasons for choosing the iterative design process was that the solution would never be right the first time (Gould & Lewis, 1985) and "iteration allows designs to be refined based on feedback" (Jenny Preece, 2015, p. 269). More about the conduction of the iterative design process can be found in Chapter 3.

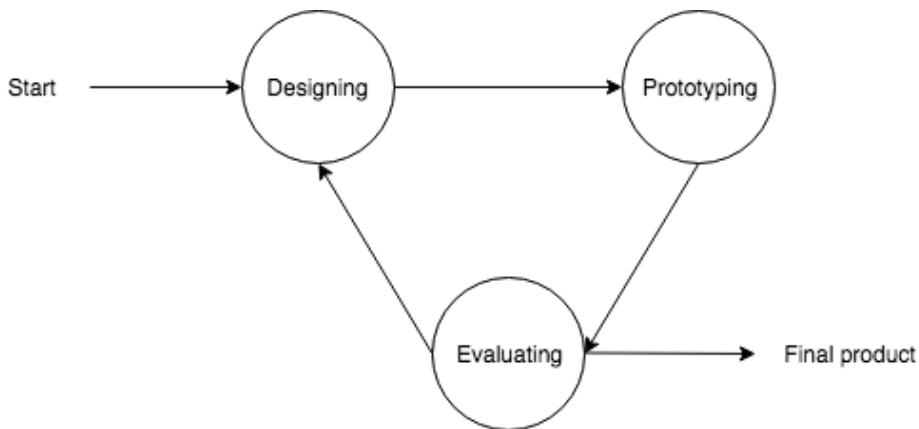


Figure 4.2: Iterative design process

Designing

The first step of the process is designing a product that meets the requirements. Moreover, this step can be divided into two activities: conceptual design and concrete design. The conceptual design consists of making the conceptual model for the product, which means that the design has to understand how and when the users interact with the product and the purpose of the product itself (Jenny Preece, 2015, p. 324).

The concrete design involves the colors, sounds, image, and its graphical design, which defines how the product should look (Jenny Preece, 2015, p. 330). However, Goalkeeper started with sketching the design and discussing the requirements on paper before making the mockups that were going to be used in user-tests in the prototyping step. The mockup was made in a design program called Sketch 2.

Prototyping

Prototyping is the second step of the process. It is important to test how the potential users interact with the design and if it is intuitive enough. The goal is that the users should not struggle when interacting with it, and achieving valuable feedback for spotting these mistakes can be done by testing the design (Jenny Preece, 2015, pp. 314-316). There exist several prototyping methods, and this researcher chose to use Wizard-of-Oz method to user-test. The Wizard-of-Oz consists of mainly two roles: a wizard and the user (Dow et al., 2005). The wizard gives specific tasks to the user to perform on the design paper-prototype and after that simulates the action on the system after the user has completed an action. Paper-prototype was not preferred during this process because interacting with the mockups was much easier for the wizard and the user. Thus, Sketch 2 was used to simulate the product and switch screens when interacting. However, the tasks were made

not to be demanding and more open so that the users could think by themselves and not require help. This user-test had, in total, seven tasks whereas the first iteration had only six tasks. Moreover, Task 7 was made for the second iteration because of the findings from the first iteration. All of the tasks are described in Appendix E.

Evaluating

The final step of the iterative design process is evaluating. According to Jenny Preece (2015), on page 270, evaluating is "the process of determining the usability and acceptability of the product or design that is measured in terms of a variety of usability and user experience criteria.". Evaluating the results from the prototyping is important to decide if the design is completed or not. That being said, the product has to be iterated again if the design is not ready for production after this step.

4.3.2 Experiment setup

The study's experiment was a build up of specific challenges with different goals. For gathering different data from the experiment, the different goals were two or six weeks, and 0 kr, 150 kr or 500 kr in deposit money. All of the different challenges had three exercise days each week to complete. Notably, the duration of the exercises had to be at least 30 minutes to be approved, and this reason is discussed in Section 3.1. Even though $30\text{ minutes} \times 3 = 90\text{ minutes}$ is not equal to 150 minutes (WHO et al., 2015) each week, it is a start for the users to do physical activity and build a routine. However, the two- and six-week challenges were used to compare if the participants who exercise after the challenge are done to exercise after these two weeks, or if they wish to join a new challenge. The reason for choosing these exact deposit values was based on the fact that every participant was rewarded a 75 kr gift card at SIT cafeteria after answering all the three questionnaires, and it was necessary that all the participants had to experience the risk of losing either a small or large sum of money. The lowest amount for deposit money was 150 kr as it was exactly double of the paid amount. Thus, it was only 75 kr to lose. However, the highest amount was 500 kr and 425 kr after the reward, which is still a large amount of money to lose. The reason for 0 kr in deposit was to generate data to compare with the money groups to see if money is a motivational factor. The data from 150 kr and 500 kr groups was used to compare whether the amount of money had influenced the motivation and to what extent.

The testers were gathered by asking different study friends with different groups of friends at the university if they were interested in trying a new form of motivation for exercising. The goal was to gather different groups of people to see how Goalkeeper impacted the user's physical activity in social groups. Overall, the reactions were positive and this researcher was able to gather 50 participants in total. Table 4.1 shows the total numbers of each group. Right before the challenges started, two participants dropped out because they were not able to exercise three times in the first week. Thus, there was no reason for them to join a challenge if they already knew that they were going to lose their money. There

were 21 participants for the two-weeks challenge and 27 participants for the six-weeks challenge.

Furthermore, all of the groups were distributed to different challenges and did not have a chance to choose or make up their own challenges. That was to have consistent data throughout the whole experiment and prevent people from making a one-week challenge even though it is possible in the real Goalkeeper application. Figure 4.3 shows the timeline of the experiment, including when the questionnaires were handed out and when the challenges started/ended.

Table 4.1: Overview of the groups

Group number	Weeks	Deposit Money (kr)	Participants	Female	Male
1	2	0	3	3	-
2	2	500	3	-	3
3	6	150	5	1	4
4	6	150	5	2	3
5	2	500	3	3	-
6	2	150	3	-	3
7	6	500	3	-	3
8	6	500	6	1	5
9	2	150	6	6	-
10	6	0	4	4	-
11	6	0	4	4	-
12	2	0	3	-	3

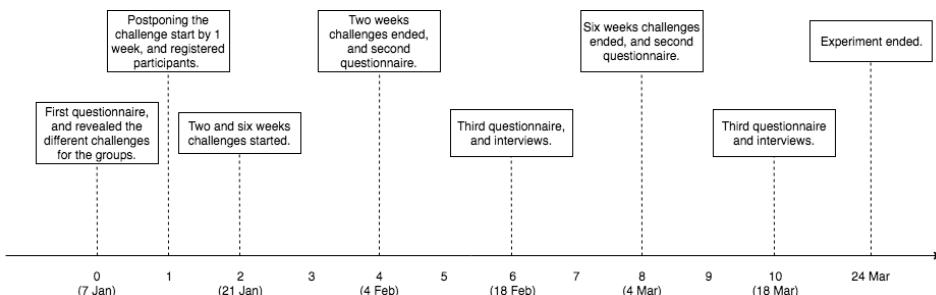


Figure 4.3: Timeline of experiment

4.3.3 Questionnaires

The data for this study were collected from online questionnaires made in Google Forms and Microsoft Forms. However, the reason for the utilization of two different forms of service was that the Norwegian Centre for Research Data (reference number 574389) did

not approve the application in time before sending out the questionnaires, whilst recommending against the use of Google Forms. Therefore, the questionnaires had to switch platforms. The questionnaires had to be sent out because of time limitations.

Moreover, the questionnaires used the seven-point Likert scales because the data will be more accurate and significant than using scales below five or above seven (Johns, n.d.). Moreover, Finstad (2010) claims that the seven-point Likert scales appear to be more suitable for electronic distribution. Thus, this study favored the seven-point Likert scale.

This study had a total of three questionnaires, where the cognitive and affective domain was asked through different variables. Furthermore, demographics and items that were not based on any study were included in every questionnaire to get an overview of the testing group. These items were also based on a seven-point Likert scale, with the results being accessible in Section 5.2. The first questionnaire was to check on the testers before the challenge started, the second questionnaire was to check on the testers after the challenge ended, and the third questionnaire was a follow-up questionnaire to investigate if they had done any physical activity two weeks after the challenges ended. All of the respondents that answered all of the three questionnaires were rewarded with a 75 kr gift card from the SIT cafeteria.

First Questionnaire

The first questionnaire consisted in total of four variables. Moreover, these variables were going to measure the cognitive domain of attitude, motivation, habits, and value before the challenge started. All of the variables for this questionnaire were adapted from previous studies. Table 4.2 shows all of the variables with its construct, where it was adapted from, and what this variable aids this study to investigate. Notice that the variables motivation and habits have a letter 1 in their construct. This is due to there being different measurements in motivation and habits in the first questionnaire and the second questionnaire. This questionnaire with all the relevant items can be found in Appendix F.

Second Questionnaire

The second questionnaire consisted in total of 15 variables for mapping the tester's cognitive and affective domain right after the challenges ended. Table 4.2 shows an overview of the 15 variables with its construct, where it was adapted from, and what this variable aids this study in investigating. Notice that the variables motivation and habits have a letter 2 in their construct because both motivation and habits were measured in the first questionnaire along with other items.

Furthermore, 14 of the 15 variables for this questionnaire were adapted from previous studies. The motivation variable was not based on any study and was constructed by this researcher. By doing this, the items were more suitable for the Goalkeeper challenge and

deposit money questions. Furthermore, this researcher is aware of the risk of invalid data when the variable is not based on any study. However, this questionnaire with all the items can be found in Appendix G.

Third Questionnaire

The third questionnaire contained only factual follow-up questions as to whether they had exercised or not, and was sent out to the testers two weeks after the challenge ended. This questionnaire can be found in Appendix H.

Table 4.2: Variables from the first questionnaire

Construct	Included / total items	Adapted from	To investigate
Attitude (ATT)	4/4	Ajzen (1991)	The user's attitude level for joining a Goalkeeper challenge.
Motivation (MOT1)	4/4	Mullan, Markland, and Ingledew (1997)	If the users have motivation to complete a Goalkeeper challenge.
Habits (HAB1)	4/4	Verplanken and Melkevik (2008)	The user's exercise habits before using Goalkeeper.
Value (VAL)	4/4	Lesieur and Blume (1987)	The user's relationship with money.

Table 4.3: Variables from the second questionnaire

Construct	Included / total items	Adapted from	To investigate
System usability (SUS)	4/4	Lewis (1992)	The user's satisfaction of the systems user interface.
Continuance intentions for system use (CIU)	4/4	Bhattacherjee (2001)	If the users have continuance intentions for using Goalkeeper.
Continuance intentions for exercise (CIE)	4/4	Bhattacherjee (2001)	If the users have continuance intentions for exercising.
Network exposure (NET)	4/4	C.-P. Lin and Bhattacherjee (2008)	If the network exposure influence the users.
Positive emotions (POS)	3/3	Kuo and Wu (2012) Pappas, Kourouthanassis, Giannakos, and Chrissikopoulos (2014)	The user's positive emotions by using Goalkeeper.
Negative emotions (NEG)	3/3	Kuo and Wu (2012) Pappas, Kourouthanassis, Giannakos, and Chrissikopoulos (2014)	The user's negative emotions by using Goalkeeper.
Exercising together (EXE)	5/5	Sallis, Grossman, Pinski, Patterson, and Nader (1987)	If the users exercise with others.
Reciprocal benefits (REB)	4/4	Hsu and Lin (2008), H.-F. Lin (2008)	If the users feel Goalkeeper have reciprocal benefits.
Recognition (REC)	4/4	Hernandez, Montaner, Sese, and Urquiza (2011), Hsu and Lin (2008), C.-P. Lin and Bhattacherjee (2010), H.-F. Lin (2008)	The user's options on recognition from other.
Subjective norms (SUB)	4/4	Ajzen (1991), Fishbein (1980), Venkatesh, Morris, Davis, and Davis (2003)	The user's subjective norms about the usage of Goalkeeper.
Word-of-mouth intentions (WOM)	4/4	Kim and Son (2009)	The user's word-of-mouth intentions after using Goalkeeper.
Habits (HAB2)	12/12	Verplanken and Orbell (2003)	The user's exercise habits after using Goalkeeper.
Behavioral intention (BEH)	3/3	Verplanken and Melkevik (2008)	The user's behavioral intention about exercise.
Perceived behavioral control (PEB)	3/3	Verplanken and Melkevik (2008)	The user's perceived behavior about exercise.
Motivation (MOT2)	3/3	This researcher	The users motivation level after using Goalkeeper.

4.3.4 Semi-Structured Interviews

The semi-structured interviews were conducted after the challenges were done and after the application to the Norwegian Centre for Research Data was approved (reference number 574389). Semi-structured interviews make it possible to change the order of questions depending on the conversation, in addition to the prepared list of themes to be covered (Oates, 2005, p. 188). Moreover, asking additional questions that are not prepared can be done with semi-structured interviews. By doing that, the interviewees can elaborate on their meaning, and more useful information may be captured.

Furthermore, all of the interviews were held in Norwegian, and a digital voice recorder Olympus WS-853 was used to capture the whole interview sessions. The reason for recording the interviews was to avoid taking notes and only focus on the conversation. After capturing the interviews, they were transcribed. However, the full interview guide can be found in Appendix I and the transcribed interviews can be found in Appendix J and K. The bullet-point list below gives examples of some of the questions during the interviews.

- How did you feel after doing the challenge?
- How was it to exercise with your friends?
- Has Goalkeeper changed the way you exercise?
- Which type of exercise did you do during the challenges?
- How would other people benefit from Goalkeeper?

There were in total, 12 testers that were interviewed, and each tester was from each challenge group. As mentioned earlier in the experiment plan, there was a total of 12 groups. This researcher chose a mix of winners and losers for each challenge group, and the interviewee was chosen randomly if there were only winners or losers in one group. Notably, there was no extra reward given to the interviewee to conduct the interview.

4.3.5 Analysis

The analysis conducted for this research involved calculating the descriptive data for the questionnaires, which included the frequencies and mean average. Moreover, to get some useful quantitative data, an Independent Samples T-Test and One-Way ANOVA was conducted to evaluate the relationship between the variables (Field, 2013). It was also interesting to check the correlation between the variables. However, the reason for conducting these analysis methods for the quantitative data is so that these methods are suitable to use when comparing variables. IBM SPSS Statistics Version 25 was used to perform Independent Samples T-test, One-Way ANOVA, and correlation check, which are described in the next subsections.

Correlations

A Pearson product-moment correlation coefficient (Pearson correlation) was run to determine the relationship between the variables within the first questionnaire and the second questionnaire. Moreover, the Pearson correlation "is a measure of the strength and direction of association that exists between two variables measured on at least an interval scale." (LaerdStatistics, 2019c). Furthermore, the correlation is significant when its Sig.(2-tailed) value is below or equal to 0.05 and 0.001, respectively.

Independent Samples T-test

An Independent Samples T-Test (T-test) was run to compare "the means between two unrelated groups on the same continuous, dependent variable." (LaerdStatistics, 2019a). For running the T-test, the variables had to be divided into two different groups that could be compared with each other. Moreover, the variables for this study that were divided were Gender, Age, Weeks, and Deposit. Table 4.4 describes these different divisions. Notice that Deposit was divided in two different ways where one way was to separate money-group (150 kr and 500 kr) and no-money-group (0kr), and 150 kr and 500 kr to compare within the money-group.

Table 4.4: Cut points for dependent variables in Independent Samples T-test

Variable	Cut point	Group 1	Group 2
Gender	-	Female	Male
Age	≥ 25	<25	≥ 25
Weeks	-	2 weeks	6 weeks
Deposit	≥ 100 kr	0 kr	150 kr and 500 kr
Deposit	-	150 kr	500 kr

One-Way ANOVA

Since some variables had more than two groups, a One-Way ANOVA (ANOVA) analysis had to be conducted to find any statistically significant differences between groups. ANOVA "is used to determine whether there are any statistically significant differences between the means of two or more independent (unrelated) groups" (LaerdStatistics, 2019b). Table 4.5 shows the different groups within the dependent variables. However, a Tukey post hoc test was used in addition to ANOVA to reveal the difference between specific groups.

Table 4.5: Different groups within the dependent variables in One-Way ANOVA

Dependent variable	Total number of different groups	Group names
Group number	12	1,2,3,4,5,6,7,8,9,10,11,12
Deposit	3	0, 150, 500
Age	3	20-24, 25-29, 30-34
Exercise days	5	1-4, 5-9, 10-15, 15 or more, I do not workout
Exercise hours	5	1-4, 5-9, 10-15, 15 or more, I do not workout

Google Analytics

Additionally, to the statistic analysis made by SPSS, the Goalkeeper website was tracked with Google Analytics. There was collected descriptive data for total users and accesses,

sessions, device information such as browsers/operative systems, and user behavior. The period of data collection on Google Analytics was 20th January 2019 to 10th March 2019, which was when the registration opened, and including the week after the six-week challenges ended.

Chapter 5

Results

This chapter will present the findings for this study conducted by the experiment and will consist of six sections. Section 5.1 outlines the descriptive statistics of the winners and losers from the challenges, and Section 5.3 to Section 5.6 presents the average, correlation, Independent T-Test and One-way ANOVA from the questionnaires. To finish, Section 5.7 presents the Google Analytics data from Goalkeeper. Notably, there were 50 respondents for the first questionnaire and 48 respondents for the second and third questionnaire.

5.1 Descriptive statistics of winners and losers

After all the challenges were completed, there was a clear variation of losers and winners. Among those who lost, the reasons reported from the second questionnaire were "I did not workout", "I forgot to log", and "I was sick". However, more participants lost in groups with 0 kr in deposit money than groups that had 150 kr or 500 kr in deposit money. Table 5.1 shows an overview of all the winners and losers in each group for each type of deposit and challenge. Notice that there was only one participant that lost in a 500 kr deposit money group and there was the same amount of winners in both two-week and six-week challenges. Section 6.3 discusses these results.

Table 5.1: All the winners and losers in the experiment

Deposit money	Two-weeks challenge				Six-weeks challenge			
	Group number	Total participants	Winners	Losers	Group number	Total participants	Winners	Losers
0 kr	1	3	2	1	10	4	0	4
	12	3	1	2	11	4	4	4
150 kr	6	3	3	0	3	5	3	2
	9	6	4	2	4	5	5	0
500 kr	2	3	3	0	7	3	5	0
	5	3	3	0	8	6	5	1
Total	6	21	16	5	6	27	16	11

Notably in Table 5.2, there is a much higher dropout in the 0 kr groups than the groups with deposit money when the groups are independent. A 50% and 100% dropout for those in two-week and six-week challenges are quite high. When comparing the dropout for 150 kr deposit money group, there are more similarities with the 22% and 20% dropout for two-week challenges and six-week challenges. Only 11% dropout for 500 kr in the six-week challenge due to one participant losing.

Table 5.2: Dropout when the groups are independent

Deposit money	Dropout	
	Two-weeks challenge	Six-weeks challenge
0 kr	50%	100%
150 kr	22%	20%
500 kr	0%	11%

When only looking at the dropout independently from the weeks and groups, focussing only on the deposit money, it can be observed in Table 5.3 that participants with no deposit money have a 79% dropout rate. The participants with a deposit money of 150 kr have a dropout rate of 21% and those who had 500 kr have a far lesser 6% rate.

Table 5.3: Dropout in total independently from weeks and groups

Deposit money	Dropout
0 kr	79%
150 kr	21%
500 kr	6%

5.2 Demographics and other items

This section presents the results for the demographics and other items for all of the questionnaires. Other items are questions that are not based on any variables but were necessary so as to know more about the testing group.

Table 5.4 presents the demographic information and other items for the first questionnaire. However, people that answered "Yes" or "Sometimes" as to whether they track exercise had a follow-up question if tracking was motivation to continue exercising. From the table, it can be observed that the mean was 5.28 among 29 persons. Even though Goalkeeper is not defined as betting (Section 2.4), it was interesting to see if the testers had experienced a commitment with money or without money from before and how much they were willing to deposit in a Goalkeeper challenge.

Table 5.4: Demographic information and other items from the first questionnaire

	Frequency	Percent		Frequency	Percent
<i>Gender</i>			<i>Tracks exercise</i>		
Female	24	48	Yes	12	24
Male	26	52	No	21	42
			Sometimes	17	34
<i>Age</i>					
20-24	40	80			
25-29	9	18	<i>Motivated to exercise when tracking</i>		(mean = 5.28, std = 1.13)
30-34	1	2			
<i>At least one sport in life</i>			<i>Lowest deposit money amount (kr) in a challenge</i>		
Yes	49	98	100-200	45	90
No	1	2	200-300	1	2
			300-400	3	6
			Above 500	1	2
<i>Competition level</i>	(mean = 4.96, std = 1.37)		<i>Highest deposit money amount (kr) in a challenge</i>		
			100-200	6	12
			200-300	11	22
			300-400	11	22
			400-500	14	28
			Above 500	8	16
<i>Exercise sessions per week</i>			<i>Bet without money</i>		
1-4	35	70	Yes	29	58
5-9	6	12	No	21	42
I do not workout	9	18			
<i>Exercise hours per week</i>			<i>Bet with money</i>		
1-4	23	46	Yes	28	56
5-9	17	34	No	22	44
10-14	1	2			
I do not workout	9	18			

Furthermore, Table 5.5 shows the results for the second questionnaire. The question about whether money was a motivational factor to complete the challenge was only available for the money-group. Notably, the result from other supporting services and if they manage to complete the challenges are not reported in this table. More about winners and losers are reported in Section 5.1. Moreover, other devices participants would have liked Goalkeeper to support included Apple Watch, Google Fit, Fitbit, Polar, Runkeeper, Nike Run Club, Samsung Gear (Watch), Whitings Steel HR, Endomondo, and Under Armour Record.

Chapter 5. Results

Table 5.5: Demographic information and other items from the second questionnaire

	Frequency	Percent		Frequency	Percent
<i>Gender</i>					
Female	24	50	Exercise sessions per week	38	79
Male	24	50	1-4	7	15
			5-9	1	2
			10-14	2	4
			15 or more		
<i>Age</i>					
20-24	37	77	Exercise hours per week	28	59
25-29	10	21	1-4	14	29
30-34	1	2	5-9	4	8
			10-14	2	4
			15 or more		
<i>Device used</i>					
Computer	16	33	Stress level in challenge	(mean = 3.58, std = 1.55)	
Mobile	9	19			
Both	23	48			
<i>Exercised regularly before challenge</i>					
Yes	28	58	Money as motivation to not fail	(mean = 4.79, std = 1.57)	
No	20	42			

The results from the third questionnaire are reported in Table 5.6. Individuals that answered "Yes" if they had exercised since the conclusion of the challenge received follow-up questions regarding exercise sessions and hours in the period after the challenge ended and when the third questionnaire was sent out. Notably, two persons had not exercised since the challenges ended.

Table 5.6: Demographic information and other items from the third questionnaire

	Frequency	Percent		Frequency	Percent
<i>Gender</i>					
Female	24	50	Exercised at least once after challenge ended	46	96
Male	24	50	Yes	2	4
			No		
<i>Age</i>					
20-24	37	77	Exercise sessions per week	21	44
25-29	10	21	1-4	21	44
30-34	1	2	5-9	4	8
			30-34		
<i>Exercised regularly before challenge</i>					
Yes	31	65	Exercise hours per week	13	27
No	17	35	1-4	22	46
			5-9	8	17
			10-14	3	6
			15 or more		

5.3 Average for the variables

The results for the first questionnaire were expected for the motivation variable. As observed in Table 5.7, there was high motivation among all of the 50 respondents before the challenge started. Moreover, most of the people did not like to lose their money to friends or alternatively simply held the value of money to a high degree.

Table 5.7: Average for the first questionnaire

N = 50	Mean	Std. Deviation
ATT	4.890	1.221
MOT1	5.260	1.312
HAB1	3.880	1.228
VAL	3.155	1.105

The average for the 15 variables for the second questionnaire varied and can be seen in Table 5.8. There was high continuance intention for exercise after a challenge but an overall low continuance intention for using Goalkeeper.

Table 5.8: Average for the second questionnaire

N = 48	Mean	Std. Deviation
SUS	4.385	1.375
CIU	1.984	1.141
CIE	5.328	1.056
NET	3.906	1.318
POS	3.368	1.532
NEG	1.563	0.920
EXE	3.667	1.697
REB	4.760	1.390
REC	3.958	1.582
SUB	4.042	1.358
WOM	4.078	1.708
HAB2	3.896	1.461
BEH	4.889	1.600
PEB	3.868	1.093
MOT2	4.840	1.353

5.4 Correlations

The correlation is significant when its Sig. (2-tailed) value is below or equals 0.05 and 0.001.

In the first questionnaire, four variables were considered: Attitude (ATT), Motivation (MOT1), Habit (HAB1) and Value (VAL). After running Pearson correlation there was a strong, positive correlation between ATT and MOT1 ($r = .656$, $n = 50$, $p = .000$) and ATT and VAL ($r = .444$, $n = 50$, $p = .001$) which was statistically significant. In addition, there was a strong, positive correlation between MOT1 and VAL which was statistically significant ($r = .513$, $n = 50$, $p = .000$). Table 5.9 shows all the correlations between the variables from

the first questionnaire.

Table 5.9: Correlation table for the first questionnaire

	Mean (SD)	N = 50	ATT	MOT1	HAB1	VAL
ATT	4.890 (1.221)	Pearson Correlation Sig. (2-tailed)	1			
MOT1	5.260 (1.312)	Pearson Correlation Sig. (2-tailed)	.656** 0.000	1		
HAB1	3.880 (1.228)	Pearson Correlation Sig. (2-tailed)	0.211 0.141	0.247 0.084	1	
VAL	3.155 (1.105)	Pearson Correlation Sig. (2-tailed)	.444** 0.001	.513** 0.000	0.210 0.143	1

**. Correlation is significant at the 0.01 level (2-tailed).

In the second questionnaire, the Pearson correlation was used to determine the relationship between 15 variables: System usability (SUS), Continuance intentions for using Goalkeeper (CIU), Continuance intentions for exercise (CIE), Network exposure (NET), Positive emotions (POS), negative emotions (NEG), Exercising together (EXE), Reciprocal benefits (REB), Recognition (REC), Subjective norms (SUB), Word-of-mouth intentions (WOM), Habits (HAB2), Behavioral intention (BEH), Perceived behavioral control (PEB) and Motivation (MOT2). Table 5.10 shows all the 50 significant correlations between the variables in the second questionnaire.

People will likely continue to use Goalkeeper because of an indication of positive emotions. There is a negative correlation between word-of-mouth intentions and negative emotions. People that want to recommend Goalkeeper to others have likely not negative emotions for Goalkeeper.

However, only the most exciting findings for motivation will be reported since there were 50 significant correlations between all the variables.

Looking at MOT2, there was several strong and positive correlations that was statistically significant. However, it is interesting that the users got motivation by good system usability experience ($r = .409$, $n = 48$, $p = .004$), have continuance intention usage for Goalkeeper ($r = .302$, $n = 48$, $p = .037$) and thinks Goalkeeper has reciprocal benefits ($r = .578$, $n = 48$, $p = .000$). In addition, the users got positive emotions ($r = .518$, $n = 48$, $p = .000$) after using Goalkeeper and had word-of-mouth intentions ($r = .586$, $n = 48$, $p = .000$). Another finding was that the users got motivation by exercising together ($r = .320$, $n = 48$, $p = .027$).

For SUS there was several strong and positive correlations that resulted continuance intention usage ($r = .526$, $n = 48$, $p = .000$) when there was positive emotions ($r = .554$, $n = 48$, $p = .000$). However, the users had also positive correlation for word-of-mouth intentions ($r = .700$, $n = 48$, $p = .000$) when there was good system usability experience.

Furthermore, the users had continuance intentions for using Goalkeeper because of their network also use it. There was a strong, positive correlation between continuance intention for using Goalkeeper and network exposure, which was statistically significant ($r = .468$, $n = 48$, $p = .001$). However, the users also had continuance intentions for exercise since their network does. There was a strong, positive correlation between continuance intention for exercise and network exposure which was statistically significant ($r = .339$, $n = 48$, $p = .019$). Another finding was that there was a strong, positive correlation between continuance intention for exercise and reciprocal benefits, which was statistically significant ($r = .302$, $n = 48$, $p = .037$). This result is interesting because the users may continue to exercise because they think Goalkeeper motivates them.

Recognition had strong and positive correlation with behavioral intention ($r = .303$, $n = 48$, $p = .036$) and perceived behavioral control ($r = .324$, $n = 48$, $p = .025$). This is interesting because the users may want to exercise because others notice their progress. There was also a strong, positive correlation and statistically significant between habit and behavioral intention ($r = .473$, $n = 48$, $p = .001$) and between habit and perceived behavioral control ($r = .540$, $n = 48$, $p = .000$). This may be that the participants had good habits before or after using Goalkeeper.

Table 5.10: Correlation table for the second questionnaire

	Mean (SD)	N = 48	SUS	CIU	CIE	NET	POS	NEG	EXE	REB	REC	SUB	WOM	HAB2	BEH	PEB	MOT2
SUS	4.385 (1.375)	Pearson Correlation 1 Sig. (2-tailed) 0.000															
CIU	1.984 (1.141)	Pearson Correlation .526** 1 Sig. (2-tailed) 0.000															
CIE	5.328 (1.056)	Pearson Correlation 0.052 .335* 1 Sig. (2-tailed) 0.725 0.001	0.099	1													
NET	3.906 (1.318)	Pearson Correlation .335* .468** 1 Sig. (2-tailed) 0.020 0.019	.339*	1													
POS	3.368 (1.532)	Pearson Correlation .554* .694** 1 Sig. (2-tailed) 0.000 0.000	0.158	.545** 1													
NEG	1.563 (0.920)	Pearson Correlation .365* .322* -0.168 -0.150 -.350* 1 Sig. (2-tailed) 0.011 0.025 0.352 0.309 0.015															
EXE	3.667 (1.697)	Pearson Correlation 0.140 -0.133 -0.033 0.083 0.045 -0.114 1 Sig. (2-tailed) 0.344 0.368 0.826 0.576 0.759 0.442															
REB	4.760 (1.390)	Pearson Correlation .512** .545** .302* .554** .620** -.379** 0.185 1 Sig. (2-tailed) 0.000 0.000 0.037 0.000 0.000 0.008 0.209															
REC	3.958 (1.582)	Pearson Correlation .309* .529** .265 .603** .614** -.058 0.140 .637** 1 Sig. (2-tailed) 0.033 0.000 0.069 0.000 0.000 0.699 0.342 0.000															
SUB	4.042 (1.358)	Pearson Correlation .630** .605** .167 .561** .738** -.307* 0.241 .794** .702** 1 Sig. (2-tailed) 0.000 0.000 0.255 0.000 0.000 0.034 0.099 0.000 0.000															
WOM	4.078 (1.708)	Pearson Correlation .700** .560** .029 .498** .725** -.435** 0.184 .712** .446** .784** 1 Sig. (2-tailed) 0.000 0.000 0.085 0.000 0.000 0.002 0.212 0.000 0.002 0.000															
HAB2	3.896 (1.461)	Pearson Correlation -0.071 0.632 0.835 0.255 0.184 0.279 0.114 0.768 0.967 0.097 0.743 0.722	0.031	0.167	0.195	0.160	0.231	0.044	0.006	0.243	0.048	-0.053	1				
BEH	4.889 (1.600)	Pearson Correlation -0.102 0.491 0.227 0.184 0.089 0.141 0.286 0.510 0.285 0.036 0.434 0.955 0.001															
PEB	3.868 (1.093)	Pearson Correlation 0.055 0.712 0.966 0.161 0.024 0.296 0.115 0.075 0.020 0.507 0.525 0.000 0.060	0.007	0.206	.325* 0.154	0.230	0.260	-0.055	.324* 0.098	0.094	.540** 0.274	1					
MOT2	4.840 (1.353)	Pearson Correlation .409** .302* .138 .473** .518** -.224 .320* .578** .455** .487** .586** 0.181 0.070 0.268 1 Sig. (2-tailed) 0.004 0.037 0.349 0.001 0.000 0.125 0.027 0.000 0.001 0.000 0.217 0.635 0.065															

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

5.5 Independent Samples T-test

After running Independent Samples T-test, referred to as T-test in text, on the first questionnaire, there was not found significant values for the dividing for Gender, Age, Weeks, and 150 vs. 500. However, there were some interesting findings when running the analyze on Deposit with cut point = 100 kr. This study found that participants that had 150 kr or 500

kr in deposit money in a Goalkeeper challenge had statistically significantly higher attitude before a challenge compared to participants that had 0 kr in deposit money, $t(48) = 2.500$, $p = .016$. Furthermore, the money-group had statistically significantly higher motivation before a challenge compared to no-money-group, $t(48) = 3.172$, $p = .003$. In addition, the money-group also had statistically significantly higher value before a challenge compared to no-money-group, $t(48) = 2.114$, $p = .040$.

Table 5.11: Independent Samples T-test for the first questionnaire. cut point = 100 kr

Equal variances assumed	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
ATT	2.500	48	0.016	0.91369	0.36541
MOT1	3.172	48	0.003	1.20437	0.37968
HAB1	-0.236	48	0.814	-0.09226	0.39060
VAL	2.114	48	0.040	0.71131	0.33642

Significantly different when the "Sig. (2-tailed)" value is less than 0.05.

Furthermore, running the T-test on the second questionnaire gave much more findings than from the first questionnaire. That is because the second questionnaire has in total of 15 variables and gave more statistically significant values. However, the T-test tables for this analyze is massive, especially for each dependent variable; all the T-test tables for the second questionnaire will be found in Appendix L.

When running the T-test on Gender, this study found that males had statistically significantly higher positive emotions, $t(46) = -2.407$, $p = .020$, and statistically significantly higher subjective norms, $t(46) = -2.031$, $p = .048$, after a challenge compared to females. That may be because male generally accepts more to risk the money than females.

Furthermore, when Age was the dependent variable the T-test found that participants older or equal 25-29 years had statistically significantly higher system usability experience, $t(46) = 2.890$, $p = .006$, and statistically significantly higher word-of-mouth intentions, $t(46) = 2.170$, $p = .035$, after a challenge compared to participants younger than 25.

Moreover, using Weeks as the dependent variable this study found that participants in the two-week challenges had statistically significantly higher continuance intentions for using Goalkeeper, $t(46) = 2.065$, $p = .045$, and statistically significantly higher recognition, $t(46) = 2.441$, $p = .019$, compared to participants in the six-week challenges. A logical thought for continuance intentions for using Goalkeeper may be that the participants in the two-week challenges are not tired of using Goalkeeper compared to the ones who have used it in six weeks. So, they likely want to use it more if they are happy with the system.

Within the money-group, it was revealed that participants with 500 kr in deposit money had statistically significantly higher system usability experience, $t(32) = -2.789$, $p = .009$, higher positive emotions, $t(32) = -2.189$, $p = .036$, higher subjective norms compared to participants that deposit 150 kr, $t(32) = -2.408$, $p = .022$, higher word-of-mouth intention, $t(32) = -3.580$, $p = .001$, and higher motivation, $t(32) = -2.074$, $p = .046$, compared to participants that had 150 kr in deposit money. This may because the more money the

participants may lose, they are more interested to check up on their friend's status and commit more to the system and its rules.

Finally, when the cut point on the Deposit was 100 kr, this study found that participants that had 150 kr or 500 kr in deposit money in a Goalkeeper challenge had statistically significantly higher motivation after a challenge compared to participants that had 0 kr in deposit money, $t(46) = 3.855$, $p = .000$. That may be because the money-group was interested in getting their money back. Thus, the no-money-group had nothing to work for than only to complete the challenge without some motivation factor as money.

5.6 One-Way ANOVA

Running One-Way ANOVA, referred to as ANOVA in text, on the first questionnaire resulted in statistically significant values for Deposit, Exercise days, and Group number. Age did not have any statistically significant values and did not generate a Tukey post hoc table since $N < 2$. See Section 5.5 for Independent Samples T-Test results for Age. The same applies to Exercise hours which had $N < 2$, but in difference manage to generate ANOVA table with a statistically significant difference in habits between groups ($F(3,46) = 14.902$, $p = .000$). Table 5.12 shows the significant values for the respective variables.

Table 5.12: One-Way ANOVA between groups for the first questionnaire

Dependent variable	Variable	Mean (SD)	df	F	Sig.
Deposit	MOT1	5.260 (1.312)	(2,47)	5.173	0.009**
Exercise days	HAB1	3.880 (1.228)	(2,47)	15.368	0.000**
Exercise hours	HAB1	3.880 (1.228)	(3,46)	14.902	0.000**
Group number	MOT1	5.260 (1.312)	(11,38)	2.175	0.038*

** $p < 0.01$; * $p < 0.05$

Furthermore, running ANOVA on the Deposit variable resulted in a statistically significant difference in motivation between groups that were determined by ANOVA ($F(2,47) = 5.173$, $p = .009$). A Tukey post hoc test revealed that the motivation was statistically significantly higher between groups that had 150 kr (5.5 ± 1.3 , $p = .031$) and 500 kr (5.8 ± 1.0 , $p = .011$) in deposit money compared to groups that had 0 kr (4.4 ± 1.3) in deposit money. There was no statistically significant difference between the groups that had 150 kr and 500 kr ($p = .800$) in deposit money.

Moreover, the findings from the "Exercise days" variable was a statistically significant difference in habits between groups ($F(2,47) = 15.368$, $p = .000$). A Tukey post hoc test revealed that the habits were statistically significantly higher among participants that had 1-4 exercise days (4.1 ± 1.0 , $p = .000$) and 5-9 exercise days (4.9 ± 1.2 , $p = .000$) compared to participants that did not exercise ($2.3 \pm .35$). There was no statistically significant

difference between the participants that had 1-4 exercise days and 5-9 exercise days ($p = .117$).

The dependent variable "Group number" had a statistically significant difference in motivation between groups ($F(11,38) = 2.175$, $p = .038$). A Tukey post hoc test revealed that the motivation was statistically significantly lower in Group 10 ($3.8 +-. 1.1$, $p = .040$) compared to Group 9 ($6.5 +-. .91$). There was no statistically significant difference among the other groups (1-8 and 11-12).

After running ANOVA on the second questionnaire, there was found statistically significant values in all of the dependent variables. Some of the dependent variables did not generate a Tukey post hoc table, like Age, because of $N < 2$. Table 5.13 shows the ANOVA results between the groups for the second questionnaire, where $p < 0.05$ and $p < 0.01$ are significant values.

Table 5.13: One-Way ANOVA between groups for the second questionnaire

Dependent variable	Variable	Mean (SD)	df	F	Sig.
Age	SUS	4.385 (1.375)	(2,45)	4.090	0.023
	WOM	4.078 (1.708)	(2,45)	3.782	0.030
Deposit	SUS	4.385 (1.375)	(2,45)	5.330	0.008
	POS	3.368 (1.532)	(2,45)	3.734	0.032
	WOM	4.078 (1.708)	(2,45)	7.125	0.002
	MOT2	4.840 (1.353)	(2,45)	10.238	0.000
Exercise days	NEG	1.563 (0.920)	(3,44)	3.931	0.014
Exercise hours	NEG	1.563 (0.920)	(3,44)	4.213	0.011
	HAB2	3.896 (1.461)	(3,44)	4.064	0.012
Group number	SUS	4.385 (1.375)	(11,36)	2.397	0.024
	CIU	1.984 (1.141)	(11,36)	2.094	0.047
	EXE	3.667 (1.697)	(11,36)	3.942	0.001
	REB	4.760 (1.390)	(11,36)	2.245	0.033
	REC	3.958 (1.582)	(11,36)	2.386	0.024
	SUB	4.042 (1.358)	(11,36)	4.434	0.000
	WOM	4.078 (1.708)	(11,36)	3.059	0.005
	MOT2	4.840 (1.353)	(11,36)	2.248	0.033
**p<0.01; *p<0.05					

The dependent variable Age had two significant differences in SUS ($F(11,36) = 2.397$, $p = 0.024$) and WOM ($F(11,36) = 3.059$, $p = 0.005$). However, there was easier to run an independent T-Test because $N < 2$ for this variable in the second questionnaire, and a Tukey post hoc table was not generated. The group of age 30-34 was merged with the group of age 25-29, and a T-Test was conducted in Section 5.5.

For the dependent variable Deposit there was found four significant differences in SUS ($F(2,45) = 5.330$, $p = .008$), POS ($F(2,45) = 3.734$, $p = .032$), WOM ($F(2,45) = 7.125$, p

= .002) , and MOT2 ($F(2,45) = 10.238$, $p = .000$) between the groups as determined by ANOVA.

Four Tukey post hoc table was generated for each finding. Firstly, for SUS there was statistically significantly lower between groups that had 0 kr ($3.9 + 1.2$, $p = .018$) and 150 kr ($4.0 + 1.2$, $p = .018$) in deposit money compared to groups that had 500 kr ($5.2 + 1.3$) in deposit money. There was no statistically significant difference between the groups that had 0 kr and 150 kr ($p = .974$) in deposit money. Secondly, for POS there was statistically significantly lower between groups that had 0 kr ($2.8 + 1.4$, $p = .038$) in deposit money compared to groups that had 500 kr ($4.2 + 1.6$) in deposit money. Thirdly, for WOM there was statistically significantly lower between groups that had 0 kr ($3.3 + 1.8$, $p = .004$) and 150 kr ($3.6 + 1.3$, $p = .007$) in deposit money compared to groups that had 500 kr ($5.3 + 1.3$) in deposit money. There was no statistically significant difference between the groups that had 0 kr and 150 kr ($p = .907$) in deposit money. Finally, for MOT2 there was statistically significantly lower between groups that had 150 kr ($4.8 + 1.2$, $p = .027$) and 500 kr ($5.7 + 1.0$, $p = .000$) in deposit money compared to groups that had 0 kr ($3.8 + 1.0$) in deposit money. There was no statistically significant difference between the groups that had 150 kr and 500 kr ($p = .097$) in deposit money.

When running on the dependent variable Exercise days, there was a statistically significant difference in negative emotions between groups as determined by ANOVA ($F(3,44) = 3.931$, $p = .014$). Since age 10-14 had $N < 2$, no Tukey post hoc table was generated.

The dependent variable Exercise hours had two significant differences in NEG ($F(3,44) = 4.213$, $p = .011$) and HAB2 ($F(3,44) = 4.064$, $p = .012$) between groups as determined by ANOVA. Moreover, a Tukey post hoc test revealed that the negative emotions was statistically significantly lower among groups that exercised 1-4 hours ($1.3 + .58$, $p = .006$) and 5-9 hours ($1.6 + 1.2$, $p = .029$) compared to groups that exercised 15 hours or more ($3.5 + .70$). What is more, a Tukey post hoc test revealed that the habit was statistically significantly higher between groups that exercised 5-9 hours ($4.6 + 1.1$, $p = .026$) compared to groups that exercised 1-4 hours ($3.3 + 1.3$). There was no statistically significant difference between the other groups.

Finally, the last dependent variable Group number had eight significant differences in SUS ($F(11,36) = 2.397$, $p = .024$), CIU ($F(11,36) = 2.094$, $p = .047$), EXE ($F(11,36) = 3.942$, $p = .001$), REB ($F(11,36) = 2.245$, $p = .033$), REC ($F(11,36) = 2.386$, $p = .024$), SUB ($F(11,36) = 4.434$, $p = .000$), WOM ($F(11,36) = 3.059$, $p = .005$) and MOT2 ($F(11,36) = 2.248$, $p = .033$) between groups as determined by ANOVA. A Tukey post hoc test tables will not be considered for this dependent variable because there are too many differences between different groups.

5.7 Google Analytics

In addition to the statistic analysis made by SPSS, the Goalkeeper website was tracked with Google Analytics. The Google Analytics data was from the period when all the challenges started, and when the six-weeks challenge ended. Therefore 20th January to 10th March was chosen. It can be observed in the figures that the total number of users are varied. However, that might have occurred because of duplicated users when being accessed by other devices and browsers.

There was extracted information about page views and average access time on the website, with Figure 5.1 showing an overview of the numbers. Note that the average access time is in seconds. During the testing period, there was in total 4533 page views, and among them, there were 1531 page views for all the challenge pages and 3002 page views on all the other pages in Goalkeeper. Moreover, it can be observed that the users spent 43 seconds on average for all the pages in Goalkeeper, while 2 minutes was spent on average for the challenge overview pages.

Furthermore, another interesting piece of information Google Analytics collected was acquisition (Figure 5.2) and when the users visit during the day (Figure 5.3). According to the statistics, the acquisition from the users saw them mostly accessing the Goalkeeper URL directly. Facebook services and strava.com also dominate the list where the users came from before going to goalkeeper.com. Moreover, Figure 5.3 shows at what times the users access Goalkeeper during the day. It can be observed that people visit most regularly during lunchtime on Mondays. However, there is more activity on Sundays and Mondays than the other days, with the reason being that it might be that each week surrounding the challenges ended on Sunday and begun Monday again.

Nevertheless, other results from Google Analytics were which devices were used (Figure 5.4), which browser people accessed Goalkeeper from (Figure 5.5), which mobile operative systems people used (Figure 5.6), and peoples screen resolution (Figure 5.7). Notably, 124 users used Goalkeeper on desktop and 97 on mobile. The most popular browser the users used was Chrome followed up by Safari, with Apple's iOS dominating among the users when using Goalkeeper on mobile phones.

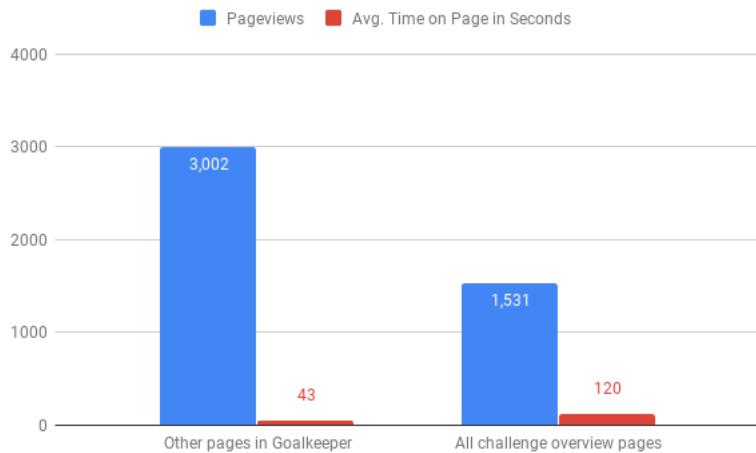


Figure 5.1: Views and average access time in seconds

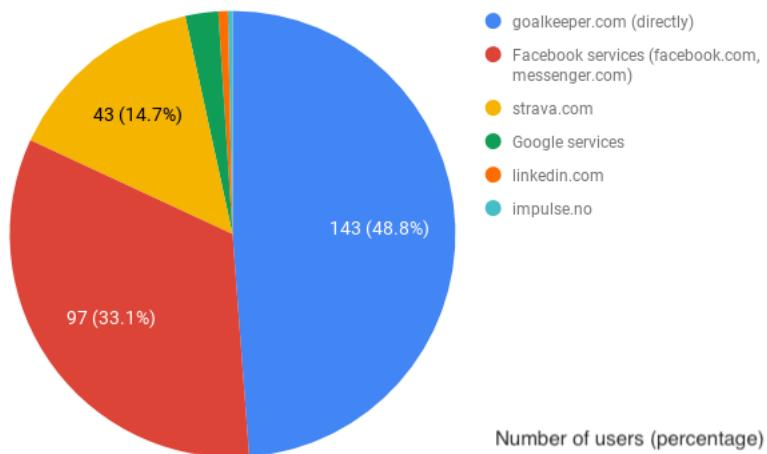


Figure 5.2: Acquisition

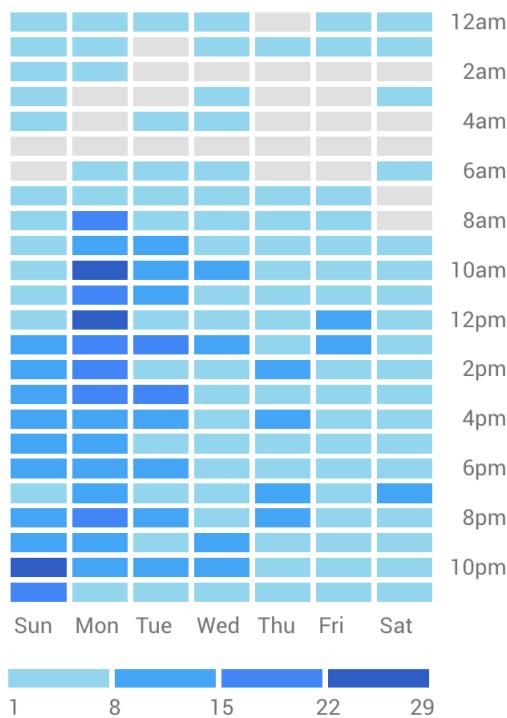


Figure 5.3: Users by time of day

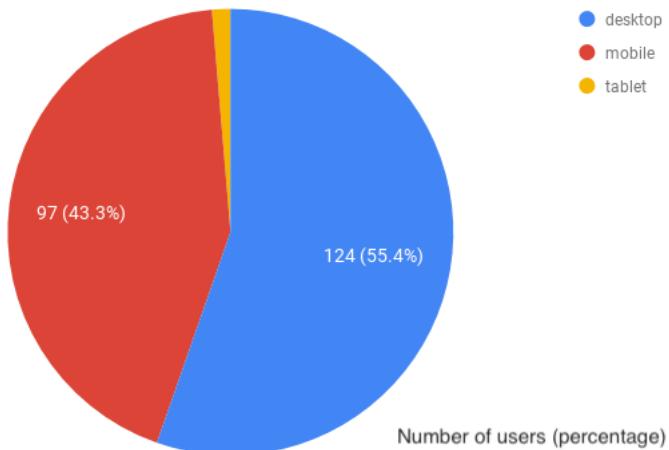


Figure 5.4: Device overview

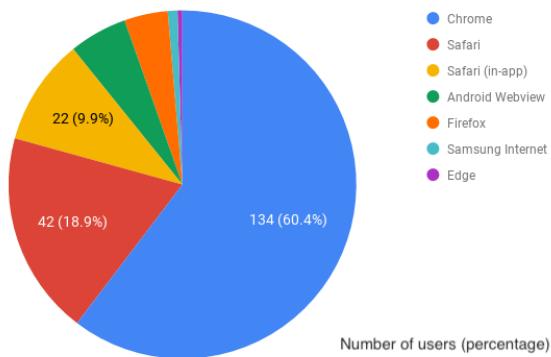


Figure 5.5: Browsers

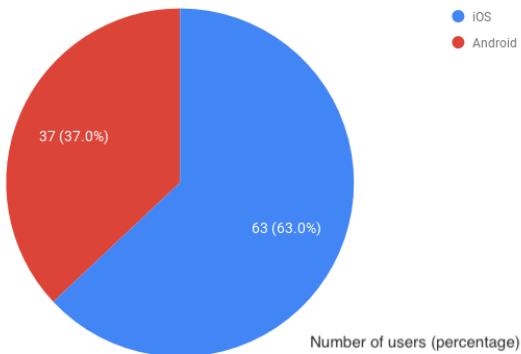


Figure 5.6: Mobile operative systems

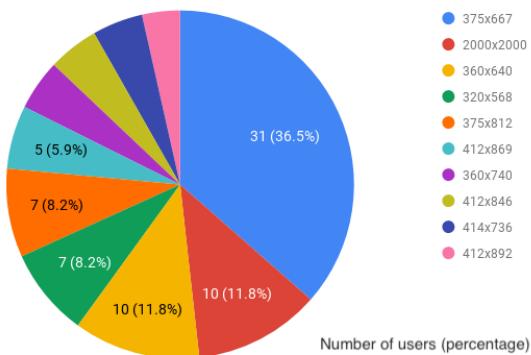


Figure 5.7: Screen resolutions

Discussion

The results from the experiment were presented in Chapter 5, whilst this chapter will review and discuss the findings. Moreover, the findings from this study will be compared to previous research by discussing similarities and differences. The research questions from Section 1.3 will be reflected upon together with the findings from the analysis and interviews.

6.1 Positively impact

This study's research goal was to "examine if deposit contract as a monetary incentive in a gamified exercise application impacts positively on user's motivation in regards to increasing physical activity in social groups.". From the study by Lesser et al. (2018), mentioned in Chapter 2, the findings were that the individuals lost weight by using deposit contracts through sticKK.com. However, none of the studies mentioned in Chapter 2 researched the impact of deposit contract in social groups. By contrast, this study ran the experiment only in social groups with the findings ultimately being similar to previous studies.

Before the challenges started, the average for motivation was the highest among the other four variables from the first questionnaire. After the challenges ended, the average for continuance intention for exercise was highest among the 15 variables from the second questionnaire. From this, it can be assumed that the users likely have a high continuance intention for exercise because of the high motivation before starting the challenge. However, people also had low continuance intention for using Goalkeeper. That may be because the users feel that they already received a workout routine after using it, or the Goalkeeper website is lacking some features for keeping the users to continue using it. Nonetheless, this researcher got oral requests from four testers that were interested in starting a new

Goalkeeper challenge after the experiment was done.

There was a significant correlation between positive emotions and word-of-mouth intentions. Based on this, the users had a good experience by using Goalkeeper for the duration of the weeks and exercised after its rules. Thus, they are likely to recommend Goalkeeper to others. However, the findings by McGill et al. (2018) states that he found low support of any financial incentive among Australian mid-older adults. This study then shows that people may support using deposit contracts as a way to increase the motivation to perform physical activity.

After the interviews, some of the findings were that Goalkeeper did not change the habits of the participants because of the short time-period of the challenges, both two-weeks and six-weeks, respectively. However, Goalkeeper did make the users more conscious of their physical activity routine. A quote taken from a person who failed a six-week challenge with 0 kr in deposit may highlight their greater physical activity routine, "I was more aware of how and when to perform my three workouts before I lost in week 3.".

6.2 Enhanced motivation with monetary incentive

This study has two research questions that were decomposed from the research goal. The first research question is, "how does a gamified exercise application increase the motivation to perform physical activity in social groups by using a deposit contract as a monetary incentive?". However, the findings from the first and second questionnaire got mixed results of how monetary incentive enhanced the motivation.

Participants with 150 kr or 500 kr had a significantly higher attitude, motivation, and value than a challenge consisting of 0 kr participants. That may be due to people gaining motivation when there is something to work for and who do not wish to lose their money to their friends. A quote from a participant that succeeded in a six-week challenge with 500 kr in deposit supports this, "I do not want my friends to get my money.".

Users that had two-week challenges had higher continuance intentions and recognition for using Goalkeeper after a challenge compared to participants in six-week challenges. That may be because the participants in two-week challenges are not bored with Goalkeeper and may want to create more challenges than participants in six-week challenges. The participants in six-week challenges may get bored or build a habit for physical activity resulting in the feeling that they do not require Goalkeeper anymore.

There is also a correlation between motivation and exercising together in the second questionnaire, which may show that exercising or the feeling of participating in a challenge as a group gives motivation. However, there was a significant difference between the groups in competition instinct and goals. This may tell us that this correlation does not apply universally to every participant.

The second research question for this study is, "how does monetary incentive influence the user's cognitive and affective domain for the gamified exercise application used?". The study by Lesser et al. (2018) discovered that the type of contract and size of deposit mattered little. This study's finding was that the people that had paid 500 kr experienced significantly higher system usability experience, positive emotions, subjective norms, word-of-mouth intention and motivation after a challenge compared to participants that had only deposited 150 kr. That may be due to people caring more about getting their money back if they pay more than they want to lose, and 500 kr is a significant amount of money for students in these cases.

Another interesting finding is that males had higher positive emotions and subjective norms after using Goalkeeper compared to females. A study by Wong, Zane, Saw, and Chan (2013) found out that more males have a gambling problem in America than females. From this, this researcher can assume that males are more likely to risk their money and have more willing to play with it than females.

6.3 Winners and losers

In Section 5.1, the results for descriptive statistics of winners and losers was presented. It was mentioned the high dropout ratio for non-deposit money groups. However, there was also some dropouts from money-groups, both 150 kr, and 500 kr. All of the reasons for these dropouts in money groups were sickness, forgetting to exercise, and forgetting to log the exercise on Strava and is expressed in the second questionnaire.

The individual that failed in the 500 kr group was sick during week number 3 and did not manage to exercise with fever. The same reason applied for those who failed in 150 kr groups, both two-week and six-week challenges. Most of them were willing to pay in a small amount to continue the challenge or have the opportunity to pause the challenge. Unfortunately, there was no opportunity to do this in the current prototype, which was a frustration for some users.

As seen in the results, all of the participants in the 0 kr groups in six-week challenges failed. That may be because they did not have the monetary incentive to continue to exercise, and through information collected from interviews, it was revealed that six weeks was a long period of time and they were not aware that they were out of the challenge. Thus, the participants did not have the pressure to continue exercise because they had nothing to lose. However, some of the participants in the 0 kr groups for two weeks managed to win the challenge. That may be because two weeks is a short period and is easier to complete than a period of six weeks.

6.4 Google Analytics data

According to the findings on Google Analytics, people access it mostly on Sundays and Mondays. That may be because that is the most typical time for people to check on others and check if the website has approved their logs for the new week of the challenges. If Goalkeeper did not approve the three exercise days by the start of the week, the participants were marked as losers. However, the observed results reveal that people most visit during lunchtime. A quote from a user "There is nothing to do on Goalkeeper than only to see an overview. We use Strava to log our workouts and not Goalkeeper". Based on this quote, it seems that people have no reason to visit Goalkeeper frequently or while they exercise because Strava is used "on the go".

All of the findings from Google Analytics can be used to improve Goalkeeper for a better user experience and purpose. It can also be analyzed to improve the design for different systems and resolutions that people use. The concept of Goalkeeper may also change to prevent it from being a "lunchtime app". It can also be observed that people most directly access Goalkeeper by URL and come to Goalkeeper from strava.com or Facebook. That can be explained by the fact that every group in the experiment got a direct challenge link on Facebook, and people use Strava to log their workouts. However, the participants also talk within the group about exercise before accessing Goalkeeper. In the end, the data may also utilize different sites for marketing Goalkeeper so that more people can access Goalkeeper easier.

6.5 Research critique

The process of this study had a time limitation and had to execute different phases in parallel. The reason for time limits was that this researcher joined Goalkeeper in November and resulted switching thesis late in the semester. The design, testing, experiment planning, literature review, and implementation phase had to go in parallel. If Goalkeeper had been the thesis from August 2018, this researcher believes that the planning of the experiment would have been better conducted, and the results may have been different.

Furthermore, the experiment for Goalkeeper was planned to start from January because people often have New Year's resolutions about increasing their physical activity. Thus, the prototype had to be rushed out during January so that the experiment could start. However, there was a very high risk for bugs in the prototype by doing that. There were some typos in the rules, and the text should have been proofread and revised before the publication of the prototype. Due to the unstable prototype, it could have affected the user-experience, but the bugs were fixed consecutively after they were discovered. Some of the bugs included people paying two times without knowing it, people forgetting how they made the Goalkeeper account and which email/password to use, problems with connecting to Strava from Goalkeeper, workout logs that did not come into Goalkeeper instantly, and workout logs that were not approved even though they had a duration above 30 minutes.

There was also a problem with several participants that they were marked as "lost" even though they had not lost, which was a frustration for these users.

Moreover, all of the challenges that were given to the testers were made by this researcher beforehand. Unfortunately, the users of Goalkeeper could not decide this by themselves because this researcher wanted consistent results with fixed deposit values, weeks and workout days. That resulted in people having different goals and values for physical activity in the same social group. However, if they got the option to make the challenge by themselves and agree within the group about the definition of physical activity, the outcome may have been different.

Another research critique was the method this researcher used for gathering testers, which was convenience sampling. 43 of 50 testers for the experiment were this researcher's friends at Informatics, which were gathered at the university. The last seven testers were gathered from a friend of this researcher, which included the friend's social group. Due to the time limitation and deadline to execute the experiment in January, this researcher had no time to collect testers outside this researcher's network and announce the need for testers through Facebook and posters. If the testers had been collected outside of this researcher's network, the results might have been different. Since this researcher had a personal relationship with 43 people, there may have been a risk the testers did not want to hurt this researcher's feelings about the study and were not completely honest during interviews and questionnaires. However, since this research was about physical activity, the answers from the questionnaires may not have been valid because the testers may want to appear good in this study about their active lifestyle even though they are not active. Another critique is that all of the testers were students, and money is a sensitive subject for this group. However, some of the students may have part-time jobs, but this was not asked about in the questionnaires. In other words, the results and sensitiveness of money may have been different if the testers had not been students and had been in a full-time job.

When it comes to the interviews and questionnaires, they could have been conducted to a higher standard. The variables and the questions in the questionnaires could have been more consistent, especially those few variables this researcher made up to fit the study. From the comments made by the testers, the second questionnaire could have been much shorter with fewer variables. Moreover, there was a risk that the testers misunderstood the questions because they were unclear or due to their language barrier in English. An example of an unclear question was "total exercise days in the week", which could be mistaken for average. Some of the questions in the interviews and questionnaires were not adapted for those who had 0 kr in deposit, and in hindsight, some of the questions during the interviews were potentially unhelpful. For example, the questions about the lowest and highest deposit money the users are willing to deposit in the first questionnaire are invalid because people already knew their challenge before answering the questionnaire. Thus, the users may have been colored by this and feel that the deposit they got handed out was the limit for the highest or lowest amount of deposit.

Conclusion

From Chapter 1, the goal of this research paper was to "examine if deposit contract as a monetary incentive in a gamified exercise application impacts positively on user's motivation in regards to increasing physical activity in social groups". The gamified exercise application in this study is called Goalkeeper, built by a start-up company under the same name, which realized the concept of using deposit contracts to provide motivation for performing physical activity within a gamified exercise web-application. This study helped Goalkeeper to evolve within different phases: a literature review, wireframing and design, development and implementation, testing, and performing the experiment. The literature review was useful to define Goalkeeper's goals and achieve inspiration on how to improve the application and the concept.

In order to answer the research goal and the two research questions in this study, an experiment with a total of 48 participants was conducted. The experiment separated the participants into small social groups (3 - 6 people) and created challenges with varying deposit amounts and duration for each of them. Both qualitative and quantitative data was collected through three questionnaires and 12 in-depth interviews. Three main conclusions have been made based on the results of this research. The first is that participants tend to have high motivation before the challenge. The second conclusion is that people have high continuance intention to exercise after a challenge. However, they have low continuance intention for using Goalkeeper in the future due to a lack of features or intention to build a routine to workout without Goalkeeper. The third conclusion is that deposit contract as a monetary incentive in a gamified exercise application gives the motivation to complete the challenge.

Furthermore, all of the results from this study shows that monetary incentive works for increasing peoples physical activity. However, a future study may be needed to see if Goalkeeper works when the users can make their challenges by themselves, and conve-

nience sampling is not used for collecting testers. The next section will give suggestions for the future work of the Goalkeeper application and further research design.

Future work

Since Goalkeeper is still in its infancy, and the field of how deposit contracts influence physical activity is still growing, it may result in a different direction to research for the future of Goalkeeper and its respective impacts. However, this research's results have already helped Goalkeeper to get 1 million kr from The Research Council of Norway. This section will give an insight into how future work may include researching Goalkeeper.

Regarding the research method for improving future studies, one would be to not hand out pre-made challenges to the testers. If this is manageable to do, a real outcome will come as a result as to how Goalkeeper influences the users. However, the testers should also not solely consist of students dominating from one study program. When it comes to questionnaires and interviews, other variables may be estimated and have better interview questions to conduct the interviews as soon as possible when the challenge is over. Moreover, research on whether the size of groups matter or the relationship between the participants may be useful for future studies and Goalkeeper. That may result in useful findings if it matters for the motivation as to whether the participants know each other or not. It may also be useful to gather persons with similar goals and the same workout perception so as to have a more extended period of challenges.

The prototype is lacking in some features, and the research results may have been different if all of these were in place. The leaderboard has to be sorted after the number of workouts, and if people are out of the challenge. Moreover, the user experience may have increased if there was a withdrawal function and buy-in function when people were sick. The rules for the challenges should have been more precise, and a feature for self-defining physical activity for each group may result in a better common understanding in the group. It is possible that more gamification elements could have been used within Goalkeeper, such as badges and in-app rewards, whilst research for opportunities for automatic back-payment after a challenge may have been conducted. However, the most significant element that Goalkeeper lacked was not the concept itself, but why the users should visit the website.

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A E-mail

Svar på spørsmål om lotteri - CONIC DATA AS - Goalkeeper

Margrete Joleik Jonstad til meg 10:32
Lotteritilsynet viser til e-posten din datert 27. august 2018. Du utviklar ei motivasjonstjeneste som du lurer på om er eit lotteri etter lotterilova.

I lotterilova § 1 fyrste ledd bokstav a vert lotteri definert slik:

«*Lotteri: virksomhet der deltakerne mot innskudd kan erverve gevinst som følge av trekning, gjetting eller annen fremgangsmåte som helt eller delvis gir et tilfeldig utfall.*»

Det er altså tre vilkår som må vere innfridde for at ein konkurranser er eit lotteri etter lotterilova. For det første må ein betale for å vere med. For det andro må ein kunne vinne pengar eller noko anna av økonomisk verdi. For det tredje må uttalet av konkurransen vere helt eller delvis tilfeldig. Dersom konkurransen gjev lik motstand til alle deltakarar vil det ikkje vere tilfeldig kven som vinn. Når uttalet av ein konkurranser ikkje er tilfeldig vil ikkje konkurransen vere eit lotteri.

Du kan lese meir om lotteriomgrepet her: <https://lottstift.no/wp-content/uploads/2015/03/Et-konkurransen-er-lotteri-2012-pdf.pdf>

Ta gjerne kontakt igjen dersom noko er ukjart eller du har fleire spørsmål.

Med helsing

Margrete Joleik Jonstad

Førstekonsulent



Lotteri- og
stiftelsestilsynet

Tlf: 57 82 80 60

Mobil: 99284348

E-post: mjog@lotteritilsynet.no

www.lottstift.no

Følg oss:

Fra: Lars Erik Andreassen <lars@conicdata.com>

Sendt: mandag 27. august 2018 13:37

Til: Postmottak <postmottak@lottstift.no>

Kop: Johnny Indrekvam Gustavsen <jig@lotteritilsynet.no>

Emne: Ønskje om vurdering frå Lotteri- og stiftelsestilsynet

Til dei det måtte angå.

NB: Då eposten inneholder forretningsmessige løyndommer ønskjer eg at den blir hald unntatt offentligheten.

Eg sender eposten etter samtale med Jonny Gustavsen den 27. august.

Conic Data AS utvikler fortida Goalkeeper, ei motivasjonstjeneste som har som mål å gi folk kortsiktig motivasjon til å nå sine langstidige treningsmål. I den forbindelse ønsker vi ei vurdering frå lotteritilsynet på korleis forretningsideen står i møte med det norske regelverket.

Kort fortalt er Goalkeeper ei teneste som fasiliterer for at begrensa vennegjengar kan setje seg felles treningsmål, for så å forplikte seg til å gjennomføre treningsmål ved å alle sette ein sum på at dei skal klare det. Dei som ikkje når målet dei sjøl har vore med på å sette, mistar pengane sine, mens dei som klarer å gjennomføre målet deler summen.

Målet med tenesta er ikkje å gamble, men å motivere folk til å komme seg opp av sofaen og inn i joggesko. Etter å ha testa konseptet i fleire månader med eigne vennar, er erfaringa at gevinsten i seg sjøl sjeldan blir særlig stor, då det -for nokon, fungerer som ein fantastisk motivasjon å investere pengar i å nå måla sine. Ein anna viktig aspekt ved tenesta er at det ikkje er eit sjansespel.

Deltakarane er sjøl med på å definere sine eigne ambisjonar, og kan alltid vinne, kun ved å trenre oktene dei har forplikta seg til.

Pengane sin eksemplar er med andre ord å gjøre det mogleg for folk å forplikta seg til å nå eigne mål.

Eit konkret eksempel:

Kari, Oda, Birgit og Rolf bestemmer seg for å trenre tre gongar i veka i ein måned. For å gi seg sjølv eit extra spark bak, set del 200kr kvar på at dei skal klare nå målet.

Dei sett opp utfordringa i Goalkeeper-appen og vippser over 200kr kvar til Goalkeeper sin vippss-konto.

Kvar gong dei trener henter Goalkeeper automatisk inn data frå smartklokka til Kari og logger treningsøkta slik at alle fire kan sjå kvarandres treningsøkter.

Både Kari, Oda, Birgit og Rolf klarer å trenre tre gongar i veka dei tre første vekene, men den siste veka skal Birgit på ferie til svigerforeldrene sine, og då ho har ei treningsøkt igjen på sondag kveld, så gikkjer ho rett og slett ikkje gjennomføre. Difor ryker Birgit ut av utfordringa.

Derved får Kari, Oda og Rolf utbetal 233,3 kroner kvar. Mens Birgit mister pengane ho satt på at ho klarte å trenre.

Korleis skal Goalkeeper tene pengar?

Ein mogleg forretningsmodell for at dette skal vere berekraftig å drive som teneste, er at Goalkeeper tek betalt for å fasilitere utfordringane. Anten ved å ta ein prosentandel av potten for pengane blir utbetal til dei som klarer treningsmålet, eller ved å ta betalt for å gi folk tilgang til å bruke appen, ein kan og sjå føre seg utfordringar som er sponsa av organisasjonar som er interessert i å fremme fysisk aktivitet.

Dette er ikkje endå avklart då konseptet framleis er i ei tidlig fase, ei opplasting rundt eventuelle begrensinger i regelverket kan vil vere med på å forme forretningsmodellen.

Conic Data er i prosessen med å søke stønad frå Innovasjon Norge til marknadsavklaring med Norge som marknad, og vi ønskjer difor ei vurdering frå lotteritilsynet rundt lovligheita av konseptet.

Ikkje nøy med å ta kontakt om dykk treng meir informasjon.

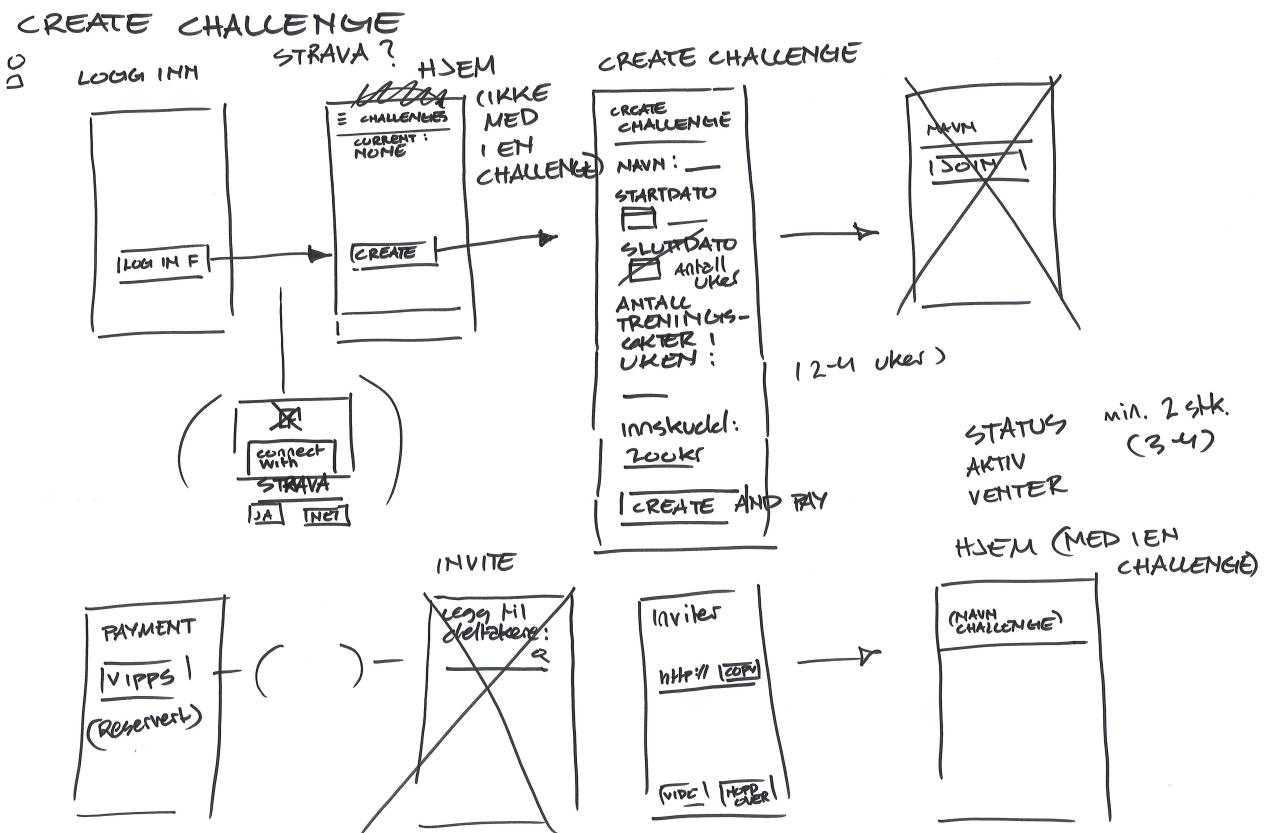
Beste helsing
Lars Erik Haukedal Andreassen
Grunnleggar av Conic Data AS
Masterstudent ved NTNUs Entreprenørskole
+47 9308 9738
lars@conicdata.com

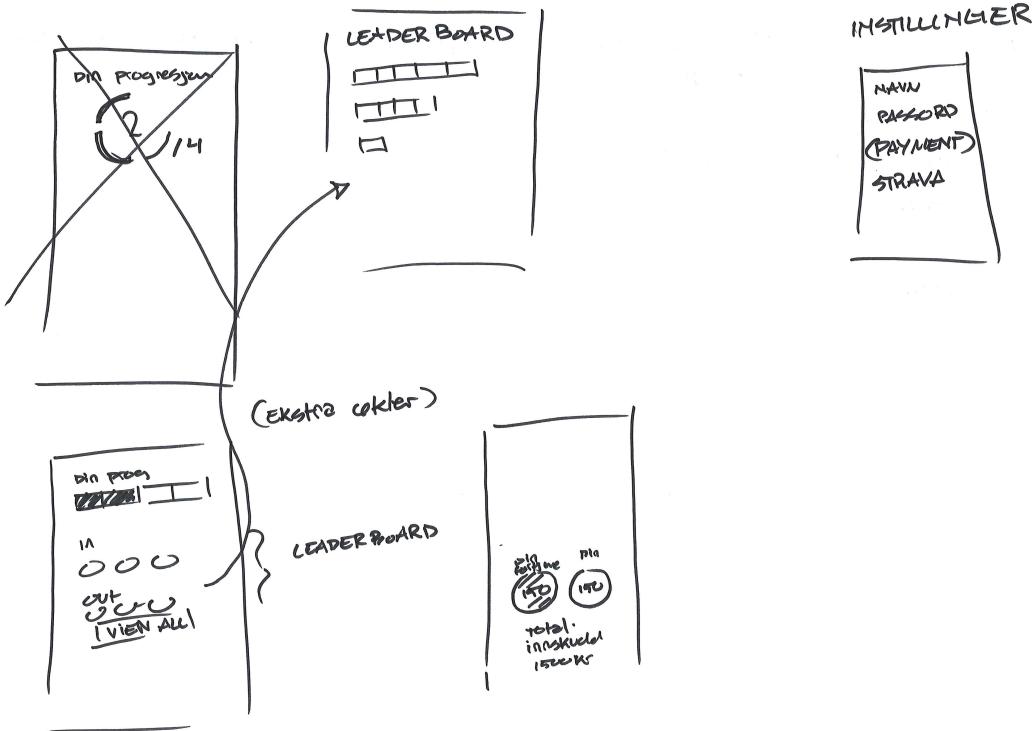
BIBLIOGRAPHY

B Use-cases

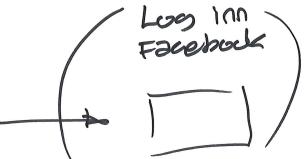
Use Case	Goal	Actors	Vision	
UC-1	Access web page	Participant	As a participant, i want to click an invite link i have received at an event or from a friend, and be directed to a page where i can join a specific challenge. When i have reached the page, i want to log in, or create a profile.	EX1.1 The user is in a challenge that overlaps the one she is invited to. EX 1.2 It is not possible to sign up because the challenge has already begun, or is finished.
UC-2	Create a profile	Participant	As a participant, i want to create a profile so that i can join a challenge. I want to log in through facebook and pull information from there to set up my profile. After i am done, i want to be directed to the page where i can get ready to join the specific challenge. (UC-4)	EX2.1 User already has profile
UC-3	Log in	Participant	As a participant, i want to access my created profile by pressing the "log in with facebook" button. When i have done this, i want to be forwarded to the page where i can get ready to join the challenge. (UC-4)	
UC-4	Join a challenge - connect with strava	Participant	As a participant that has logged in, i want to join a challenge by connecting to Strava. I will be directed to a page where strava asks me to share my strava information. When i choose to share my strava-information, i want to be directed back to the "join the challenge"-page and see that i am connected to Strava	EX4.1 User has already connected with strava EX4.2 User does not give goalkeeper access to retrieve strava data.
UC-5	Join a challenge - Pay	Participant	As a participant that has signed in with strava and created a profile, i want to pay the get-in price to join challenge. I want Goalkeeper to let me choose a convenient payment method, and as easy as possible, pay the fee so that i can be forwarded to the challenge waiting room.	EX5.1 User do not want to pay unless she has read the rules
UC-6	Acess challenge lobby	Participant	As a participant, when i have successfully fulfilled UC-2/UC-3, UC-4 and UC-5, i want to be forwarded to a challenge lobby where i can see who has joined, what the details of the challenge are and a countdown to when it starts.	
UC-6.1	Invite other friends	Participant	As a participant, i want to be able to find an invite link in the Challenge lobby so that i can invite my friends to join the challenge.	
UC-7	get notifications on important activity	Participant	As a participant, i want to receive notifications on important activity like: Challenge start, challenge end, someone is out. I am about to fail, i am doing very well. I want to receive this information in my daily loop, so either through facebook messenger, notifications on my home screen on the phone or through email (not preferred)	
UC-8	Challenge dashboard - compare	Participant	As a participant i want to see my progress when the challenge starts, i want it to be easy and visual to understand how i am doing compared to the other contestants.	
UC-9	Challenge dashboard - activity overview	Participant	As a participant, i want to see what challenges other contestants have logged, and i want to comment and like on their activity.	
UC-10	Challenge dashboard - report suspicious activity	Participant	As a participant, i want to be able to report suspicious activity by other contestants anonymously, so that i can continue to trust the service.	
UC-11	Submit activity to Goalkeeper	Participant	As a participant, i want to be able to submit activity to the challenge, i will do that by submitting the activity to Strava, and goalkeeper will pull the data from there.	
UC-12	See the prize grow!	Participant	As a participant i want to see my share of the price money grow if other contestants go out.	
UC-13				
UC-13	Pay out the price	Participant, initiator	As a participant, i want Goalkeeper to pay me my price if i win. I want Goalkeeper to do all the work, and the money to automatically pop up in my bank account. When this is done, i want to get a receipt that the money has been sent, and i want to be able to share the receipt on social media.	
UC-13	Recieve Transaction confirmation	Participant, initiator	As a Participant, i want goalkeeper to send me a transaction confirmation whenever a transaction occurs between Goalkeeper, the payment solution and me. When this is done, i want to be able to share the details of the transaction on social media.	
EX-1.1	Prompt user to create STRAVA profile	Participant, initiator		
EX-1.2	Login Unsuccesful			

C Sketches from paper ideation





INVITED TO CHALLENGE



Log in
Facebook

STRAVA

PAYMENT



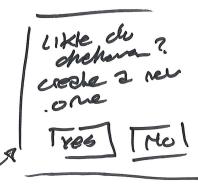
CHALLENGE



COMPLETED CHALLENGE



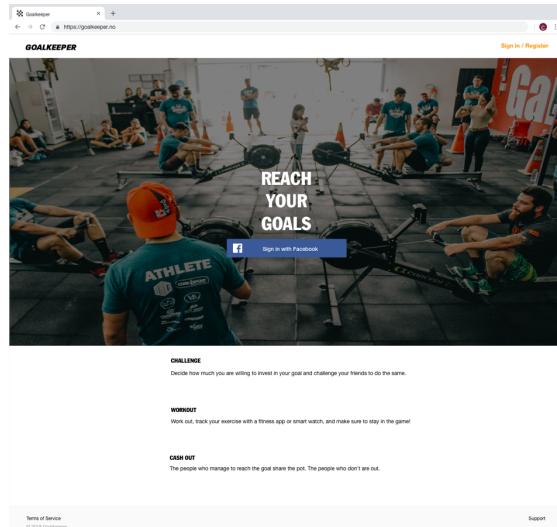
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TAPERE
○○○



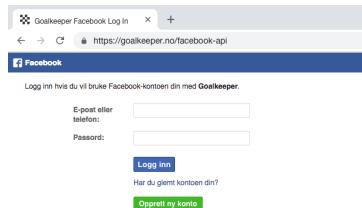
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BIBLIOGRAPHY

D Website mockups

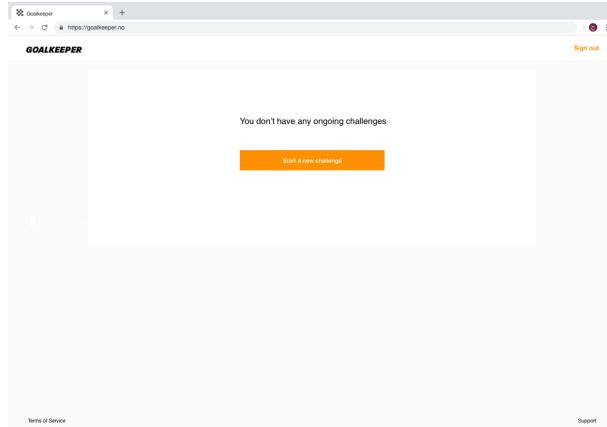


1. Landing page

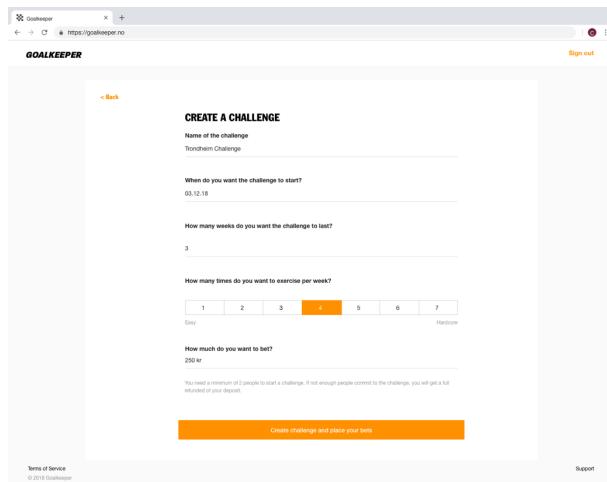


2. Facebook login

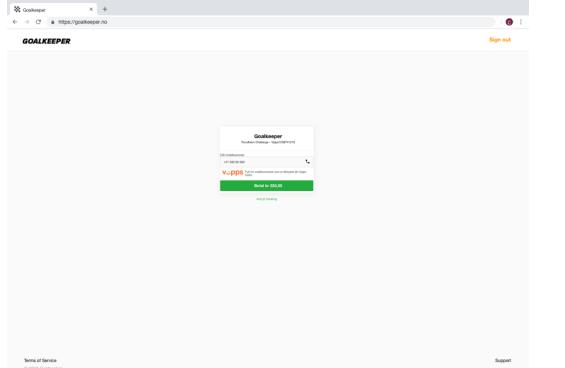
BIBLIOGRAPHY



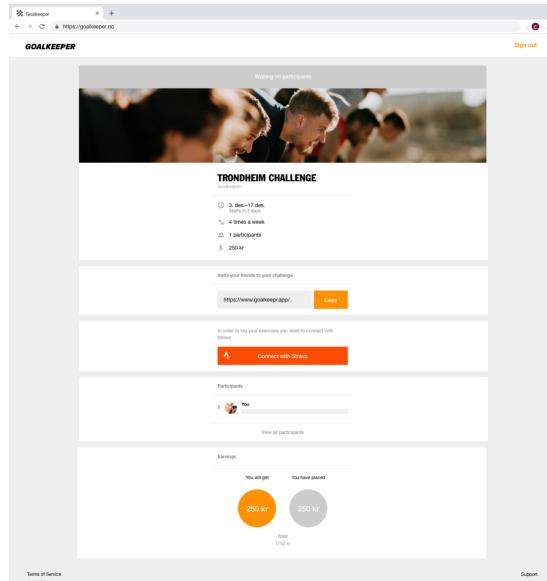
3. Home without a challenge



4. Create a challenge

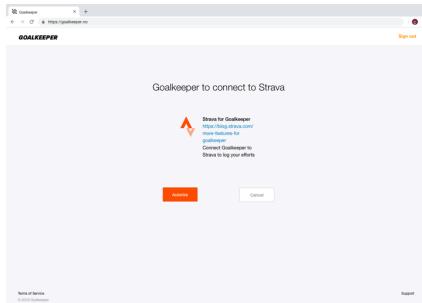


5. Vipps payment for challenge

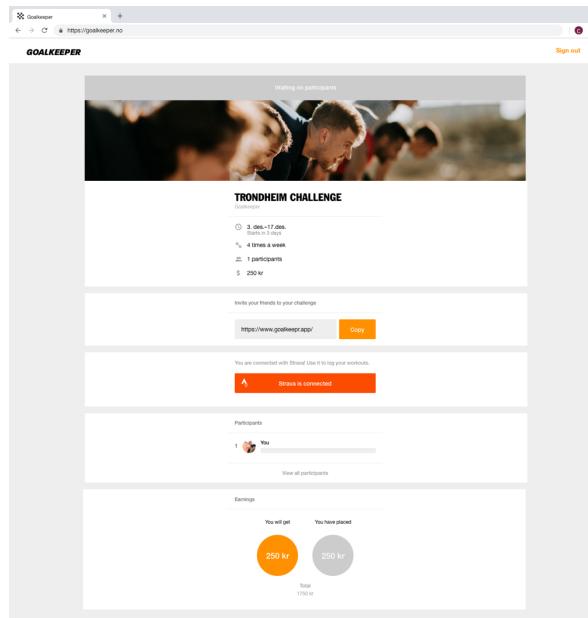


6. Home with an existing challenge

BIBLIOGRAPHY



7. Authorize Strava



8. Challenge waiting for more participants

E User-test cases

The first and second iteration

Task 1

You wanted another form for motivation to exercise. After some research in the mobile-phone browser, you entered [goalkeeper.no](#). You arrive the landing page and wants to check out what this is. You are curious of the concept and wants to make a new user to try this out.

Task 2

After you have created a user, you come into the user-page. You notice you are not a part of any challenges. What do you do?

Task 3

The challenge is made, but you notice that you need friends to start the challenge.

Task 4

You are still signed in and have explored [goalkeeper.no](#) enough. You feel that you are done using [goalkeeper](#) for now.

Task 5

You have gotten an invite-link from your friend Henrik on Facebook Messenger to join a Goalkeeper challenge. You click on the link and observe the invite.

Task 6

After observing the challenge, you decide to join the challenge.

The second iteration only

Task 7

Cancel the challenge

BIBLIOGRAPHY

F The first questionnaire

23/05/2019

Questionnaire 1

Questionnaire 1

* Required

Demographics

1. Gender *

Mark only one oval.

- Male
- Female
- Other

2. Age *

Mark only one oval.

- Less than 20
- 20-24
- 25-29
- 30-34
- 35-39
- 40-44
- 45-49
- 50 or more

3. Position *

Mark only one oval.

- Student
- Non-student

4. I have done at least one sport in my life actively *

Actively played football, basketball, dancing, swimming etc...

Mark only one oval.

- Yes
- No

5. I think I am competitive *

Competitive in competitions, betting, workout (want the best time or weight) etc...

Mark only one oval.

1 2 3 4 5 6 7

Strongly disagree Strongly agree

23/05/2019

Questionnaire 1

6. I am familiar with Goalkeeper before this study *

Mark only one oval.

- Yes
 No

7. Type of challenge I am going to do in this study *

Mark only one oval.

- 2 weeks, 0 kroner
 2 weeks, 150 kroner
 2 weeks, 500 kroner
 6 weeks, 0 kroner
 6 weeks, 150 kroner
 6 weeks, 500 kroner

8. How many times (not days) do you exercise per week in total? *

Mark only one oval.

- I do not workout
 1-4
 5-9
 10-14
 15 or more

9. How many hours do you exercise per week in total? *

Mark only one oval.

- I do not workout
 1-4
 5-9
 10-14
 15 or more

10. I track my exercises *

Mark only one oval.

- Yes Skip to question 11.
 No Skip to question 12.
 Sometimes Skip to question 11.

11. I feel tracking my exercise is motivating to continue exercising. *

Mark only one oval.

1 2 3 4 5 6 7

Strongly disagree Strongly agree

Attitude

BIBLIOGRAPHY

23/05/2019

Questionnaire 1

12. Please indicate how much you agree or disagree with the following statements regarding your attitude to use Goalkeeper.*

Mark only one oval per row.

	1 - Strongly disagree	2	3	4	5	6	7 - Strongly agree
I find joining a Goalkeeper challenge is a wise thing to do	<input type="radio"/>						
I find joining a Goalkeeper challenge is a good idea	<input type="radio"/>						
I find joining a Goalkeeper challenge is a positive thing	<input type="radio"/>						
I find joining a Goalkeeper challenge is favourable	<input type="radio"/>						

Motivation

13. Please indicate how much you agree or disagree with the following statements regarding your motivation to participate in a Goalkeeper challenge.*

Mark only one oval per row.

	1 - Strongly disagree	2	3	4	5	6	7 - Strongly agree
I am motivated to complete this challenge.	<input type="radio"/>						
Competing against my friends gives me motivation to complete this challenge.	<input type="radio"/>						
Money gives me motivation to complete this challenge.	<input type="radio"/>						
I feel motivated to complete this challenge because I want to increase my exercise habits.	<input type="radio"/>						

Habits

14. Please indicate how much you agree or disagree with the following statements regarding your exercise habits.*

Mark only one oval per row.

	1 - Strongly disagree	2	3	4	5	6	7 - Strongly agree
I workout regularly every week.	<input type="radio"/>						
I think my current activity level is high.	<input type="radio"/>						
I am satisfied with my current activity level.	<input type="radio"/>						
I want to change my exercise habits.	<input type="radio"/>						

Value

Please indicate how much you agree or disagree with the following statements regarding your opinion on value for money in the context of betting.

23/05/2019

Questionnaire I

15. 4. Please indicate how much you agree or disagree with the following statements regarding your opinion on value for money in the context of betting.*

Mark only one oval per row.

	1 - Strongly disagree	2	3	4	5	6	7 - Strongly agree
I think it is fine to lose my money to my friends in a bet.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think it is fine to lose my money to strangers in a bet.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to bet with money.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The thought of reward is exiting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. 5. The LOWEST amount of money I am willing to deposit in a Goalkeeper challenge with friends is: *

Mark only one oval.

- 100 - 200 kroner
- 200 - 300 kroner
- 300 - 400 kroner
- 400 - 500 kroner
- Above 500 kroner

17. 6. The HIGHEST amount of money I am willing to deposit in a Goalkeeper challenge with friends is: *

Mark only one oval.

- 100 - 200 kroner
- 200 - 300 kroner
- 300 - 400 kroner
- 400 - 500 kroner
- Above 500 kroner

18. 7. I have previously joined a bet without money. *

Mark only one oval.

- Yes
- No

19. 8. I have previously joined a bet with money. (Lotto, V75 etc...) *

Mark only one oval.

- Yes
- No

BIBLIOGRAPHY

G The second questionnaire

23/05/2019

Questionnaire 2

Questionnaire 2

* Required

Demographics

1. Gender *

Mark only one oval.

- Male
- Female
- Other

2. Age *

Mark only one oval.

- Less than 20
- 20-24
- 25-29
- 30-34
- 35-39
- 40-44
- 45-49
- 50 or more

3. During the challenge, which device did you use to access Goalkeeper? *

Mark only one oval.

- Computer
- Mobile
- Both

4. Which devices or other application should Goalkeeper support? *

Check all that apply.

- Fitbit
- Apple Watch
- Google Fit
- Strava is enough
- Other: _____

5. Did you workout regularly before this challenge? *

Mark only one oval.

- Yes
- No

23/05/2019

Questionnaire 2

6. How many times (not days) did you exercise per week in total during the challenge? *

Mark only one oval.

- I did not workout
- 1-4
- 5-9
- 10-14
- 15 or more

7. How many hours did you exercise per week in total during the challenge? *

Mark only one oval.

- I did not workout
- 1-4
- 5-9
- 10-14
- 15 or more

8. I think participating in a Goalkeeper challenge is stressful. *

The whole experience with not losing money, exercise at least 3 days in a week, log on Strava etc...

Mark only one oval.

1	2	3	4	5	6	7	
Strongly disagree	<input type="radio"/>	Strongly agree					

9. I felt the money gave me motivation to not fail *

Mark only one oval.

1	2	3	4	5	6	7	
Strongly disagree	<input type="radio"/>	Strongly agree					

10. Did you win the challenge? *

Mark only one oval.

- Yes Skip to question 12.
- No Skip to question 11.

11. Why? *

Check all that apply.

- I forgot to log an exercise on Strava
- I was sick
- I lost my motivation
- I did not workout
- Other: _____

System usability

BIBLIOGRAPHY

23/05/2019

Questionnaire 2

12. 1. Please indicate how much you agree or disagree with the following statements regarding your usage of Goalkeeper.*

Note: The interface includes those items that you use to interact with the system, such as the keyboard, mouse, screens, graphics and language.
Mark only one oval per row.

	1 - Strongly disagree	2	3	4	5	6	7 - Strongly agree
Goalkeeper has all the functions and capabilities I expect it to have	<input type="radio"/>						
Overall, I am satisfied with Goalkeeper	<input type="radio"/>						
Overall, I am satisfied with how easy it is to use Goalkeeper	<input type="radio"/>						
The interface of Goalkeeper was pleasant.	<input type="radio"/>						

Continuance intentions for using Goalkeeper

13. 2. Please indicate how much you agree or disagree with the following statements regarding your continuance intentions for using Goalkeeper.*

Mark only one oval per row.

	1 - Strongly disagree	2	3	4	5	6	7 - Strongly agree
I predict that I will keep using Goalkeeper in the future at least as much as I have used it lately	<input type="radio"/>						
I intend to use Goalkeeper at least as often within the next three months as I have previously used	<input type="radio"/>						
I predict that I will use Goalkeeper more frequently rather than less frequently	<input type="radio"/>						
It is likely that I will use Goalkeeper more often rather than less often during the next couple months	<input type="radio"/>						

Continuance intentions for exercise

23/05/2019

Questionnaire 2

14. 3. Please indicate how much you agree or disagree with the following statements regarding your continuance intentions for exercise *

Mark only one oval per row.

	1 - Strongly disagree	2	3	4	5	6	7 - Strongly agree
I plan to increase the amount of exercise rather than to decrease it	<input type="radio"/>						
I predict that I will exercise more frequently within the next three months	<input type="radio"/>						
I think I will keep exercising in the near future at least as much as I have during the last few months	<input type="radio"/>						
I want to continue exercise regularly after this challenge	<input type="radio"/>						

Network exposure

15. 4. Please indicate how much you agree or disagree with the following statements regarding your opinion on network exposure *

Mark only one oval per row.

	1 - Strongly disagree	2	3	4	5	6	7 - Strongly agree
I have many friends on Goalkeeper	<input type="radio"/>						
I want more friends to join the challenge to increase the pot	<input type="radio"/>						
I gets motivated if I notice a participant in a challenge workout more than me.	<input type="radio"/>						
I gets motivated if I notice a participant in a challenge workout less than me.	<input type="radio"/>						

Positive emotions

16. 5. Please indicate how much you agree or disagree with the following statements regarding your positive emotions after using Goalkeeper *

Mark only one oval per row.

	1 - Strongly disagree	2	3	4	5	6	7 - Strongly agree
I feel happy after using Goalkeeper.	<input type="radio"/>						
I have a warm feeling after using Goalkeeper.	<input type="radio"/>						
I am being valued after using Goalkeeper.	<input type="radio"/>						

Negative emotions

BIBLIOGRAPHY

23/05/2019

Questionnaire 2

**17. 6. Please indicate how much you agree or disagree with the following statements
regarding your negative emotions after using Goalkeeper ***

Mark only one oval per row.

	1 - Strongly disagree	2	3	4	5	6	7 - Strongly agree
I feel angry after using Goalkeeper.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am in a bad mood after using Goalkeeper.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel upset after using Goalkeeper.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Exercising together

NOTE: Friends in general.

**18. 7. Please indicate how much you agree or disagree with the following statements
regarding exercising together ***

Mark only one oval per row.

	1 - Strongly disagree	2	3	4	5	6	7 - Strongly agree
My friends exercised with me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My friends offered to exercise with me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My friends gave me helpful reminders to exercise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My friends gave me encouragement to stick with my exercise program.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My friends changed their schedule so we could exercise together.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Reciprocal benefits

**19. 8. Please indicate how much you agree or disagree with the following statements
regarding your opinion on reciprocal benefits ***

Mark only one oval per row.

	1 - Strongly disagree	2	3	4	5	6	7 - Strongly agree
I find that participating in a Goalkeeper challenge can be mutually helpful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find my participation in a Goalkeeper challenge can be advantageous to me and other people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that participating in a Goalkeeper challenge improves my motivation to exercise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A Goalkeeper challenge encourages me to exercise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Recognition

23/05/2019

Questionnaire 2

20. 9. Please indicate how much you agree or disagree with the following statements regarding your opinion on recognition *

Mark only one oval per row.

	1 - Strongly disagree	2	3	4	5	6	7 - Strongly agree
I feel good when my achievements in Goalkeeper are noticed	<input type="radio"/>						
I like it when other Goalkeeper users ask me about my exercise	<input type="radio"/>						
I like it when my Goalkeeper peers notice my exercise reports	<input type="radio"/>						
It feels good to notice that another user has browsed the leaderboard on Goalkeeper	<input type="radio"/>						

Subjective norms

21. 10. Please indicate how much you agree or disagree with the following statements regarding your opinion on subjective norms *

Mark only one oval per row.

	1 - Strongly disagree	2	3	4	5	6	7 - Strongly agree
People who influence my attitudes would recommend Goalkeeper	<input type="radio"/>						
People who are important to me would think positively of me using Goalkeeper	<input type="radio"/>						
People who I appreciate would encourage me to use Goalkeeper	<input type="radio"/>						
My friends would think using Goalkeeper is a good idea	<input type="radio"/>						

Word-of-mouth intentions

22. 11. Please indicate how much you agree or disagree with the following statements regarding your opinion on word-of-mouth intentions *

Mark only one oval per row.

	1 - Strongly disagree	2	3	4	5	6	7 - Strongly agree
I would recommend Goalkeeper to my friends	<input type="radio"/>						
I will recommend Goalkeeper to anyone who seeks my advice	<input type="radio"/>						
I will refer my acquaintances to Goalkeeper	<input type="radio"/>						
I will say positive things about Goalkeeper to other people	<input type="radio"/>						

Habits

BIBLIOGRAPHY

23/05/2019

Questionnaire 2

Please indicate how much you agree or disagree with the following statements regarding your habits.

23. 12. Consider, after completing a challenge I feel exercising is something: *

Mark only one oval per row.

	1 - Strongly disagree	2	3	4	5	6	7 - Strongly agree
I do frequently.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do automatically.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do without having to consciously remember. that makes me feel weird if I do not do it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do without thinking. that would require effort not to do it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
that belongs to my (daily, weekly, monthly) routine.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I start doing before I realize I'm doing it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would find hard not to do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have no need to think about doing. that's typically "me."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have been doing for a long time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Behavioral intention

**24. 13. Please indicate how much you agree or disagree with the following statements
regarding your opinion on behavioral intention ***

Mark only one oval per row.

	1 - Strongly disagree	2	3	4	5	6	7 - Strongly agree
I intend to exercise x times per week during the coming month	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will try to exercise x times per week during the coming month	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am motivated to exercise x times per week during the coming month.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Perceived behavioral control

23/05/2019

Questionnaire 2

25. 14. Please indicate how much you agree or disagree with the following statements about perceived behavioral control *

Mark only one oval per row.

	1 - Strongly disagree	2	3	4	5	6	7 - Strongly agree
It is difficult to execute the exercise activities that I planned	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is easy for me to exercise x times per week during the coming month	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am sure I will be able to exercise x times per week during the coming month.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Motivation

26. 15. Please indicate how much you agree or disagree with the following statements about motivation *

Mark only one oval per row.

	1 - Strongly disagree	2	3	4	5	6	7 - Strongly agree
I felt the money gave me motivation to not fail	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am motivated to continue exercise after the challenge.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt the challenge gave me motivation to exercise.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

27. Other comments to Goalkeeper

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BIBLIOGRAPHY

H The third questionnaire

23/05/2019

Questionnaire 3

Questionnaire 3

* Required

Demographics

1. Gender *

Mark only one oval.

- Male
- Female
- Other

2. Age *

Mark only one oval.

- Less than 20
- 20-24
- 25-29
- 30-34
- 35-39
- 40-44
- 45-49
- 50 or more

3. Did you exercise regularly before the challenge? *

Mark only one oval.

- Yes
- No

4. Have you exercised at least once since the challenge ended? (Between 4th February and 17th February) *

Mark only one oval.

- Yes Skip to question 5.
- No Stop filling out this form.

5. How many times (not days) did you exercise in total between 4th February and 17th February? *

Mark only one oval.

- 1-4
- 5-9
- 10-14
- 15 or more

23/05/2019

Questionnaire 3

6. How many hours did you exercise in total between 4th February and 17th February? *

Mark only one oval.

- 1-4
 - 5-9
 - 10-14
 - 15 or more
-

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I Interview agenda

Hvilke forventninger hadde du før challenge?

Hvordan følte du at det gikk under challengen?

Hvordan følte du deg etter utfordringen?

Hvordan følte du at det ikke var noe å vedde om?

Hvordan følte du det med å vedde med penger mot dine venner i sammenhengen med trening?

På hvilken måte har Goalkeeper endret treningsvanene dine?

Hva er svakhetene og styrkene med Goalkeeper?

- Challenges
- Nettsiden

Hva trente du under perioden? Og prøvde du noe nytt?

Hva synes du om kombinasjonen (uke, depositum og treningsdager) av utfordringen du har?

Trente du sammen med de du konkurrere med?

Hvordan var det å bruke Strava?

Hvordan tror du andre kan dra nytte av Goalkeeper?

Hvor mye ville du ratet Goalkeeper (helhet) fra 1-7?

Hva tenker du om at Goalkeeper gir rabatter til brukerne?

Siste kommentarer?

J Interviews with participants from the two-week challenges

0 kr, 2 weeks, loser

- C Sånn, ja, så du hadde 0 kr og 2 uker challenge.
A Ja, det stemmer
C Der du tapte
A Ja
C Hvorfor tapte du?
A Fordi jeg ikke trente ofte nok, og tror også at jeg trente en gang jeg ikke førte opp, men det var mest dårlig innsats fra egen side
C Skjønner, så da du fikk challengen, hvilke forventninger hadde du før den startet?
A Jeg hadde forventningen med å slå en annen på gruppen i hvert fall
C Ja, er han, hvordan er han i forhold til deg?
A Han trener hver dag i ukken cirka? Det gjør ikke jeg, jeg trener når jeg får lyst og det er vel det
C Ja, og han tapte jo også?
A Ja, han tapte og og impornerte stort.
C Var heller han tredje personen som vant
A Haha, den så jeg ikke komme
C Greit, så du håpet på å kunne slå han første i hvert fall
A Ja
C Hvordan var det nivå messig i gruppen?
A Jeg tror det var jevnt nivå når det var kun snakk om 3 treningsøkter. Det kunne jo hvem som helst klart hvis de hadde gått litt mer inn for det.
C Mhm
A Det gjorde uheldigvis ikke jeg, så da tapte jeg.
C Skjønner, hvordan følte du at det gikk under challengen?
A Det gikk greit. Hadde ganske mye å gjøre de to ukene så nedprioriterte jeg dessverre trening.
C Ja
A Noe som også ble gjenspeilet i resultatene
C Mhm, eeh, ja, hvordan følte du deg etter utfordringen?
A Jeg følte meg cirka like lik som før utfordringen.
C Så ingenting forandret seg eller noe?
A Jeg så ikke noe enormt trenings boost dessverre. Det var nok litt for kort intervall, og for label stakes.
C Ja, skjønner. Jaa.. Hvordan følte du at det var ingenting å vedde om?
A Det gjorde at det ikke var så enormt, ga et enormt boost med å klare challengen fordi det var ikke så mye som stod på spill
C Så du trodd at, eller hvis du hadde veddet om penger så hadde du trodd at det hadde vært mer motivasjon?
A Hvis det hadde vært stort nok sum, så hadde jeg nok fått mine tre økter i ukken
C Ja
A Men da måtte det ha vært hakket høyere enn kr 0
C Ja, du har allerede sagt det, men kan spørre deg igjen. Hvordan har goalkeeper endret treningsvanene dine?

BIBLIOGRAPHY

- A De har ikke blitt endret egentlig. Jeg har prøvd å trenere litt mer og fått noen resultater, men jeg har som regel holdt på som før.
- C Ja, men det du mener å trenere mer, var det etter utfordringen?
- A Jeg trenerte litt mer etter utfordringen, men jeg vet ikke om jeg kan si om det var Goalkeeper eller om det var andre faktorer. Men det er mulig at det var goalkeeper
- C Ja, hva syntes var svakheten og styrken med goalkeeper både med challengene og nettsiden.
- A Ja, det er jo en terskel å gå inn på en nettside og loggføre det
- C Ja ok
- A den er ikke så stor men tilstede værende, goalkeeper nettsiden var bra og strava var bra så er det en liten overhead som må brukes. Fort gjort å glemme når man trener sent, og har dusjet og snakket med de i kollektivet og sånt. Jeg burde kanskje gjort det på mobilen, eller laget meg en vane med å loggføre
- C Så du følte at det var en høy terskel å logge
- A Ja, fordi det er raskt for å glemme
- C Ja, skjønner. Hva trenete du under perioden?
- A Jeg trenete jogging og styrke.
- C Prøvde du noe nytt som du aldri hadde gjort før?
- A Nei, jeg trenete stort sett det samme
- C Ja, hva syntes du om kombinasjonen du fikk? Antall uker, treningsdager og at dere ikke skulle vedde om noen ting?
- A Den kunne gjerne vært lengre og hatt litt høyere stakes. I hvert fall litt lengre sånn at man kom bedre inn i det. Sånn at man kan få en bedre rutine, fordi man får ikke bygget en rutine etter 2 uker.
- C Skjønner, trenete du sammen med de du konkurrerte med?
- A Nei, jeg trenete med en i kollektivet
- C Ja, så du trenete i hvert fall sammen med noen
- A Jeg tror jeg trenete sammen med en annen jeg konkurrerte med! Stemmer! Vi klattered.
- C Ja, hvordan var det å bruke Strava? Du har egentlig nevnt det
- A Det tok litt tid å sette seg inn i, burde kanskje brukt smart dappedinger til å vise hva som er gjort istedenfor bare å loggføre selv. Men det funket nå greit nok.
- C Supert. Ja, hvordan tror andre kan dra nytte av Goalkeeper?
- A De kan dra nytte av det hvis de lager en challenge der det er mange sammen, og da med å ha litt en eller annen gulrot til vinnerne og oppmuntre til trening. Eller tillegge det til skam, eller ved å gjøre det kjapt å tape for å gi motivasjon
- C For den faktiske er jo at de taper penger eller får tilbake igjen penger
- A Ja
- C Hvor mye ville du ratet Goalkeeper i helhet fra 1-7?
- A 5 eller 6?
- C Ja.
- C Goalkeeper er jo fortsatt under utvikling, der vi tenker å ha samarbeidspartnere som gir rabatter til vinnere. F.eks XXL, 20% på XXL. Hva tenker du om den muligheten?
- A Det kunne vært grådig kult, men jeg vet ikke, men da måtte det vært rabatter uten så mye restriksjoner og sånt da. Sånn at man vet hva man kommer til. Jeg har opplevd i mange tilfeller at det høres ganske kult ut før man leser det med liten tekst. Så hvis det hadde vært for hele så hadde det vært bra.
- C Noen siste kommentarer?

0 kr, 2 weeks, winner

- C Sånn, ja, ok, greit. Hallo
- A Hallo
- C Skal prøve å ikke gjøre dette så kleint, men ja, så du hadde 2 ukers challenge med 0 kr der du trente med 2 andre venner. Uhm. Hvordan følte du etter utfordringen?
- A Uhm, det var på en måte litt deilig å bli ferdig. Eehm, men jeg følte ikke så spesielt, men jeg var stolt av meg selv som hadde trent 3 dager i 2 uker fordi jeg har ikke trent så veldig bra i det siste. Så det var litt sånn bra å komme i gang.
- C Hvordan følte du at det gikk under treningen? Liksom ja
- A Jeg følte at det gikk bra. Eeh, det var noen ganger det var vanskelig å komme på trening, men ikke så veldig. Det gikk greit.
- C Hvilke forventninger hadde du før challenge begynte?
- A Det er vanskelig å tenke tilbake nå
- C Ja
- A Jeg hadde ikke så veldig mye forventninger. Trodde kanskje at jeg skulle være mer konkurransedrevet enn det jeg var. Uhm, ja. Ja
- C Mhm, ja skjønner. For du sa at du var stolt av at du hadde klart det som betyr at du ikke hadde så mye forventninger, vet ikke...
- A Jeg vet ikke helt, uhm, jeg forventet kanskje at jeg kom til å klare det, eh, fordi det var ikke så lenge, og ikke så mye heller, men det var fortsatt en god mestringsfølelse etterpå da det var ferdig.
- C Hvordan følte du at det ikke var noe å vedde om?
- A Ehm, jeg følte at det bare var, det var bare veddemål mellom venner, og det var på en måte ikke så farlig å gå glipp av en trening, men det var allikevel at du konkurrerer med dine venner, og du ville ikke være mye dårligere enn dem. Jeg følte fortsatt et sikt motivasjon for trening fordi det var mot dine venner.
- C Uhm, ja, hva syntes var, eeh, hva heter det, herregud, strength and weakness med Goalkeeper, styrker og svakheter, er det det det heter på norsk? Ja...
- A Om Goalkeeper?
- C Både med utfordringen og nettsiden
- A Jeg husker at jeg hadde klare meninger om dette rett etter at det var ferdig, men det har gått litt tid så jeg må bare tenke litt tilbake. Eeeehm, sånt generelt om utfordringen så syns jeg at det var veldig bra. Eeeh, Nå har jeg ikke prøvd det med penger da, så jeg vet ikke hvordan det føles, men følelsen av at man blir tvunget til å gå på trening syns jeg at det er veldig bra. Jeg trenger litt sånn motivasjon, at andre også trener, for å dra på trening og bli motivert. Nettsiden syntes jeg at den ikke gav meg så mye informasjon. Det var ikke så mye å gjøre der. Det var bare å se. Ja, jeg har så og så mange ganger i ukken. Eh, ja. Det var på en måte kanskje litt lite? Men sånn estetisk så var den fin.
- C Hvilke mangler, eller hva manglet det?
- A Kanskje litt, uhm, fordi vi koblet med Strava, men du så liksom ingenting av det på Strava på Goalkeeper, du så bare at det går oppover. Så det kunne kanskje vært noe mer som at du trykket inn på dine aktiviteter på Goalkeeper da, altså at jeg kunne sett hva jeg hadde gjort der, og kanskje litt mer statistikk kanskje? Kanskje gå inn på andres profiler? Kanskje se hvordan de gjør det? Eller noe sånt?
- C Skjønner. Eeeh, *stillhet* ja, ehm, hva, eller, hva trente du i løpet av de to ukene? Var det noe av det samme heletiden eller om det var variert?
- A Det var litt variert, eller, kanskje ikke så mye, det var en blanding mellom spinning og styrke. Og det jeg trener på siden som rollerby.
- C Ja, stemmer
- A Det var vel det det gikk i så ikke så variert kanskje

BIBLIOGRAPHY

- C Og var det noe nytt du prøvde?
- A Ja, jeg prøvde noen nye SIT timer, som styrkegreier
- C Nais
- C Eh, ja, du nevnte allerede at kombinasjonen av uken var kort og at ja, men jeg vil gjerne spørre deg om hva du syntes om kombinasjonen av challengen, liksom.
- A Ja, at det var 3 ganger og 2 uker, ja
- C Men ja du har egentlig allerede svart. Uhm, jo
- C Trente du sammen med de konkurrerte med?
- A Ja, noen ganger
- C Var det liksom hver gang?
- A Var faktisk de meste av gangene faktisk, ja, enda et push for å komme på trening følte jeg
- C Så du følte ikke at det var type et konkurranse mot de? Men det var heller med de?
- A Det var liksom samme, det var bedre fordi man trener sammen, fordi hvis jeg ikke ble med de to så var jeg litt sånn utenfor liksom.
- C Skjønner, ehm men var det liksom alle 3 eller var det bare 1 av de?
- A Det var som oftest alle 3
- C Og jeg husker før jeg spurte dere om å joine challengen, så sa dere at dere hadde prøvd på å ha en avtale før det. Hvordan, eller, eh, da husker jeg at du sa at det gikk ganske dårlig?
- A Hehe, ja
- C Så
- A Ja, det gjorde det fordi man har liksom ikke noe retningslinjer å forholde seg til, eller liksom noe rammer på en måte, og liksom. Nå trener jeg, nå må jeg logge fordi den kommer opp i Goalkeeper og viser det visuelt. Det er noe ekstra med det da. Og at det er liksom et fastsatt tid tror jeg også at det hjalp.
- C Ja, skjønner, mhmm, eeeh, ja. Uhm...
- *stillhet*
- C Hehe, sorry.
- C Siste spørsmålet så er egentlig er hvordan tror du andre kunne dra nytte av Goalkeeper?
- A Eh, vil tro de som kanskje liker å trenere eller bare sliter med å komme seg ut for å trenere på en måte, ja.
- C Mhm, ja
- C Har du noen siste kommentarer? Hva som helst? Nettsiden? Positivt, negativt, etellerannet, reglene?
- A Egentlig ikke
- C Så du var for det meste fornøyd
- A Ja
- C Så hvor mye ville du ratet Goalkeeper fra 1-10? Eller en 1-7 fordi undersøkelsene er fra 1-7.
- A Uhm, 5
- C Ja, og det er liksom med helheten, challengen og visuelt og alt liksom?
- A Ja
- C Jo, forresten, hvordan var det å logge i Strava? Hvordan var det å bruke Strava?
- A Jo, det var bra. Jeg slet litt hvordan jeg skulle gjøre det i starten men det er kanskje mest ment for løping og sånt, så man måtte logge manuelt da.
- C Sorry, det var ikke siste spørsmål, hva syns du om, jo, Goalkeeper er jo fortsatt under utvikling og vi tenker å ta in, at folk kan tjene på det, altså type, kuponger og sånt, eeehm, blant annet samarbeidspartner med Coop og andre butikker, så når du fullfører en challenge så kan du få, vetshe, 20% på XXL eller noe sånt. Hva tenker du denne ekstra featuren?
- A Det tenker jeg bare er positivt, det er liksom HOLD appen at man liksom får belønning, enda en belønning. Jeg tror det bare er positivt ja.
- C Ville du brukt Goalkeeper i fremtiden liksom?

A Ja
C Ja
latter
C Tusen takk!

Record 2: Glemte å stille noen spørsmål

C Ok, ja, ehm, på hvilken måte har Goalkeeper endret treningsvanene dine?
A Oi! Hehe, uuuhm, jeg vet ikke helt. Jeg har vel begynt å trenere litt mer, sååååå, jeg vet ikke, kanskje terskelen for å komme seg på trening har blitt litt lettere? Litt mindre liksom? Også så har jeg, så er det fort gjort å glemme at man liksom får med seg noen andre så er det mye lettere å komme seg på trening. Så jeg tror at jeg har lært av det.
C Ja, mhmm, har du trent sammen med vennene dine etter det?
A Ja
C Og alene?
A Ja
C Nais

BIBLIOGRAPHY

- A Syns alt i alt at det er bra initiativ og bra nettside og en bra ide bak og fått god oppfølging.
- C Takk, Goalkeeper er jo opprinnelig med penger, så jeg måtte ha noen grupper som ikke veddet om penger for å bevise om penger hadde spilt en faktor.
- A Har det vist seg å gjøre det så langt?
- C Nei, eller både og.
- C Men ja, tusen takk!
- A Bare hyggelig!

150 kr, 2 weeks, winner

- C Eeh, ja, ehm, Hvilke forventninger hadde du før challangen startet?
- A Egentlig ikke så store, hehe, det var som å dra på trening på en vanlig hverdag
- C Uhm, Hvordan følte du at det gikk under challengen?
- A Det gikk fint, tror jeg? Det var bare å logge de øktene du gjorde også gikk det
- C Ja, Hvordan følte du deg etter utfordringen?
- A Helt vanlig. Hahaha, ja,
- C Helt vanlig?
- A Haha, ja, jeg var vant treningsmengden og hadde det samme som jeg gikk inn med
- C Ingen forandring? Liksom, ja,
- A Nei, nei.. Jeg er vant til å trenere mye da, så var vel kanskje noe med det.
- C Ja, kanskje det
- C Uhm, Hvordan følte du det med å vedde med penger mot dine venner i sammenhengen med trening?
- A Det var flott det, jeg hadde håpet på at de ikke skulle klare det selvfølgelig, men de gjorde det jo.
- C Ja
- A Ellers var det greit liksom
- C Du følte ikke at det var for mye å vedde om? Liksom? For mye intensitet med antall antall uker og dager? Ingenting?
- A Nei, alt var ok og fint
- *latter*
- C På hvilken måte har Goalkeeper endret treningsvanene dine?
- A På absolutt ingen måte
- *latter*
- A Nei, kanskje jeg har blitt flinkere å føre ned øktene mine i de 2 ukene der
- C Ja, nei, så, nå kommer det spørsmål om Hva er svakhetene og styrkene med Goalkeeper? Både med utfordringen og nettsiden
- A Ja, eeeeh, svakheten med nettsiden var at det ikke gikk å resette passordet. Det var veldig frustrerende. Så klikker det annen hver gang når du logger inn med Facebook. Det var også litt irritende. Jeg skjønte ikke ikke hvorfor det funket av og til. Eller så var nettsiden grei, var ikke noe annet å gjøre der enn å se progresjonen du hadde.
- C Ja
- A Også hadde det vært bedre hvis man kunne brukt noe annet enn Strava
- C Hadde du brukt strava før?
- A Nei
- C Gikk det fint?
- A Det var en årelit app
- C Skjønner, men selve challengene da
- A Om det var noe problemer?
- C Om det var noe problemer med det.
- A Nei, var ok. Hadde selvfølgelig vært gøyere hvis de andre ikke hadde klart det selvfølgelig
- C Ja, Hva trente du under perioden?
- A Styrke og håndballtrening
- C Prøvde du noe nytt?
- A Nei
- C Eeeh, ja, hva synes du om kombinasjonen av uke, depositum og treningsdager i challengen du fikk?
- A Jeg hadde 2 uker, 3 dager og 150 kr. Egentlig greit? Kunne kanskje bettet mye mer og hatt flere uker. Det var helt greit
- C Kunne du også tenkt deg å, eller, tenkt deg å ha mer treningsdager i uken på en måte? Ka hadde vært en utfordring for deg?

BIBLIOGRAPHY

- A Da måtte jeg ha hatt 7 dager i uken. Eller ja... Så det var irriterende å ikke kunne logge flere økter for 1 dag.
- C Ja
- A Det var frustrerende
- C Trener du 2 økter hver gang du trener?
- A Nei, 2 økter tirsdag og torsdager
- C Ok, så to dager i uken
- C Ja, trente du sammen med de du var i challenge med?
- A Nei, ikke i de 2 ukene
- C Trente du sammen med noen andre?
- A Bare på håndballen. Styrke gjorde jeg som regel alene
- C Ja, skjønner
- C Hvordan tror du at andre kan dra nytte av Goalkeeper?
- A Tror det kan være en fin måte å sparke i gang folk, liten initiativ, men når du allerede er vant med å trenere 3 dager i uken allerede så er det kanskje litt vanskeligere å dra nytte av det. Eventuelt trenere med folk som ikke trener så mye så kan man loppe de for pengar
- C Hvor mye ville du ratet Goalkeeper fra 1-7 liksom i helhetlig på en måte?
- A Selve konseptet og alt?
- C Alt
- A 4 tror jeg?
- C Venter til døren lukker seg
- C Ja, Goalkeeper er jo fortsatt under utvikling, og dette var bare en MVP, så ja, så er slik at Goalkeeper tenker å legge til at folk som bruker det og klarer challengeen får rabatter fra samarbeidspartnere som 20% fra XXL. Hva tenker du om dette?
- A Syns det er en god ting og litt større insentiv å bruke det
- C Ja, ville du kanskje muligens tatt det i bruk da?
- A Det kommer an på hvilke typer rabatter det er, fornuftig ting eller om det er noe jaktutstyr som kan bare brukes 1 gang i året så er det uaktuelt. Hvis det er generelt for en hel butikk eller kjede, så absolutt.
- C Har du noen siste kommentarer, hva som helst?
- A Tror ikke det. Ikke som jeg kommer på
- C Nei
- A Hvis du logget på mange økter, så gikk den baren forbi
- C Det ble fikset med overflow: hidden etterhvert. Vi pushet liksom koden etterhvert og var ikke akkurat noe vi annonserte, men ja. Det var en del bugs. Det er som sagt en MVP. Men nei, tusen takk.
- A Bare hyggelig.

150 kr, 2 weeks, loser

- C Sånn, ja, eeh, ja, så du hadde 2 uker og 150 kr
A Mhm
C Og du tapte
A Jeg tapte ja
C Hvorfor tapte du?
A Jeg tapte fordi jeg klarte ikke å loggføre alt på riktige tidspunkt enten, det var litt kluss i loggføringen min men jeg tror grunnen for at jeg tapte var fordi det var for sene datoer eller så gjorde jeg det på en mandag da det skulle vært på en søndag. Jeg fikk trent da, så det funket sånt sett, men jeg klarte ikke å gjøre challengen som det skulle blitt gjort.
C Hva følte du da du tapte?
A Jeg følte ikke at jeg egentlig tapte fordi jeg hadde trent, men siden loggførte feil så var det litt bittert, men det gikk helt fint. Det var liksom ikke et så stort, det var ikke så stort nederlag.
C Skjønner
C Hvilke forventninger hadde du før challengen?
A Jeg hadde forventet å klare det fordi jeg alltid har likt å trenere og syns det var artig og kun bli pushet til å trenere mer. Så jeg hadde ganske høye forventninger med å klare det
C Så det som egentlig stod i veien var å loggføre
A Ja, i og med at jeg ikke hadde gjort det før så var det en ting jeg glemte. Å loggføre
C Du sa at du ikke hadde gjort det før?
A Ja, jeg har aldri loggført trening. Så det var sikkert det som hindret meg å klare challengen.
C Hvordan følte du at det gikk under challengen?
A Jeg følte at det gikk veldig bra, jeg følte alltid at jeg hadde alt under kontroll. Jeg syns det var artig å bli pushet til å trenere på denne måten. Så ingenting negativt.
C Bra
C Hvordan følte du deg etter utfordringen?
A Jeg følte ikke så stor forandring, jeg har alltid på en måte, jeg følte at det var kjapt å få på en måte, ja, at det stod at jeg ikke klarte å fullføre det, men visste at jeg hadde fått trent, så det var jo egentlig målet mitt. Så jeg er egentlig fornøyd i etterkant
C Ja, fordi du var ikke fornøyd med å klare det, men var det kjapt fordi du ikke klarte det av prinsipp eller at du mistet pengene dine til dine venner?
A Det var egentlig å miste pengene, hehehe, fordi jeg følte ikke at jeg fortjente å miste dem. I og med at det var bare 150 kr så var det ikke så stort. Det var mer at hvis jeg ikke hadde trent, så hadde jeg følt nederlaget, at jeg ikke hadde klart å fullføre. Men det var ikke så kjapt egentlig. Det gikk greit.
C Så det var liksom ikke «å nei, jeg tapte mot alle mine venner»
A Nei, det var ikke sånn kjempe stort nederlag, egentlig ikke
C Skjønner, ja, hvordan følte du det med å vedde om penger mot dine venner i sammenheng med treningen?
A Jeg syns det var litt, det hadde kanskje vært bedre å vedde med noe annet, fordi når man er student så er pengene veldig viktig liksom, da er det liksom viktig å fullføre, men jeg følte liksom ubehagelig press å ha fordi det er pengene jeg trener for. Hadde

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- det f.eks at noen kunne lagd en kake, fordi folk er motivert til å trenere, så jeg tror ikke at det er 150 kr som gjør at folk vil trenere men det er mer å holde seg på overflaten og ikke miste pengene, som er kjapt. Men det hjalp på motivasjonen. Jeg følte at jeg måtte trenere, fordi jeg ikke kunne tape 150 kr
- C For 150 kr for deg var mye?
- A Det er ikke mye penger, men det var, det var i forhold til å bare trenere 6 ganger så var det litt mye.
- C På hvilken måte har Goalkeeper har endret treningsvanene dine?
- A Egentlig ikke så mye, fordi challangen gikk ut på like mange treningsdager som jeg var vant med å trenere. Så det var bare å fortsette, men det var veldig greit fordi jeg var pushet til å trenere, f.eks rett etter Åre, så sånn sett var det bra.
- C Ja, hva syns du er styrkene og svakhetsene med Goalkeeper, på både challangen i seg selv og nettsiden
- A Styrken er jo at folk blir pushet til å trenere når det er penger involvert. Svakheten er at det er kjapt å måtte huske å loggføre, og bruke mye tid og krefter på det. Å huske på det, det er en ting å trenere, men for min del så var det å ta opp PC-en å logge fordi jeg ikke fikk til å logge via telefonen. Og det å huske å gjøre det var litt nedsiden med det.
- C Men var Goalkeeper siden var grei i seg selv?
- A Ja, den var forså vidt grei. Det var mer Strava jeg syns var vanskelig å forstå. Jeg syns det var en enkel nettside, Goalkeeper, hadde full oversikt over hvem som var med og sånt. Men jeg tror bare det å loggføre treningen var noe jeg ikke syntes var artig og syns det er unødvendig og negativt.
- C Hadde du foretrukket noe annet på en måte?
- A Nei, jeg kommer ikke på en annen måte fordi man må jo vise at man har trent på ett vis, jeg skjønner jo det. Kanskje hatt en tavle et felles rom der man kan krysse av eller noe? Ikke-digitalt kanskje.
- C Ok, men tavle blir jo kanskje litt vanskeligere for alle
- A Ja, det er kanskje litt vanskelig, jeg tror bare at mitt forhold til digitalt gå å loggføre treningen er ikke den beste måten for meg.
- C Skjønner, veldig interessant. Ja. Hva trente du under perioden?
- A Jeg trente mye spinning og yoga og styrketrenings
- C Ja, prøvde du noe nytt?
- A Nei, det gjorde jeg ikke.
- C Greit. Hva syns du om kombinasjonen av challangen du fikk av uker, dager, depositumspenger? Syntes du at det var greit balanse av challangen? Skulle det vært mer?
- A Jeg syns det var veldig bra, jeg syns 150 kr mapper greit til antall treningsdager, så da blir ikke det så mye penger på antall treningsdager. For en så kort periode syns jeg var bra, 200 kr hadde heller ikke vært mye, men alt over 200 kr syns jeg hadde vært mye og under 100 kr hadde vært litt lite. Jeg syns det var greit, og det var ikke så mange, var liksom ikke så uoverkommelig antall treningsdager, 3 ganger i uken er liksom du får liksom annenhver dag og en hviledag, så det var bra.
- C For det hadde vært noe annet hvis det var 7 treningsdager?
- A Ja, det hadde vært mye
- C Ja
- A Så nei, jeg syns det var greit
- C Nice, ja, trente du sammen med noen du konkurrerte med?

- A Ja, jeg var på spinning med et par. Sånn sett var det artig, fordi vi hadde et felles mål og vi dro hverandre med på trening hver gang noen trente så alle spurte hverandre. Så det var en veldig positiv greie med at man blir dratt med litt og får ofte tilbud fra andre om å være med å trenere fordi alle er opptatt av det.
- C Var det slik at alle 6 var med da eller var det litt?
- A Var sånn 2-3 hver gang. For det må passe med alle.
- C Trente du også med folk som ikke var med i challengen også?
- A Ja, det gjorde jeg. Det var liksom mine vanlige treningsvenner
- C Så greit, nå kommer spørsmål, hvordan det var å bruke Strava da?
- A Jeg syntes ikke at det var så greit, men jeg er jo ikke vant med det da. Kjenner man til Strava så er det sikkert null stress, men siden jeg måtte bruke tid på å sette meg inn i det så var det kjapt.
- C Ja, jeg skjønner, hvordan tror du andre kan dra nytte av Goalkeeper?
- A Jeg tror helt klart at folk blir motivert av å trenere hvis man setter en challenge mer enn det man vanligvis trener. Til meg så var det heldigvis min vanlige rutine, så det var ikke så stor påvirkning egentlig, men til folk som vil komme ut og forbedre seg så tror jeg helt klart at det er kult hvis man har et mål sammen med andre. Så jeg er veldig positiv til Goalkeeper, men jeg personlig liker ikke formen for loggføring.
- C Hvor mye ville du ratet Goalkeeper i helhet fra 1-7?
- A Jeg ville ha ratet det, kanskje, jeg personlig ville ratet det 3 fordi jeg liker ikke systemet. Jeg syns det blir feil fokus, men den teknologi delen, så det å være med på en treningsutføring så ville jeg kanskje ratet en 6 fordi det er positivt. Så en 4 da.
- C Den teknologiske delen så mener du loggføringen?
- A Ja, fordi man må koble det til noe annet igjen som Strava. Men en 4 vil jeg si.
- C Goalkeeper er jo fortsatt under utvikling fordi det er en start-up der vi tenker å samarbeidspartnere etter hvert f.eks XXL der vinnere får rabatter, sånn type 20% rabatt på XXL. Hva syns du om den ordningen?
- A Jeg syns det hadde kanskje vært en positiv greie. Hvis man først har Goalkeeper og er komfortabel og liker det, så da er det siste motivasjons dyttet, at det er ikke er kun vennene dine sine penger du tar. At det ikke går ut over noen du er glad i. Det høres bra ut.
- C Hadde du vurdert å eventuelt ta i bruk Goalkeeper i fremtiden? Det er et veldig vanskelig spørsmål
- A Per nå hadde jeg ikke gjort det fordi jeg liker bare at trening er trening.
- C Har du noen siste kommentarer?
- A Nei, ikke annet at det var hyggelig å bli spurt om å være med.
- C Ja, uhm. Jeg skal jo egentlig ikke ha påvirkning i det intervjuet her. Men jeg har jo snakket med folk i gruppen din, og det var ett eller annet om at 2 av dere hadde vært syk.
- A Ja, det er sant. Da var det Yoga økter de gangene.
- C Hva syntes du om det?
- A Det var litt, i og med at jeg ikke var så syk at jeg ikke klarte å bevege meg så gikk det fint, men det er helt klart en utfordring når man ikke kan trenere da. Hvis man blir syk så har man tapt liksom. Det kunne vært en mulighet å hatt, at hvis man blir syk så får man permisjon eller trekke fra treningsøkter. Men jeg skjønner at folk kan utnytte det til at folk bare sier at de er syk heletiden. Men det gjør jo det litt vanskelig.
- C Ja, skjønner, tusen takk

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500 kr, 2 weeks, winner

- C Sånn, greit, ja. Du hadde 2 uker og 500 kr, og ingen tapte din i challenge. Hvilke forventninger hadde du før challengen begynte?
- A Ehm, det var jo det der på en måte om jeg kom til å klare det. Eh, jeg hadde en liten forventning om at jeg kom til å klare det ja, så var det sånn derre og om de andre kom til å klare det.
- C Men siden hvorfor hadde du de forventingene? Var du usikker på om du kom til å klare det eller?
- A Ja det var bare akkurat mye å gjøre i de to ukene challengen pågikk da. Så det gikk på om jeg egentlig hadde overskudd til å gjøre det da.
- C Ja, men du klarte det da!
- A Ja
- C Hvordan følte du at det gikk under challengen da?
- A Det gikk egentlig veldig bra. Det var kanskje litt det der å faktisk liksom bare å dra til treningsenteret for å gjøre en halvtime. Så det var på en måte ikke, selvom jeg hadde lyst å trenre så var det at jeg måtte gjøre en halvtime fort for å ikke tape noen penger på det. Men det gikk egentlig veldig bra, men det var ikke så mye, man trengte ikke å gjøre så kjempe mye for å klare det da. Så det var overkommelig på en måte.
- C Hva trente du da?
- A Den ene uken trente jeg først på 3D-møllen også 1 time styrke etterpå, mens den andre uken så løp jeg bare 30 min.
- C Prøvde du noe nytt?
- A Nei, egentlig ikke. Jeg har vært kontakt med en SIT veileder før som har lagd et program for meg som jeg gjennomførte.
- C Så bra
- C Hvordan følte du deg etter utfordringen?
- A Det var en god følelse. Det var jo mest fordi jeg hadde klart challengen. Også var det fordi jeg hadde trent.
- C Så bra, ehm, ja, Hvordan følte du det med å vedde om penger mot dine venner i sammenheng med trening?
- A Eh, det er jo litt sånn når man er student så er 500 kr veldig mye penger. Men følte ikke at det var sånn, vel var jo ikke akkurat som at jeg veddet mot folk jeg ikke kjente. Da er det noe annet. De jeg veddet mot nå kjente jeg ganske godt.
- C På hvilke måte hadde det vært hvis du ikke kjente de? Hvilke tanker har du om det?
- A Vet på en måte ikke hvilke forventninger jeg hadde hatt hvis det hadde vært bare fremmede, men det er en liten trygghet på det når det er folk du kjenner. Nå gjorde jeg ikke det da, hun ene var jo ikke her, men er kanskje lettere å dra på treningsenteret sammen med noen. Høyere terskel kanskje. Kanskje når man ikke kjenner folk så må man bevise seg selv på en annen måte enn med folk du kjenner
- C På hvilken måte har Goalkeeper endret treningsvanene dine?
- A Ikke sånn kjempe mye sånn egentlig nå har jeg på en måte prøvd å ha et mål å trenre 2 ganger i uken, men det har ikke vært det i de siste fordi det har vært ting som har kommet i veien for å komme seg på trening da. Men ja. Men så er det litt annerledes når det er penger involvert og at man er student. Det med å tape penger.
- C Jeg skjønner, uhm, ja, eh, Hva syntes du var styrkene og svakhetene med Goalkeeper både med nettsiden og challengene liksom?

- A Det var litt det med at en av styrkene var at man kunne se hvor de andre lå, og hvor langt de hadde kommet i challengen på en måte. Den ene svakheten jeg irriterte over var at det var to forskjellige nettsider man måtte forholde seg til. At jeg måtte registrere det i Strava også måtte jeg passe på at det hadde blitt registrert i Goalkeeper. Så jeg syntes at det var litt irriterende og tungvint. Det var egentlig bare det.
- C Ellers var challengen i seg selv grei?
- A Ja, absolutt
- C Ja, hva syntes du om kombinasjonen av challengen antall uker, treningsdager og depositum?
- A Jeg syntes egentlig for 2 uker så var 500 kr litt mye. Ja, men ellers var antall treningsdager og antall uker var forsåvidt greit. Jeg syntes at det var litt mye med 500 kr på 2 uker.
- C Trente du sammen med de du konkurrerte med? Bortsett fra hun som var bortreist?
- A Nei, egentlig ikke. Vi var ikke medlem på samme treningssenter, så da var det litt vanskelig. Selvom jeg prøvde å forsøk å vi skulle trenere sammen, så var det litt vanskelig.
- C Trente du sammen med noen andre ellers?
- A Ja, den ene dagen hadde jeg en avtale om å trenere sammen med en annen
- C Bra, eh, ja, hvordan var det å bruke Strava egentlig?
- A Ja, det gikk forsåvidt greit. For jeg har jo en pulsklokke som jeg bruker når jeg trener. Men jeg skjønte ikke helt hvordan jeg skulle koble den opp mot Strava. Så da registrerte jeg alt manuelt. Og det gikk forsåvidt greit. Det gikk egentlig helt fint å gjøre det da.
- C Hvordan tror du andre kan dra nytte av Goalkeeper?
- A Det kan være en motivasjon kanskje, og det med at man kan bli enig om hvilken sum man kan legge inn da. Nå var det litt sånn, vi fikk vi en challenge og fikk et beløp. Så det blir litt annerledes når man kan være med å bestemme selv. Ja
- C Måtte nesten bestemme det for forskningens skyld
- A Altså, det er en veldig fin konsept da. Veldig bra konsept.
- C Ja, eh, hvor mye ville du ratet Goalkeeper som helhet fra 1-7?
- A 6 kanskje?
- C Ja, og goalkeeper er fortsatt under utvikling så vi tenker å legge til med at hvis du vinner så og får pengene tilbake igjen så kan du få litt mer og som f.eks via samarbeidspartnere som XXL, så kan du få 20% rabatt på ett eller annet da. Hva synes du om det på en måte?
- A Det tror jeg absolutt kunne vært noe, men da må, det spørrs hva man får rabatt på. Liksom en vannflaske eller, treningsarmbånd eller noe. Det kommer an på hva man får rabatt på og. Ja.
- C Så ja, så ville du brukt Goalkeeper videre da? Eller i fremtiden da? Er det noe du kunne tenkt deg?
- A Jaa, kanskje?
- C Kanskje?
- A Ja, kanskje ikke akkurat nå. Kanskje når jeg har fått meg en fast jobb, men er absolutt en alternativ
- C Har du noen siste kommentarer?

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- A Jeg kommer på nå med en svakhet, for nå hadde jeg treningsøkt der den ene varte i 15 minutter, det var forskjellige logger men samme treningsøkt. Jeg hadde jo kanskje 20 minutter oppvarming og 45 minutter trening, eller 20 minutter jogging også 20 minutter styrke så det var uklart om det regnes som to separate økter eller om det regnes som en sammenhengende økt.
- C Jeg kan jo svare på det, som du oppdaget da så blir det regnet som 2 separate økter, så det er kun 1 logg som teller som sammenhengende som over 30 minutter.
- A Så var liksom som hva jeg skal registrere det som? 40 minutter styrke eller 40 minutter jogge økt? For man har jo trent i 40 minutter.
- C Ja
- A Ellers var det helt topp
- C Så bra
- C Nei, det er jo en prototype da, så det er mye som ikke er på plass, så dere var også de første testerne og. Og den funket godt nok til å bli testet.
- A Var litt sånn, for den ene dagen hadde jeg trent akkurat ikke nok, så måtte trenere litt mer for å få nok.
- C Ja, så da brukte du pulsklokken din?
- A Ja, da brukte jeg det, men jeg hadde først 15 minutter jogging også 27 minutter styrke. Men så kunne jeg ikke registrere det som at jeg hadde trent i 3 kvarter
- C Men den klokken din?
- A Ja
- C Var den koblet til Strava sa du?
- A Jeg fikk ikke til å koble til den, men som jeg skjønte det så kunne ikke økten vare i 27 minutter, men måtte akkurat være 30 minutter
- C Eller mer
- A Ja, og da blir det liksom inconvinient at hvis du vil ha 15 minutter først, så må du registrere det som en annen, men spørsvs hvordan man velger å ha instillingen på klokken også da.
- C Ja
- A Om man velger å kjøre en 20 eller 40 minutters, også registrerer det seg som en 40 minutters styrkeøkt. Det jeg gjorde da var at jeg registrerte 15 minutter jogging på klokken også 30 minutter styrke på klokken.
- C Men som oftest så hadde de aller fleste registrert seg som 45 minutter treningsøkt uten å spesifisere. Men det kommer helt an på hvordan man liker å logge
- A Ja, det er veldig individuelt.
- C Ja, takk for feedback. Det var bra
- A Bare hyggelig.

500 kr, 2 weeks, Second winner

- C Ja, greit, du var på 2 ukers og 500 kr challenge. Hvilke forventninger hadde du før challengen? Husker du det?
- A Jeg tenkte at det kom til å bli godt å begynne å trenre igjen, jeg trente aktivt før og det har flydd litt etter at jeg flyttet til Trondheim. Så forventningen var at jeg skulle ha ekstra motivasjon på å komme på trening
- C Hvordan følte du at det gikk under challengen?
- A Under challengen så brukte jeg mye tid på å gå, så fant jeg ut at jeg kunne gå som en treningsøkt, og å gå fort var en form for trening. Men det ble sett litt ned på fra resten av gruppen. Selvom jeg personlig mente at det var en form for trening, kanskje det var en mismatch med hvilke gruppe jeg ble plassert på der folk hadde forskjellige mål.
- C Hvordan følte du deg etter utfordringen?
- A Bra, følte meg mer energisk enn det jeg hadde tidligere. Fått litt ekstra treningsmotivasjon. Jeg skulle jo egentlig ønsket å bruke den videre, men jeg må da vente. Har et bra treningsopplegg som jeg bruker hjemme
- C Hvordan følte du det med om å vedde om penger sammen med venner i sammenheng med trening?
- A Right, vel, det gav definitivt ekstra motivasjon. Og det var ikke akkurat at jeg var redd for å miste pengene mine, men var mer at jeg ikke ville at mine venner skulle ta pengene mine. Da hadde det vært ekstra ydmykende. Ja.
- C På hvilken måte har Goalkeeper endret treningsvanene dine?
- A Det har fått meg i gang. Ja. Det har fått meg til å starte.
- C Bra. Hva er styrkene og svakhetene med Goalkeeper? Både med utfordringene og nettsiden?
- A Det har vært noen tekniske problemer. Jeg syns det var vanskelig krav med 30 minutter fysisk aktivitet, fordi hvis det hadde vært 20 minutter med CrossFit så er det ganske mye mer utmattende enn 20 minutter joggetur i hvertfall for min del. Det tar ikke hensyn til intensitet og heller ikke hvilke aktiviteter en gruppe støtter for challengen. F.eks at gruppen kan si at de aksepterer roing, styrke, jogging men ikke gåing. F.eks vi ønsker å ha en gruppe som fokuserer på styrketrenings og derfor ekskluderer man jogging. Sånn funksjonalitet hadde vært nyttig. Sånn utover det syns jeg har at var bra. Oversikt over hvor langt de andre hadde jobbet, også tenke «nå må jeg virkelig få gjort noe med dette.»
- C Skjønner, så på hvilken måte tenker du at de skal få lov å velge?
- A Ved å, det er sånn Strava plugin der å ha alle aktivitetene på Strava og kan checke av hvilke aktiviteter som skal teller for denne challengen
- C Ja, hva trenete du under perioden?
- A Hovedsakelig gange, da noe rask gange, noe lengre turer og noe egentrening med treningsopplegg.
- C Som hva da?
- A Knebøy, pushups, situps, rygghev, nedfall, plankehopp
- C Ja, men prøvde du noe nytt?
- A Hjemmerutinen var ny for meg, men å gå har jeg kunne gjort siden jeg var 2 år gammel, men ja.

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- C Skjønner, bra,
A Vent, jeg tror jeg prøvde kickboksing, men det var etter perioden.
C Ja
A Etter at challengen var ferdig
C Men du prøvde i hvert fall noe nytt etter det, kult
C Hva syntes om kombinasjonen av challengen du fikk, altså type lengde uker og antall treninger i uker og penger?
A Jeg som er ny til det med faste treningsrutiner syns at det var greit å ha 3 ganger i uken som gav på en måte nok press til å være aktiv i løpet av en uke. Og det å ha 500 kr, som er mye penger, gjorde at jeg var helt sikker på at jeg ikke ville faile. Så ja, jeg tror det var fornuftig, men jeg var litt stresset over da jeg fant ut at jeg skulle legge 500 kr i potten, og tenkte at nå kan jeg virkelig ikke faile
C For du føler at det er mye for deg? Altså 500 kr?
A Ja, 500 kr var litt for mye for min del ja. Hvis det hadde vært 100 eller 200 kr så hadde det vært en øl på byn. Da hadde det ikke vært like, eller, det hadde jo fortsatt vært skammen med å gi penger til mine venner som ikke er greit.
C Skjønner, trente du sammen med de du konkurrerte med i perioden?
A Eeeh, nei. Det ble foreslått, men forskjellige økter og forskjellige dagligrutiner så ble ikke det noe av.
C Skjønner, men trente du sammen med noen andre?
A Nei
C Mest individuellt trening?
A Ja, egentrening og vandre med headsett
C Hvordan var det å bruke Strava? Var det greit?
A Strava var veldig åleイト med å tracke gåturer. Det var litt værre da jeg skulle dokumentere egentreningsøkten min med en svett selfie
C Hæ?
A Heldigvis kan du ha private posts på Strava sånn at folk ikke kan se aktivitetene din. Og det kan jeg forstår at da oppfattes det shady fra de andre gruppemedlemmene, men ja, jeg har ikke noe behov for å vise frem mine treningsachievements. Jeg er litt shy på å vise frem mine treningsachievements så hadde alt som private
C Skjønner, men du nevnte om svette bilde
A Det står som et krav at man skal ta en svett selfie som dokumentasjon at man har trent
C På goalkeper
A Ja
C Da var det en feil fra vår side fordi det ikke skulle gjelde for den challengen her.
A Men jeg tok ikke noe svett selfie og bare førte det opp
C Så bra, fordi reglene ble egentlig skrevet veldig utfyllende til hvordan det skal være til slutt og ikke tilpasses til MVP-en på en måte. Så vi skulle kanskje tatt en mer nøyne gjennomgang før vi publiserte den, men vi hadde ganske mye hastverk å få den ut på en måte.
A Skjønner
C Vet jo f.eks at GPS står som et krav, men jeg skrev i en eller annen melding at det ikke var et krav
A Jeg brukte det kun på 1 økt
C Det går helt fint

- C Hvordan tror du andre kan dra nytte av Goalkeeper?
- A Hvordan tror jeg at andre kan dra nytte av Goalkeeper?
- C Ja
- A De kan komme seg i gang med å trenere eller for de som allerede har en god treningsrutine kan vedlikeholde sin trening. Ekstra insentiv for å ikke skippe legday, både for nye og folk som har trent før
- C Hvor mye ville du ratet Goalkeeper i helhet fra 1-7?
- A Uvant skala
- C Det er fordi undersøkelsene er det
- A Total inntrykket, konsept og
- C Brukeropplevelse
- A 5, kjempe bra konsept og ide. Mangler kanskje litt på utførelsen fortsatt. Men ellers er det en 6 eller 7 hvis det er proof of konsept eller tidlig prototype.
- C Skjønner, keeper er fortsatt under utvikling og tenker å ha samarbeidspartnere etter hvert der vinnerne bli belønnet med f.eks 20% på XXL? Hva tenker du om at Goalkeeper kan gi rabatter til vinnerne?
- A Gi rabatter på sportsbutikker og treningssentre og sånt?
- C Ja, hva syns du om det?
- A Jeg syns det hørtes ut som en god ide. Ekstra insentiv både for å bruke appen og kjøpe nye sportsklær.
- C Skjønner, har du noen siste kommentarer?
- A uuuuhm, jeg vil bruke Goalkeeper igjen. Når dere ferdig med google analytics delen så vil jeg bruke det igjen. Kanskje ha single player challenges.
- C Skjønner, greit, jo forresten, ved at du gikk og hadde oppfylt minstekravet til Goalkeeper. Følte du at du jukset?
- A Ja, noen av turene jeg gikk følte som at jeg jukset var f.eks «langtur fra byen», men jeg ville få oppfylt en dag pga jeg visste at jeg var for bakfull til å gå. Mens andre ganger da jeg gikk så var det 1 time + tur med høy intensitet. Kjente at jeg fikk puls og må ta av jakken i Januar. Noen ganger ja, andre ganger nei.
- C Greit, tusen takk

K Interviews with participants from the six-week challenges

0 kr, 6 weeks, loser

- C Yes, du hadde 6 uker, 0 kr challenge og røk ut da uke 3 begynte så du klarte 2 uker. Hvilke forventninger hadde du før challengen startet?
- A Jeg trodde at jeg skulle være lenger med tanke på den motivasjonen jeg hadde fra før av. Ja, at man er fler om det og sånt da.
- C Ja, hvordan følte du at det gikk under challengen?
- A Det gikk ganske greit, men man merket fort at man glemte å logge økten, altså sånn på Strava og at det var noe jeg kom på rett før jeg sovnet eller ett eller annet.
- C Var du vant med å logge økter fra før av?
- A Nei, ikke sånn. Jeg har brukt pulsklokke før der den logger automatisk men ikke at jeg har logget det manuelt da.
- C Skjønner
- C Men hvordan syntes du det var å bruke strava?
- A Det gikk egentlig greit. Det var ganske enkelt program da jeg først skjønte det.
- C Skjønner! Hvordan følte du deg etter utfordringen? Type da du røk ut da
- A Nå røk jeg ut fordi jeg ble syk den uken da, så det gjorde at jeg ikke kunne trenere. Hadde ingen overskudd til det. Så da skulle jeg ønsket at det var mulighet til å hoppe inn igjen uken etterpå. Kunne gjerne vært med lengre, men det gikk ikke da jeg røk ut.
- C Skjønner. Har du noen ideer om hvordan du kunne hoppet inn igjen og hvordan Goalkeeper kunne tilbuddt det?
- A Kanskje det kunne vært en mulighet å kunne satt det på pause eller noe sånt. At det gikk an å sette en hel uke på pause. Eller ta på seg noen prosenter eller noe sånt.
- C Hva mener du med prosenter?
- A Kanskje de som ikke ble satt på pause fikk mer prosenter eller noe.
- C Skjønner
- A Man kunne tatt høyde for at noen reiste vekke eller ble syk eller noe
- C Det var ikke en dum ide med at det kunne blitt satt på pause.
- C Hvordan følte du at det ikke var noe å vedde om?
- A Det gjorde kanskje at det var litt lettere å droppe ut da. Ja, det var motivasjon i seg selv å gjøre det sammen med venner og at det ble veldig mye snakk om at vi skulle trenere sammen og bruke Goalkeeper og sånt. Hvis det hadde vært med penger så hadde det sikkert vært vanskeligere å droppe ut uansett da.
- C Skjønner, på hvilken måte har Goalkeeper endret treningsvanene dine?
- A De to ukene jeg ble med da, så ble det lagt opp til at man skulle gjennomføre 3 treninger i hvert fall og kanskje planlagte det litt mer. Ble litt mer bevisst på det.
- C Følte du at du tok det med deg etter at du røk ut?
- A Ja, kanskje, at liksom at jeg planlegger litt mer at jeg skal få gjennomført 3-4 treninger i uken da.
- C Ja, skjønner. I den lille korte tiden du var med, hva er svakhetsene og styrkene med Goalkeeper både med konseptet og nettsiden.
- A Kanskje gjøre det enklere å koble opp mot andre tjenester eller helse apper f.eks helse appen på mobilen eller noe sånt da. Eller polar, sportsklokker. Ellers var det veldig greit. Var ganske enkelt opplegg. Kanskje det Strava og Goalkeeper kunne vært i samme app, eller jeg vet ikke.
- C At du kunne logge fra Goalkeeper?
- A Ja
- C Skjønner, hva syntes du om konseptet da?
- A Det var veldig bra! Strava kan man vel koble opp mot Facebook og sånt og invitere venner og sånt, at man ikke trenger å bo på samme plass og man kan motivere andre.
- C Yes, hva trente du under perioden? Og prøvde du noe nytt? Det er veldig lengesiden da.

- A Jeg trente crossfit og det var ikke nytt da. Mhm..
C Ja, hva synes du om kombinasjonen (uke, depositum og treningsdager) av utfordringen du har? Altså at det var 0 kr å vedde om
A Det var jo veldig gjennomførbart med 3 treningsdager i uken og det var et bra mål. Og med 0 kr så kunne det kanskje vært motiverende med penger egentlig.
C Skjønner! Trente du sammen med de du konkurrerte med?
A Vi stod på ski sammen en dag, men ikke utenom det.
C I Åre?
A Ja, hehe
C Hehe, skjønner. Ellers så trente du sammen med de du var på time med på crossften?
A Jepp
C Hvordan tror du andre kan dra nytte av Goalkeeper?
A Jeg tror det kan være veldig motiverende for folk som trenger ekstra dytt, og at det gjør at vi holder på veddemålet i stedet for at det skal være sånn løst at ingen holder det. Det blir litt tettere oppfølging, og jeg tror at det kunne vært nyttig for mange.
C Hvor mye ville du ratet Goalkeeper (helhet) fra 1-7?
A Kanskje 5, ja
C Ikke verst. Goalkeeper er fortsatt under utvikling og tenker å ha samarbeidspartnere for å gi rabatter til vinnerne da og ha mulighet til å gjøre om depositumet til gavekort. Hva tenker du om dette?
A Det hørtes ut som en god ide. F.eks når man er student så vil man ikke gi så mye penger i fra seg og hvis det er store aktører som har lyst å sponse til en veldig bra premie så hadde det vært supert.
C Har du noen siste kommentarer?
A Nei, eneste jeg tenker på er oppkobling mot andre sportsklokker og andre ting for å gjøre det enklere å logge.
C Ja, greit da er vi ferdig. Tusen takk!

BIBLIOGRAPHY

0 kr, 6 weeks, Second loser

- C Sånn, du hadde 0 kr challenge i 6 uker der du røk i uke 4. Du klarte 2 uker
A Det kan sikkert det
C Det er ganske lengesiden, men sjekket opp i loggen at du var fortsatt med i uke 1, 2 og 3 men røk ut i uke 4. Ja, Hvilke forventninger hadde du før challengen startet?
A Til meg selv?
C Ja, til deg selv
A Jeg tenkte at det var noe jeg kom til å klare, men jeg hadde tatt på meg litt flere verv enn forventet og det skjedde veldig mye i starten. Så jeg var litt usikker på hvordan det kom til å gå. Men jeg tenkte at det skulle være en utfordning. Jeg tenkte også at det det er greit hvis jeg trener 1 eller 2 ganger i uken, men hvis jeg trente 3 ganger så hadde det vært kjempe fint. Men så var jeg litt sånn at jeg var sikker på at jeg ikke kom til å klare det hele tiden. Jeg tenkte at jeg kom til å ryke ut hvis det var en uke der det skjedde litt mer.
C Ja, fordi du røk av slutten av januar tror jeg. Ja, det gjorde du. Det ballet jo sikkert opp mye ting og sånt da
A Ja, men det kan godt hende at det var det
C Var du vant med å logge treningsøkter?
A Nei, det har jeg aldri gjort
C Så hendte det at du glemte å gjøre det?
A Ja
C Men, hvordan var det å bruke Strava? Var det uvant?
A Ja, det var uvant. Det var forsovet ikke vanskelig, men de gangene jeg trente mest innebandy så visste jeg ikke hva jeg skulle logge det som. Enten om jeg skulle logge det som løping eller noe annet. Men ellers loggingen i seg selv var grei.
C Ja, skjønner. Så du hadde ingen intensjoner med at det var sånn type at det var YESS jeg skulle klare alle ukene?
A Nei, jeg trodde ikke det. Eller, jeg kunne klart det og ikke var umulig, men jeg var realistisk og tenkte at jeg ikke kom til å klare det.
C Hvordan følte du at det gikk under challengen?
A I starten så syntes jeg at det gikk ganske bra, selvom jeg gjorde en del ting så fikk jeg også tid til å trenere 3 ganger. Så i starten syntes jeg at det gikk bra helt til jeg røk ut. Men ja.
C Etter at du røk ut, hvordan følte du deg egentlig?
A Jeg tror ikke at jeg var helt klar over at jeg røk ut. Liksom, oi denne uken trente jeg ikke. Jeg tror ikke at jeg var så bevisst. Etter en stund så tenkte jeg at jeg har røket ut. Jeg tenkte ikke liksom når jeg får tid til å trenere denne uken her.
C Mhm, skjønner. Men følte du at det var en forandring eller noe?
A Nei, ikke noe annet enn at jeg var bevisst på når jeg kunne trenere. Altså hvor mange ganger jeg har trent. Jeg liker å ta det som det kommer og trenere når det passer. Men jeg var mer bevisst på det da jeg var med, men ikke nå.
C Hvordan følte du at det ikke var noe å vedde om?
A Jeg tenkte ikke noe over det og jeg tror ikke at jeg hadde blitt mer motivert hvis det var penger på spill. Jeg i hvert fall pleier ikke å bli mer motivert av penger, så for min del så trengte jeg bare å huske på å logge treningsøktene så jeg tenkte heller ikke over at dette var et veddemål.
C Fordi du er en aktiv person fra før av?
A Sånn passer vil jeg si. Som sagt så trenere jeg når jeg kommer på det. Så går jeg på innbandy så jeg prøver å komme meg på 2 treninger i uken. Men det er sånn at jeg aktivt men ikke så veldig strukturert.
C Skjønner. På hvilken måte har Goalkeeper endret treningsvanene dine?

- A I de ukene jeg var med så husker jeg at jeg tenkte når jeg fikk tid til å trenere i uken, om den og den dagen passet. Men sånn i ettertid så tror jeg at det har gått tilbake igjen til sånn jeg var. Jeg tror ikke at det har endret så mye.
- C Av den lille korte tiden, hva er svakhetene og styrkene med Goalkeeper? Både med challangen og nettsiden.
- A Husker jeg slet litt med å logge inn, og da tror jeg at vi fikk valget med å logge inn med Facebook eller gmailen din. Så husket jeg ikke hvilken jeg hadde registrert meg med, så da var det mer min feil kanskje. Men jeg husker at jeg slet med å logge inn. Ellers var jeg ikke så mye innpå den nettsiden, så jeg vet faktisk ikke helt egentlig. Nei, jeg var inne der en gang og kunne se hvem som ledet og sånt og det var forsovet bra. Men ellers var jeg ikke der.
- C Og selve konseptet da?
- A Som jeg tenker så tror jeg ikke at det passer for slik jeg er siden jeg tar trening som det kommer. Så jeg tror ikke at veddemål konseptet motiverer meg i forbindelse med trening for min egen del. Men det er en god ide, for folk som er mer konkurranser preget og trener med andre. Det kan jeg tenke meg er bra for dem.
- C Bra, du nevnte at du trente innebandy. Trente du det under perioden?
- A Ja
- C Prøvde du noe nytt under perioden?
- A Jeg løp inne noen ganger og ute i hvert fall en gang. Men det var vel egentlig det. Jeg har ikke prøvd noe annet nytt. Jeg stod også på ski i Åre. Så ikke noe annet nytt tror jeg. Kanskje også langrenn.
- C Mhm, ja. Hva synes du om kombinasjonen (uke, depositum og treningsdager) av utfordringen du har?
- A Jeg synes at 3 dager i uken var et godt antall. Det var heller ikke for mye eller for lite men jeg måtte kanskje strekke meg litt i noen uker. Eller kanskje det var litt mye siden jeg hadde anstrengt meg med det. 6 uker var kanskje litt lenge, eller jeg klarte jo ikke det i strekk. Og 0 kr passet meg bra, fordi jeg hadde ikke lyst å vedde penger så jeg tror ikke at det hadde gjort noe for min del.
- C Trente du sammen med de du konkurrerer med?
- A Bare ski, men ikke noe annet.
- C Ellers trente du sammen med de du trente innebandy med?
- A Ja
- C Hvordan tror du andre kan dra nytte av Goalkeeper?
- A Jeg tenker det kan være motiverende å vedde om noe også bare følge med på hvordan andre trener. Så hvis det er noe å bli motivert av så er det veldig bra. Jeg tror det kan være bra motivasjon.
- C Hvor mye ville du ratet Goalkeeper (helhet) fra 1-7?
- A Jeg følte ikke at jeg brukte det så mye, men jeg fikk litt motivasjon da så kanskje sånn 4. Men jeg har ikke så mye grunnlag. Men kanskje 4 hvis jeg skulle sagt noe.
- C Det er veldig vanskelig å si det her og nå da, men det er for å høre hva du tenker.
- C Ellers er Goalkeeper fortsatt under utvikling og tenker å ha samarbeidspartnere med rabatter og gjøre om depositumet om til gavekort. Hva tenker du om dette?
- A Det hørtes jo veldig kult ut.
- C Har du noen siste kommentarer?
- A Ikke som jeg kommer på nå. Det har nå gått en liten stund nå så jeg har glemt litt, men som jeg husker så trente jeg litt mer enn det jeg hadde gjort etter at jeg var ferdig å være med i challangen. Alt i alt så var det bra. Jeg er en person som tar trenings som det kommer og hvis jeg ikke rakk det så rakk jeg det ikke.
- C Greit, tusen takk!

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150 kr, 6 weeks, Winner in loser group

- C Yes, uhm, du hadde 6 ukers challenge og 150 kr. Hvilke forventninger hadde du før challangen?
- A At jeg kom til å måtte trenere. At jeg kom til å hate livet litt fordi jeg måtte trenere. Men så hadde jeg en liten sånn forventning at jeg skulle bli flinkere til å trenere. Hvordan det ble infrikked, det spørst jo helt hvordan man ser på det.
- C Ok, ja. Hvordan følte du at det gikk under challengen?
- A Helt greit i starten. Og på slutten så ble det veldig at man trente fredag, lørdag og søndag. Og gjengen var en litt tafat gjeng der alle trente på slutten, og særlig da vi mistet 2 stk så var vi bare 3 stk igjen. Og de to som ble ute av challengen var de 2 jeg ofte trente med. Så jeg mistet veldig mye av motivasjonen min da for å trenere.
- C Så du trente ikke sammen med de 2 andre?
- A Ikke så mye, nei. Fordi den ene personen trener kun styrke og det gjør ikke jeg. Og den andre hadde en helt annen timeplan enn meg der jeg trente på kveldstid og personen trente på dagtid.
- C Skjønner, men trente du sammen med noen andre ellers?
- A Han ene jeg bor med trente jeg med og fikk han med ut et par ganger.
- C Trente du med den ene personen som røk ut av challengen etter at personen røk ut?
- A Både ja og nei. Personen var med av og til, men det var veldig vanskelig å få med personen.
- C Det samme med han andre som røk ut også?
- A Ja, han var i hvert fall umulig å få med å trenere uansett. Skulle prøve å få med, men personen kunne aldri.
- C Skjønner, hvordan følte du deg etter utfordringen?
- A Jeg følte meg litt lettet av å være ferdig. Jeg merket ikke noe særlig forskjell på livet. Da challengen var akkurat ferdig så fikk jeg en veldig hektisk uke, så da fikk jeg ikke trenert i det hele tatt. Det var fullt kjør med skole og kite-NM og alt. Jeg var bare borte heletiden. Så det ble en veldig brå overgang fra at jeg hadde tid til å trenere, også hadde jeg ikke tid i det heletatt. Så det ble bare mer stress etter challengen ble ferdig.
- C Hvordan følte du det med å vedde med penger mot dine venner i sammenhengen med treningen?
- A Jeg syns det var gøy. Det var morsomt, og skulle gjerne hatt mer penger å vedde om. Jeg merket at 150 kr var veldig mye i starten, men jo lenger tid det gikk så var pengene mindre verdt. 150 kr er ikke så mye fordelt over 4-5 uker. Og da var ikke det så mye å tape på 6 uker. Da noen røk ut, så fikk man ikke så mye igjen for det. Men det er grei sum for å få med seg flere folk. Men jeg syns det var gøy.
- C Fordi i deres gruppe så var det 2 stk som røk ut, og da fikk dere 100 kr hver. Hva syntes du om det?
- A Jeg syns det var kjedelig at de røk ut. Fordi som sagt så var det en liten sum og hadde ikke noe å si for min del når det var så lite. Også var det jo de jeg trenete med som røk ut, så motivasjonen min forsvant. Den eneste grunnen for at jeg fortsatt var med fordi jeg ville ikke at den ene personen på gruppen skulle få pengene. Personen sa heletiden «Ja, skal ikke dere slutte å trenere nå da?»
- C Så motivasjonen din ble forandret
- A Ja, så i starten så var det at jeg ville begynne å trenere, og jeg skulle være med i Birken. Ikke akkurat at jeg har løpt så mye, men challengen var en kickstart. På slutten så var

- det at den ene personen på gruppen ikke skulle få pengene mine, så pengene hadde noe si med at han ikke skulle få dem. Ikke at jeg trengte de pengene selv.
- C Men syntes du at det var negativt at motivasjonen din ble forandret?
- A Det var litt negativt med tanke på at folk røk ut, spesielt når det er venner. Sånn type, oi, der mistet jeg en til. Vi var også en gjeng som ikke trente, så det var vanskelig å få dem med i ettertid da de røk ut.
- C Hvilke grep tror du kunne blitt gjort for å få dem med igjen?
- A Det vet jeg ikke. Evt å starte challengen på nytt, muligheten til å kjøpe seg inn igjen for halv pris eller noe og bli med på resten.
- C På hvilken måte har Goalkeeper endret treningsvanene dine?
- A Challangen endret dem i 6 uker, også har det stoppet litt opp pga jeg fikk veldig mye å gjøre da de ukene var ferdig. Jeg har trent 1 gang etterpå, og kittingen telles vel også som trening, men det er mer som en hobby for meg. Så sånt sett så har jeg trent opp til 4 ganger. Jeg har hatt veldig mye å gjøre. Det har gjort det lettere for meg å tenke på trening i hvert fall!
- C Hva er svakhetsene og styrkene med Goalkeeper både med challenges og nettsiden
- A Svakheten er jo at det er veldig lett å utnytte slik den er som nå. Det finnes regler, men det følges ikke opp av noen. Og hva er definisjonen på en trening. Yoga er liksom, men blir ikke svett av det men det er fortsatt tungt. Hvordan skal man måle det opp med en person som har løpt i en time eller gjort crossfit. Hva er det gruppen forventer at er trening? Fordi hos noen grupper så er det for noen at å gå er trening, mens andre trener hardt. Men det blir regnes som likt. Særlig det med at man må bruke Strava, men min klokke bruker ikke strava.
- C Så klokken din støttet ikke Strava.
- A Nei.
- C Var det tungvint for deg å bruke Strava?
- A Nei, strava er enkelt, men når jeg har utstyr fra før av som fyller mine behov også går over til Strava som mister noen av funksjonalitetene, så er det litt kjapt.
- C Hva er det du bruker?
- A Nokia health app og kommer med klokken
- C Men å bruke Strava i seg selv var greit?
- A Ja, var one-click
- C Nettsiden da?
- A Den var helt grei. Jeg er glad i informasjon da, og det var litt lite informasjon på den. Litt mer statistikk, og ikke nødvendigvis bare at de har trent 3 ganger. Men mer informasjon om når de andre trente og evt hva de trente. Sånn at du ikke må inn på Strava og må sjekke det fordi det er ikke nødvendigvis at folk godkjenner deg. Så statistikk er det jeg savner. Ellers fungerte den helt greit for min del. Det er noe logikk som må fikses, men jeg antar at det er noe dere har kontroll over. Som f.eks at man kan logge alle 3 dager på samme dag og at det teller på nettsiden. Det fant vi ut da vi hadde glemt å logge. Hvis du ser at alle de andre trener hardt med hvilken type trening de har trent og når, så kan det spille på samvittigheten til folk med at personen må også trenre hardt. 150 kr så går det sikkert fint at folk kan gå seg en tur. Men når det er høyere sum, så er det kanskje ikke like greit. Spesielt når vi er studenter. Ved å vise hva folk gjør, så vil du få folk til å trenre i større grad.
- C Ja, bra. Hva trente du under perioden? Og prøvde du noe nytt?

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- A Jeg løp, crossfit, kickboksing, squash. Gikk en del på langrenn siden jeg kjøpte meg utstyr. Også litt styrkeøkter hjemme. Da var det å google 30 min workout på youtube og følge en jente som viste booty toning. Det var tyngre det enn å være på treningsenter har jeg merket. Fordi det er 30 min med intensivt og ikke med pause. Jeg følte at selvom en annen på gruppen mobbet meg for det, så trente jeg hardere enn personen som trener 1 time på treningsenteret da. Så jeg har prøvd mye nytt, sånn når man ikke har så mye tid så må man tenke på hva man rekker å gjøre. Jeg måtte planlegge uken min i mye større grad.
- C Var det en grunn for at du trente hjemme og ikke på treningsenteret?
- A Jeg har ikke medlemskap fordi jeg gidder ikke å betale for det. Og når jeg skal være med på birken så har jeg ikke behov til å løfte vekter og trenere bryst. Jeg skal gå ned i vekt og ikke opp i vekt.
- C Hvor lang er birken?
- A 21 km i terren.
- C Men du bestemte å løpe birken før challengen eller etter?
- A Det er et godt spørsmål. Tror vi visste om challengen, men vi visste ikke om vi ville være med. Vi meldte oss på Birken, også på challengen, for å få oss til å trenere til Birken. Jeg ville være med på challengen uansett, også fikk jeg med 2 stk til på challengen fordi de skulle være med på Birken også.
- C Hvordan tror du andre kan dra nytte av Goalkeeper?
- A Andre som i hvem som helst?
- C Ja.
- A Nei, motivere folk da. Jeg vil alltid tro at de som er best trent ikke vil ha stort nytte av det, men det er mer å få folk til å komme i gang. Kanskje de som er middels til lite trent. For de som trener mye trener mest av rutine og ikke motivasjon. Så det er vel å få folk i gang er den største funksjonen som Goalkeeper kan ha.
- C Hvor mye ville du ratet Goalkeeper (helhet) fra 1-7?
- A Sånn som den er nå: 4 kanskje. Fordi den fikk meg ut for å trenere.
- C Hva tenker du om at Goalkeeper gir rabatter til brukerne?
- A Det hørtes ganske bra ut, og folk liker jo gratis ting. Og få promokoder og sånt. Men det å gjøre en sum til gavekort så må det være en økning. Fordi det er bedre å få 150 kr igjen og bruke de hvor som helst. Rabatter er greit, f.eks fra løpelabbet og sånt. Hvis jeg hadde fått rabatter så hadde jeg brukt det
- C Siste kommentarer?
- A Nei. Det var gøy! Reglementet må jobbes litt med.
- C Hva mener du med det?
- A En svett treningsselfie skal postes og sånt som ikke ble fylt opp.
- C Det gjaldt ikke for denne prototypen, og det var en feil fra vår side at vi ikke korrekturleste før vi publiserte nettsiden. Men tusen takk!
- A Bare hyggelig!

150 kr, 6 weeks, winner

- C Du var på 6 ukers challenge, og hadde 150 kr
A Ja
C Hvilke forventninger hadde du før challengen?
A Jeg forventet kanskje ikke at jeg kom til å bli så motivert av pengene. Men kanskje at det kom til å gjøre at jeg presset meg selv til å trenere fordi jeg ikke ville tape mot mine venner. Kanskje heller det enn pengene.
C Hvordan følte du at det gikk under challengen?
A Det gikk overraskende bra, men jeg var syk i 2 uker og da var det ganske vanskelig å måtte trenere. Så jeg syntes at det var kjedelig at challengen ikke tok noe hensyn til noe sånt da. Men utover det så syntes jeg at det var ganske bra. Det var noen tekniske problemer her og der men det var gøy liksom. Alle var jo på Strava og fulgte hverandre og sånt.
C Ja, så gøy
C Følte du at det var motiverende å se at de andre hadde trent og hva de hadde trent og sånt på Strava?
A Ja, nå fulgte jeg ikke alle på Strava. Men jeg syntes at det var gøy å se på Strava hva folk hadde gjort og hvilken effekt prosjektet hadde i helhet. Hvor mange vi var som hadde begynt å trenere og trenede jevnlig.
C Hvordan syntes du det var å bruke Strava?
A Jeg syntes det var greit å bruke Strava. Noen ganger så manglet det noen treningsstyper, ellers hadde de veldig mye. Ellers så var det bare squash jeg ikke fant. Enten om det var på klokken eller strava, ellers syntes jeg at det var lett å legge ting innpå Strava. Så da det begynte å gå litt mer automatisk med Goalkeeper så gikk det bra.
C Så bra. Hvordan følte du deg etter utfordringen?
A Følte at jeg hadde generelt kommet i bedre form fordi jeg hadde trent mer jevnlig. Det var ikke helt fordi jeg hadde trent så annerledes enn før. Det var mer at jeg tok den siste økten i ukken da i alle ukene. Så sånn sett bedre ja.
C Hvordan følte du det med å vedde med penger mot dine venner i sammenhengen med trening?
A Jeg tenkte ikke så mye på pengene etter at jeg hadde vippset de. Jeg tenkte mer på det at det var mot mine venner og ble motivert av det. Men jeg tror ikke at det var pengene, men jeg ville tape og være dårligere enn de andre. Det var mest det tror jeg som var motiverende.
C Skjønner. På hvilken måte har Goalkeeper endret treningsvanene dine?
A Jeg vil si at det har ført til at jeg trener mer jevnlig. Det er ikke at jeg har gjort det tidligere, men jeg har hatt en periode der det har vært vanskelig å få til. Så å måtte komme i den rutinen i en hektisk periode og få det til, så innser jeg at jeg gjerne kan fortsette med det nå.
C Har du trent jevnlig etter det?
A Ja, den første uken så klarte jeg bare 2 da men jeg har prøvd å fortsette å holde på 3. Men jeg har trent alle ukene siden vi sluttet.
C Nice. Hva er svakhetene og styrkene med Goalkeeper? Både med challengene og nettsiden.
A Nettsiden er ganske basic per nå. Så det var ikke alltid at det gikk så sømløst. Noen ganger så var det 2 ganger at jeg ble kicket fra challengen uten at det var meningen. Og den første ukken så ble ikke treningene mine lagt til automatisk fra Strava. Og hvis du tapte så stod det at du skulle få mer penger enn det du skulle få. Men det var ingen hemminger fordi jeg gikk inn med den innstillingen at det var en prototype. Hvis det skulle vært et ferdig produkt så hadde jeg vært mer skeptisk. Fordi du kunne funnet på å betale for det og at ingen klarer å fullføre challengen da. Men når det er

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- en prototype så synes jeg at det er greit. Selve konseptet så syns jeg at det er kult, men som sagt så vet ikke jeg om det er pengene jeg blir motivert av, og at det var uansett 150 kr. Men hvis det hadde vært 500 kr så hadde det betydd mer sammen med dette aspektet med at jeg ikke hadde lyst å tape pengene mine til mine venner. Så jeg syns det er et kult konsept.
- C Nice, takk. Hva trente du under perioden? Og prøvde du noe nytt?
- A Jeg trente nok mer squash enn det jeg hadde gjort til vanlig. Jeg har prøvd det noen ganger før, men trente det jevnlig under challengen. Også har jeg parallelt drevet med styrke trenings app for å bli sterkere. Så siden jeg var med i challengen så ble jeg mer bevisst over hva jeg skulle gjennomføre på mine treninger for å få best utbytte av det. Da valgte jeg squash for å få bedre kondis og trenere mer strukturert styrke.
- C Nice. Hva synes du om kombinasjonen (uke, depositum og treningsdager) av utfordringen du har?
- A Jeg syns 3 var veldig passe fordi jeg selv har følt at det er lett å få til 2, men man må jobbe litt for å få til 3. Også ble jeg glad for at det var 3 dager og 6 uker fordi da har man en sjanse å komme inn i det, fordi hvis det bare hadde vært 2 eller 3 så tror ikke jeg at jeg hadde klart å komme til det punktet der jeg hadde det i rutinene mine. Så jeg likte godt å jeg fikk 3 dager og 6 uker. Så jeg var glad for at vi ikke fikk 2 eller 3.
- C Men hvis du hadde lagd en egen challenge. Tror du at du hadde valgt 6 uker selv?
- A Ja, eller jeg vet ikke. Jeg tror ikke at jeg hadde valgt noe mindre. Så 6 eller 8 uker kanskje.
- C Så bra, skjønner. Så 4 dager i uken hadde vært for mye for deg?
- A Ja, i hvert fall i den livssituasjonen jeg er i nå med skole som tar veldig mye tid av døgnet. Så det å ta seg en trening i helgen så var det en fordel. Så jeg tror at hvis det hadde vært 4 uker så tror jeg at det hadde vært mer pes da. Da tror jeg at i større grad hadde hatt større sjanser for å gi opp fordi det var en motiverende følelse å få til 3 treninger men å skulle ta seg tid til 1 trening ekstra så hadde det ikke gått. Spesielt i de ukene jeg var syk.
- C Skjønner, trente du sammen med de du konkurrerte med?
- A I noen grad, men i noen grad ikke. Jeg trente mest med folk i andre challenges fordi jeg følte at treningsrutinene demmes passet bedre mine rutiner. Så ikke så mye egentlig. Men vi snakket mye om det da, så det var jo likevel felles så jeg følte ikke at det var et negativt aspekt at jeg ikke trente med dem.
- C Mhm, skjønner. Syntes du at du heller trivdes i den andre gruppen som har mer passende eller mer lik treningsrutine enn deg eller gikk det greit å være i den gruppen du var i?
- A Det var det samme egentlig. Jeg syns jo at det var mine venner jeg var i challengen med og hadde nok valgt det på nytt hvis jeg hadde fått velge igjen.
- C Hvordan tror du andre kan dra nytte av Goalkeeper?
- A Jeg tror at man kan, nå vet jeg ikke hvordan Goalkeeper er ment til å være fordi nå fikk jeg bare utdelt en challenge, men hvis man kan justere det selv så tror jeg andre kan dra nytte av det med å lage challenges som de ønsker å få en rutine ut av selv. Og kanskje føle litt på at de skal gjøre det sammen og sånt da og ikke ha lyst til å tape. De fleste har jo konkurranse instinkt, men det er vanskelig å ha konkurranse med seg selv syns jeg da enn å ha konkurranse med andre.
- C Bra. Hvor mye ville du ratet Goalkeeper (helhet) fra 1-7?
- A Det var vanskelig. Basert på hva?
- C Alt. Hele brukeropplevelsen din.
- A Kanskje 5.
- C Yes. Takk.
- C Ellers er Goalkeeper fortsatt under utvikling og tenker å ha samarbiedspartnere med rabatter og gjøre om depositumet om til gavekort. Hva tenker du om dette?
- A Jeg tror det er bra. Trening er ofte knyttet til interesser til treningsstøy og sunn mat og sånt, så jeg syns det er relevant hvis vi kan styre det selv da. Om man har lyst til å få penger tilbake eller få goder for det så er det bare bra.

- C Jepp. Har du noen siste kommentarer?
- A Jeg syns det har vært gøy å være med. Kult prosjekt å delta i og det har jo hjulpet. Det var gøy å se effekten av det på seg selv når man egentlig bare gikk inn i det for å hjelpe og være tester.
- C Tusen takk for at du ville være med!

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500 kr, 6 weeks, loser

- C ja, ok, greit, eeh, ja, du hadde 6 ukers challenge og 500 kr og du datt ut i uke 3
A Det stemmer, bare gni det inn
C Hvorfor datt du ut?
A Jeg ble syk, så jeg hadde ikke mulighet til å trenere, eller nei, jeg følte ikke at jeg hadde mulighet til å trenere
C Ah, ok. Du kunne ikke tenkt deg å gjøre yoga hjemme en gang?
A Nei, jeg lå hjemme med feber så, greien var at jeg var syk på onsdag og hadde tenkt å ta, jeg hadde trent før onsdagen og hadde tenkt å ta de to siste på torsdag og søndag, og da var det at hvis jeg fikk feber da så gadd jeg ikke å trenere. I første uken så var jeg småsyk og tok en økt hjemme som statistisk styrke trenings. Da gikk det greit fordi da var jeg forskjølet og var ikke et problem, men så ble det verre med feber. Hvis du har vondt i hodet, så har du vondt i hodet og da blir det værre å trenere syns jeg.
C Hva syns du om at Goalkeeper ikke tok hensyn til at du var syk, altså at du ble instant ute av challenge?
A Jeg syns det var litt dumt egentlig fordi det var ikke noe jeg kunne ha kontroll på liksom. Stort sett så kan du kontrollere noe annet enn om du er syk. Hvis du blir syk eller skadet, så er det ikke noen unnskyldning som du ikke har noe med. Jeg syns det er for mye å be om at hvis du har knekt foten så må du fortsatt løpe en tur. Det er litt sånn da. Jeg tenker det finnes forskjellige måter å unngå den problematikken på.
C Hvordan da?
A Enten ha mulighet til at man kan snakke sammen med de på gruppen og foreslå liksom: Hei, er det greit at jeg skipper 1 trenings på grunn av dette? Det gikk jo forså vidt an å gjøre det nå også, men da måtte jeg logge, men det hadde vært greit å ha det som en greie i Goalkeeper. Den andre måten er å ha muligheten til å kjøpe seg inn igjen i challenge. Jeg tror det ville vært mye å betale seg inn igjen for full pris, men i hvert fall til lavere pris da.
C Mhm
A Tenker jeg, fordi da får du en liten straff, enten du ikke får hele beløpet tilbake, men de andre i gruppen får en andel av det. Eller at det du betaler inn med er en del av de 500 kr, men alle de 75 kr blir splittet til alle andre enn deg. Det kan være en annen ting.
C Ja, interessant. Ellers syns du at det gikk fint før du ble syk?
A Ja, jeg syns det. Det var en liksom, jeg hadde jo tenkt å begynne å trenere igjen etter at jeg ble frisk igjen men jeg har jo ikke begynt å trenere. Jeg føler at jeg har samme mindset nå som før jeg ble med på challenge, og eneste grunnen for at jeg fortsatt trenerte da jeg var syk var fordi jeg måtte gjøre challenge fordi jeg ikke ville tape 500 kr.
C Skjønner. Ja, så Hvilke forventninger hadde du før challenge? Da du fikk?
A Neeeeeei
C NEEEEEI
A Vi tar det senere...
C Ble den knust nå?
A Ja....
C NEEEEEI
A Ok, lets go

- C Hvilke forventninger hadde du før challenge? Altså da du fikk vite det
- A At det kom til å gå kjempe greit fordi i sommerferiene så trener jeg alltid 3-4 ganger i Uken fordi jeg har ikke noe bedre å gjøre. Så da jeg fikk det så tenkte jeg at det ikke ble noe problem å trenere fast hver uke. Egentlig. Det var da litt mer pain enn det jeg hadde tenkt fordi jeg har som sagt mye mindre å gjøre i sommerferien enn hverdagen min her i Trondheim. Men ellers var det greit
- C Men hadde du en slik treningsroutine før som student?
- A Nei, trener ikke her.
- C Hvordan følte du at det gikk under challenge? Du sa at det gikk fint?
- A Ja, det gikk fint helt til jeg ble syk. Og at jeg tatt ut også fordi da følte jeg at det ikke var noe vits å fortsette fordi da hadde jeg allerede tapt pengene mine.
- C Du hadde ikke tenkt å trenere utenom heller?
- A Jeg hadde tenkt å fortsette å trenere etter challenge, men så tenkte jeg at jeg ikke hadde tid og at det var mye chillere å sitte hjemme å game. Det gikk bare ut over meg selv egentlig
- C Så du har absolutt ikke trent en eneste gang etter challenge?
- A Jeg tror ikke det
- C Curlingen?
- A Ja, stemmer, curlingen.
- C Har du svart på undersøkelsen min?
- A Ja, og der står det at jeg ikke har trent. Men da følte jeg ikke at det var treningsat nå skal jeg ut å trenere, men jeg dro fordi jeg tenkte at jeg skal på teambuilding. Men jeg tenkte ikke over curling, men jeg hadde ikke vært ute og trenet siden
- C Så du har ikke trenet frivillig
- A Jeg har ikke gått ut med tanken om å trenere. Jeg har tenkt tanken, men jeg har ikke gått ut og gjort det. Sånn sett. Men jeg kunne sett curlingen på som trenings hvis jeg fortsatt var med i challenge fordi jeg hadde nok logget den.
- C Hvordan følte du deg etter utfordringen?
- A Nei, ikke noe spesielt. Bare kjøpt å dette ut. Bare det. Hadde et håp om at jeg kom til å fortsette å trenere, men det gjorde jeg ikke
- C Nei
- A Men det tenker jeg fordi det var demotiverende å dette ut av treningen, også er jeg fortsatt litt småsyk og det er bare dritt. Så det er litt sånn det.
- C Skjønner, ja, eh, ja, Hvordan følte du det med å vedde med penger mot dine venner i sammenhengen med treningen?
- A Tja, jeg syns det var en god greie syns jeg. Det var en sånn lett motivator da. Penger. Det er a) en lett motivator å holde deg i gang. Og ja, man kunne lett argumentert for å trenere med kompisene dine lær, men jeg trente ikke med kompisene mine. Alle i gruppen trente fordi vi ikke ville tape penger. Og hvis kompisene din skal ha så stor innvirkning så må dere være på samme sted på studioet. Så sånn sett så jeg på det som bra fordi jeg er litt sånn på med delt mening om å trenere sammen fordi jeg syns noen ganger er det stress å finne passende tidspunkter, men nå var det mer sånn du trenete pga vennene dine og at du kom til å tape penger. Men du trengte ikke å trenere og finne tidspunkt som passet for alle liksom.
- C Skjønner, yes. På hvilken måte har Goalkeeper endret treningsvanene dine?
- A Det har ikke gjort det da, jeg hadde et håp om at det skulle gjøre det, og jeg tror at det hadde gjort det hvis jeg hadde vært rutinert på hvordan man gjør under øvelsen. Mandag, onsdag og si lørdag hadde vært treningsdager og jeg hadde gjort det i 6 uker så hadde jeg nok trodd at jeg hadde fått en rutine på det etter det egentlig. Men jeg var mer sånn «ok, jeg får til en gang i starten og tar en gang slutten av uken og en i helgen» og det ble litt stress og kronglete fordi jeg aldri satt opp et slikt skjema med faste treningsdager. Nå var det sånn, er jeg keen på å trenere? Har jeg tid til å trenere? Jeg satt ikke av tid, og men jeg fant tid til det og det gjorde at jeg ikke hadde noen struktur.

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- C Hva hadde du syntes om at challengen tillot at gruppen kunne bestemme faste treningsdager? Hadde det, alle har jo forskjellige timeplan da...
- A Det virker ikke helt realistisk å få det til, eller det spørs da. Det hadde jo kanskje gått hvis alle hadde vært i arbeidslivet fordi da er det mye lettere. Mens nå er det forskjellige dager med bedpresser og kurs, og faste opplegg på kvelden med faste tidspunkter. Det første jeg er innstilt på om dagene er å først dra på skolen og jeg drar hjem et tidspunkt og dermed må trene etter skolen. Det kommer også plutslig faste greier på kvelden og da er det vanskelig med å få det til å klaffe med 6 personer. Så det ville ikke vært realistisk med oss som studenter men i arbeidslivet, så ja.
- C Hva er svakhetene og styrkene med Goalkeeper? Både med challengene og nettsiden som ble lagd.
- A Jeg følte at jeg aldri var innom nettsiden og følte ikke at jeg hadde noen grunn til å gå innpå den. Mest fordi jeg følte at jeg ikke trengte å følge med på dem egentlig, også trengte jeg ikke å gå innom der fordi jeg skulle allerede logge øktene mine på Strava. Jeg følte at jeg aldri var innom egentlig. Så jeg har ikke lagt merke til noe mer positivt eller negativt med nettsiden annet enn det. Også er det med ikke noe håndtering når man er syk eller av andre åpenbare årsaker er en annen ting fordi hvis challengen er ment til å være mellom venner så tenker jeg at det er veldig greit å ta opp med venner at det er greit å diskutere med venner å si at man har feber og at det ikke er noe problem. Hadde vært greit å ha muligheten til å gjøre det uten å måtte «fake logge» en treningsøkt tenker jeg da. Jeg føler at det blir feil å fake logge fordi da lyver du bare at du har trent. Da er det mye bedre å ha en option å f.eks ha stemmestystem. «Hei, jeg er syk. Hva stemmer dere for at jeg skal få slippet?». Jeg syns egentlig konseptet i seg selv er en grei ting. Det er bare noen få svakheter.
- C Takk, eh, Hva trente du under perioden? Og prøvde du noe nytt?
- A Jeg prøvde et nytt treningsprogram da, men det er fordi det jeg pleier å trene tar for mye tid. Jeg føler ikke at det var å prøve noe nyttre da fordi det var som å ta en annen serie med øvelser. Men jeg prøvde ikke noe ny sport.
- C Har du vært på noen av x-sport sine arrangementer?
- A Ja, jeg var på crossfiten, men det hadde jeg vært med på før uansett. Kan jo si at det telte på. Challenget var så klart en motivator for å være med på crossfit. Men som sagt så ville jeg vært med på det uansett som jeg ser for meg.
- C Hva synes du om kombinasjonen (uke, depositum og treningsdager) av utfordringen du har?
- A Jeg syns den var grei, jeg likte 3 dager i uken fordi jeg syns ikke at det er noe vits å trenere noe mindre. Liksom, 1 jogge tur i uken. Jeg føler at man ikke får noe ut av det hvis man trener mindre. Det positive var at det virket litt høyt, men på en annen side så hvis det hadde vært 100 kr eller 150 kr så hadde jeg lett funnet på å skipe treningen fordi jeg er sliten en dag. En 100 kr så hadde jeg ikke giddet å slite meg ut for det. Så det at det var 500 kr så fikk jeg følelsen over at det er litt mer penger. Det er liksom en OK tur på byn. Det svir å måtte miste alt det. Så i tillegg til at da andre falt ut, og da er det en grei fortjeneste for de andre, 75 kr hver. Antall uker var, ja, 6 uker, men nå fullførte jeg ikke da så jeg har ikke så noe si på det. Men jeg syntes at 2 uker var for kort og 3 uker. Så kanskje 4 eller 6 uker så er det nok greit. Og jeg vet ikke hva som kan være best av dem.
- C Folk lager egentlig challengene selv på Goalkeeper, så da er det typisk at man lager korte uker da som vi tror da i hvert fall. Så under studiene så var det slik at vi kunne få konsistente resultater fra det
- A Ja, nei, jeg trodde at 2 uker er noe egentlig. Jeg bare føler at hvis du trenger faktisk så er det liksom, meh. Så en 6 uker tror jeg er bedre. Men jeg vet ikke. Jeg tror ikke at jeg hadde vært med på en challenge til etter de 6 ukene bare fordi jeg liker bedre å ha kontroll på når jeg selv stikker på trening og sånn. Og å føle seg tvunget til å måtte løpe ute på en søndag når du føler deg halv klein bare fordi du må gjøre det sånn sett, men da er det liksom man vil heller vente til mandagen med å trenere. Så ja, jeg tror at etter den første perioden, så kanskje en lang periode i starten også korte

- gjentagende etter det kanskje. Men hvis jeg skulle prøvd det igjen så hadde jeg nok kanskje prøvd å få til squash 1 gang i uken.
- C Trente du sammen med de du konkurrere med?
- A Tror ikke at jeg gjorde det, bortsett fra crossfiten da
- C Men trente du sammen med noen andre?
- A Nei, forresten jeg var og trente med en annen, men da var vi på treningsenteret samtidig, men trente helt forskjellig. Såååå, jeg merker at jeg ikke er så fan av å trenne sammen med andre med mindre det er en sport, fordi f.eks når jeg jogger så liker jeg å jogge helt til jeg blir sliten og da orker jeg ikke å snakke. Så da blir det å jogge ved siden av hverandre, helt stille, eller puster og peser da. Men så har du at man trener styrke og da kan det gå å trenere med flere samtidig, men jeg er litt sånn, ja, det kan gå. Men jeg igjen så føler jeg at jeg liker å høre på podcast eller noe.
- C Skjønner
- A Så med mindre det er meningen, så
- C Hvordan var det å bruke Strava?
- A Jeg likte det, jeg har også vært borti det før. Det var litt tungvint å logge styrkeøkter føler jeg. Det kan være at jeg ikke fant ut hvordan, men det hadde vært fint å kopiere en template og kopiere. Man har gjerne den samme rutine når man tar styrketrenings, og da er det dumt at jeg ikke bare kan kopiere inn forrige ukes økt, også endre på antall repetisjoner og vekt. Det er så pas å skrive inn alle øvelsene når man tar sånn 10 øvelser. Men til løping så er det perfekt fordi da logger den alt for deg. Og det er helt nydelig med tanke på at jeg har pulsmauler som kobler seg lett opp mot Strava.
- C Så du følte ikke noe behov for noe annet enn Strava
- A Nei, var bare hvis jeg kanskje hadde hatt en bedre app for styrkelogging da. Men ja, Strava sin fungerte jo greit.
- C Skjønner, ja. Hvordan tror du andre kan dra nytte av Goalkeeper?
- A Det er jo de, hvis man trenger en unnskyldning for å komme seg ut, det er de som kanskje klarer å ikke komme seg ut av dem selv. Det er en motivator for å begynne å trenere og det er en motivator for å fortsette å trenere. Om det er på noen andre måter så vet jeg ikke.
- C Hvor mye ville du ratet Goalkeeper (helhet) fra 1-7?
- A 5, pga svakhetsene
- C Ja, ærlig det
- C Goalkeeper er fortsatt under utvikling, og da tenker vi å ha samarbeidspartnere som gir rabatter og sånt da. Hva tenker du om at Goalkeeper gir rabatter til brukerne? Brukerne kan velge å få pengene igjen, eller omgjøre det til gavekort, eller rabatt.
- A Det er vel bare lettere å bare få cash. Det er jo som julegaver. Du vet bedre selv hva du vil ha enn andre. Men hvis du spytter inn 500 kr og kan velge 500 kr eller 600 kr på komplet.no fordi da tenker man kanskje at man har brukt det på komplet.
- C Men hvis du hadde fått rabatt i tillegg til pengene da.
- A Det hadde ikke gitt meg noe bonus føler jeg. Fordi du har jo masse sånne spill som fungerer på den måten der du må gjøre spesielle ting for å få rabattene. Men jeg har aldri vært interessert i sånne type spill
- C Hvorfor det?
- A Det er vel fordi jeg føler at jeg bruker lite penger enn på byn. Det er da jeg bruker penger og man får ikke rabatt på alkohol uansett. Det jeg kjøper bare firstprice ting, og bruker ikke så mye penger, så jeg føler at jeg ikke har bruk for rabatter.
- C Skjønner, som betyr at hvis du hadde fått rabatter så hadde du bare ikke brydd deg om det?
- A Jeg hadde nok brukt det så hadde jeg vurdert å bruke det. F.eks 20 eller 10 prosent på komplet som er en butikk der jeg bruker penger uten at jeg trenger å bruke penger så hadde jeg nok brukt det.
- C Hva mener du med bruker penger uten at du trenger å bruke penger?
- A Da mener jeg f.eks hvis jeg hadde fått 10 prosent på akademika så hadde jeg ikke giddet fordi de har ikke noe jeg er interessert i. Komplet har noe jeg er interessert i,

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men jeg trenger det egentlig ikke, men de har ting jeg er interessert i. Et liksom «Skal jeg ikke kjøpe en raspberry pi når jeg har 10% off?». Det er litt mer tankegangen min, altså relevante steder for meg, f.eks hvis jeg får 10% på JYSK så girder jo ikke jeg å dra på JYSK. Det er der tanken er da.

- C Ja, greit! Har du noen siste kommentarer? Hva som helst.
A Nei, tror ikke jeg har det. Jeg syns Goalkeeper greit og jeg har troen på at det kan få deg i gang med å trenere. Men jeg sliter med å se hvorfor man skal fortsette å bruke det etter at man har kommet i gang. Annet enn å ha challenges mot andre, men når man først har kommet i gang og har rutinen inne så ser jeg ikke noe vits å fortsette å bruke penger på det, fordi da setter du deg i den posisjonen at du kan bli syk eller at noe annet skjer og at det gjør at du kan tape penger. I stedet for å bare vente til du blir frisk også starte på igjen. Jeg har troen på at tankegangen at hvis du trener så mange ganger i en viss tid så fortsetter du å gjøre det.
C Nice, tusen takk

500 kr, 6 weeks, winner

- C Så du hadde 6 ukers challenge og 500 kr. Hvilke forventninger hadde du før challengen?
- A Det var ikke noe spesielle forventinger annet enn at jeg måtte logge treningene og fortsette med min vanlige trening.
- C Hvordan følte du at det gikk under challengen?
- A Det gikk bra, jeg hadde mindre frihet til å skippe da.
- C Fordi det hadde du gjort ellers?
- A Ja
- C Fordi?
- A Fordi jeg har ikke vært så motivert å trenere i det siste.
- C Ja, skjønner
- A Skal jeg snakke høyere?
- C Ja
- C Hvordan følte du deg etter utfordringen?
- A Det var litt digg å kunne trenere som jeg ville og ikke måtte trenere 3 ganger i uken lenger.
- C Hvorfor følte du at du måtte trenere?
- A Jeg ville ikke miste pengene mine
- C Så det var motivasjonen?
- A Ja
- C Mest?
- A Mest ja, ellers er det jo at mine venner ser dømmende på meg hvis jeg ikke har trent. Og at de blir skuffet.
- C Hvordan følte du det med å vedde med penger mot dine venner i sammenhengen med trening?
- A Ikke noe problem, men det var ikke noe jeg ville gjort utenom, men det går helt fint.
- C Ja. På hvilken måte har Goalkeeper endret treningsvanene dine?
- A Jeg kunne ikke skippe og måtte trenere 3 dager i uken.
- C Ja, men hadde det endret noe?
- A På hvilken måte?
- C Nei, at du har fått bedre rutiner eller føler deg bedre eller noe?
- A Jeg endret litt på treningsrutinene der jeg trente litt mindre styrke og klaret mer.
- C Men trente du før challengen startet?
- A Kindof, men det var ujevnt men jeg prøvde å holde det på et jevnt nivå.
- C Så akkurat på den fronten så har ikke det endret seg?
- A Nei
- C Greit. Hva er svakhetsene og styrkene med Goalkeeper? Både med challengen og nettsiden.
- A Nettsiden gjør egentlig ingenting. Man trenger ikke å forholde seg til Goalkeeper nettsiden i det hele tatt og alt skjer gjennom Strava. Challenget så trener jeg allerede 3 ganger i uken og at det er det jeg prøver. I at det var en challenge involvert så var det mer incentiv til å gjøre det.
- C Hva trente du under perioden? Og prøvde du noe nytt?

BIBLIOGRAPHY

- A Jeg jogget mer. Fordi da kunne jeg bli ferdig med treningen etter 30 min. Jeg kunne også bytte ut legday med jogging.
- C Hva syntes du om det?
- A Jeg er i veldig dårlig form når det kommer til jogging....
- C Hehe, skjønner.
- A Men det er ikke noe jeg ikke ville gjort utenom challengen. Jeg hadde nok bare skippet dagen.
- C Men syntes du at det var givende? Eller jogget du fordi du måtte?
- A Jeg har jo lyst å jogge, men det er noe av det mer kjedelig syns jeg. Så det blir fort fordi jeg måtte.
- C Hva synes du om kombinasjonen (uke, depositum og treningsdager) av utfordringen du har?
- A Jeg syntes at det var greit fordi jeg prøver jo å trenre den mengden i uken. Så det var greit at det var samme mengde og ikke mer enn det jeg vanligvis ville gjort. Og med penger så har jeg ikke så lyst å miste pengene mine. Så jeg måtte trenre da.
- C Skjønner, rente du sammen med de du konkurrerer med?
- A Jeg prøvde, men jeg var litt var litt dårlig motivert til å trenre så det ble senere enn de andre og andre dager og tider.
- C Som betyr at du gjorde det eller ikke.
- A Noen ganger ja, eller noen ganger ikke?
- C Men trente du sammen med folk som ikke var med i challengen og?
- A Ja, har en kompis jeg klatrer sammen.
- C Nice. Hvordan var det å bruke Strava?
- A Det var litt forvirrende i starten. Jeg fant ikke legg til knappen fordi den var gjemt bort, men da jeg fant den så gikk det greit å legge det til. Det var ikke så mye som måtte registreres. Jeg bare gadd ikke å navngi dem jeg bare satt tidspunkt.
- C Har du brukt andre logge apper eller noe?
- A Nei
- C Ok, så du kan ikke akkurat si at du anbefaler noen andre..
- A Nei jeg har ikke noen andre erfaringer med andre tjenester fordi jeg logger ikke treninger.
- C Ja, skjønner. Hvordan tror du andre kan dra nytte av Goalkeeper?
- A Hvis de ikke har lyst å miste penger så det er en ekstra motivasjon.
- C Hvor mye ville du ratet Goalkeeper (helhet) fra 1-7?
- A Hva da? Alt?
- C Ja, altså brukeropplevelsen og sånt
- A fra 1-7? 5. Goalkeeper fikk meg faktisk til å trenre så det er ikke så negativt da.
- C Nice. Goalkeeper er fortsatt under utvikling og tenker å ha samarbeidspartnere der folk kan få rabatter og evt få omgjort depositumet ditt til gavekort. Hva tenker du om dette?
- A Når det kommer til omgjøre pengene til gavekort så får jo du mer verdi av å bare få pengene tilbake. Gavekortet har ikke så mye verdi i seg. Men når det kommer til rabatter og sånt så hørtes det greit ut.
- C Har noen siste kommentarer?
- A Nei
- C Ingenting?
- A Nei. Er bare digg å ikke måtte trenre heletiden.
- C Greit, takk!

L T-test for second questionnaire

Independent Samples T-Test: Gender

Gender									
	Levene's Test for Equality of Variances			t-test for Equality of Means				95% Confidence Interval of the Difference Lower	Upper
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference		
SUS	Equal variances assumed	.361	.551	-1.657	46	.104	-.64583	.38978	-1.43042
	Equal variances not assumed			-1.657	45.591	.104	-.64583	.38978	.13894
CIU	Equal variances assumed	.074	.787	-1.045	46	.302	-.34375	.32902	-1.00604
	Equal variances not assumed			-1.045	45.621	.302	-.34375	.32902	.31869
CIE	Equal variances assumed	1.096	.301	.372	46	.711	.11458	.30762	-.50463
	Equal variances not assumed			.372	43.871	.711	.11458	.30762	.73461
NET	Equal variances assumed	.034	.854	-.653	46	.517	-.25000	.38295	-1.02085
	Equal variances not assumed			-.653	45.968	.517	-.25000	.38295	.52086
POS	Equal variances assumed	.004	.949	-2.407	46	.020	-1.01389	.42122	-1.86176
	Equal variances not assumed			-2.407	45.775	.020	-1.01389	.42122	-.16590
NEG	Equal variances assumed	2.297	.137	.993	46	.326	.26389	.26573	-.27099
	Equal variances not assumed			.993	42.487	.326	.26389	.26573	.79996
EXE	Equal variances assumed	.032	.859	-1.161	46	.252	-.56667	.48800	-1.54895
	Equal variances not assumed			-1.161	45.737	.252	-.56667	.48800	.41562
REB	Equal variances assumed	.605	.441	-1.865	46	.069	-.72917	.39094	-1.51609
	Equal variances not assumed			-1.865	45.652	.069	-.72917	.39094	.05776
REC	Equal variances assumed	.004	.952	-1.974	46	.054	-.87500	.44331	-1.76733
	Equal variances not assumed			-1.974	45.970	.054	-.87500	.44331	.01733
SUB	Equal variances assumed	.842	.364	-2.031	46	.048	-.77083	.37959	-1.53491
	Equal variances not assumed			-2.031	44.818	.048	-.77083	.37959	-.00622
WOM	Equal variances assumed	.016	.901	-1.702	46	.095	-.82292	.48345	-1.79606
	Equal variances not assumed			-1.702	45.839	.095	-.82292	.48345	.15032
HAB	Equal variances assumed	4.035	.050	.556	46	.581	.23611	.42487	-.61911
	Equal variances not assumed			.556	41.157	.581	.23611	.42487	1.09133
BEH	Equal variances assumed	1.447	.235	-.298	46	.767	-.13889	.46638	-1.07766
	Equal variances not assumed			-.298	45.069	.767	-.13889	.46638	.79988
PEB	Equal variances assumed	.337	.565	.305	46	.762	.09722	.31866	-.54420
	Equal variances not assumed			.305	45.429	.762	.09722	.31866	.73864
MOT	Equal variances assumed	.674	.416	-1.327	46	.191	-.51389	.38737	-1.29362
	Equal variances not assumed			-1.327	45.062	.191	-.51389	.38737	.26584

BIBLIOGRAPHY

Independent Samples T-Test: Age, Cut point = 25-29

Age, Cut point = 25-29								
	Levene's Test for Equality of Variances			t-test for Equality of Means				95% Confidence Interval of the Difference
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	
SUS	Equal variances assumed	.691	.410	2.890	46	.006	1.26904	.43913 .38512 2.15297
	Equal variances not assumed			3.112	18.516	.006	1.26904	.40781 .41397 2.12412
CIU	Equal variances assumed	.983	.327	1.421	46	.162	.55098	.38761 -.22924 1.33121
	Equal variances not assumed			1.595	19.976	.126	.55098	.34546 -.16968 1.27165
CIE	Equal variances assumed	.014	.907	-.438	46	.663	-.16032	.36575 -.89653 .57589
	Equal variances not assumed			-.430	15.971	.673	-.16032	.37291 -.95098 .63034
NET	Equal variances assumed	.615	.437	1.527	46	.134	.68182	.44651 -.21695 1.58059
	Equal variances not assumed			1.624	18.120	.122	.68182	.41986 -.19985 1.56348
POS	Equal variances assumed	2.226	.142	.434	46	.667	.23014	.53064 -.83798 1.29826
	Equal variances not assumed			.513	22.217	.613	.23014	.44897 -.70044 1.16072
NEG	Equal variances assumed	3.030	.088	-.939	46	.352	-.29730	.31647 -.93431 .33972
	Equal variances not assumed			-1.244	29.187	.223	-.29730	.23901 -.78600 .19140
EXE	Equal variances assumed	2.692	.108	.861	46	.394	.50319	.58429 -.67293 1.67932
	Equal variances not assumed			.723	13.274	.482	.50319	.69595 -.99716 2.00355
REB	Equal variances assumed	2.391	.129	1.278	46	.208	.60565	.47400 -.34847 1.55977
	Equal variances not assumed			1.529	22.818	.140	.60565	.39619 -.21429 1.42559
REC	Equal variances assumed	.289	.593	.206	46	.838	.11302	.54900 -.99205 1.21810
	Equal variances not assumed			.219	18.129	.829	.11302	.51608 -.97067 1.19671
SUB	Equal variances assumed	7.687	.008	.958	46	.343	.44717	.46675 -.49234 1.38668
	Equal variances not assumed			1.534	45.203	.132	.44717	.29158 -.14003 1.03438
WOM	Equal variances assumed	.868	.356	2.170	46	.035	1.22543	.56477 .08860 2.36226
	Equal variances not assumed			2.318	18.264	.032	1.22543	.52863 .11598 2.33488
HAB	Equal variances assumed	.557	.459	-1.287	46	.205	-.64128	.49824 -.164418 .36163
	Equal variances not assumed			-1.186	14.711	.254	-.64128	.54064 -.179561 .51305
BEH	Equal variances assumed	1.283	.263	-.736	46	.466	-.40622	.55212 -.151758 .70513
	Equal variances not assumed			-.821	19.743	.422	-.40622	.49509 -.143983 .62738
PEB	Equal variances assumed	.723	.399	.037	46	.971	.01392	.37946 -.74989 .77774
	Equal variances not assumed			.040	18.511	.969	.01392	.35245 -.72507 .75292
MOT	Equal variances assumed	1.690	.200	1.302	46	.199	.60033	.46114 -.32790 1.52855
	Equal variances not assumed			1.423	19.016	.171	.60033	.42192 -.28272 1.48338

Independent Samples T-Test: Weeks

Weeks											
		Levene's Test for Equality of Variances			t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference			
SUS	Equal variances assumed	.035	.853	.611	.46	.544	.24603	.40278	-.56473	1.05680	
	Equal variances not assumed			.614	43.967	.542	.24603	.40059	-.56133	1.05339	
CIU	Equal variances assumed	15.633	.000	2.065	46	.045	.66270	.32099	.01657	1.30883	
	Equal variances not assumed			1.942	30.755	.061	.66270	.34119	-.03338	1.35878	
CIE	Equal variances assumed	.527	.472	1.718	46	.092	.51720	.30101	-.08871	1.12310	
	Equal variances not assumed			1.776	45.996	.082	.51720	.29120	-.06895	1.10334	
NET	Equal variances assumed	7.217	.010	.762	46	.450	.29365	.38534	-.48200	1.06930	
	Equal variances not assumed			.796	45.582	.430	.29365	.36894	-.44916	1.03646	
POS	Equal variances assumed	.147	.703	1.395	46	.170	.61552	.44126	-.27269	1.50373	
	Equal variances not assumed			1.383	41.693	.174	.61552	.44492	-.28257	1.51361	
NEG	Equal variances assumed	.885	.352	-.994	46	.325	-.26631	.26782	-.80541	.27278	
	Equal variances not assumed			-1.013	45.450	.316	-.26631	.26287	-.79562	.26299	
EXE	Equal variances assumed	1.003	.322	-.959	46	.342	-.47407	.49409	-1.46863	.52048	
	Equal variances not assumed			-.942	39.601	.352	-.47407	.50353	-1.49207	.54392	
REB	Equal variances assumed	.049	.826	1.163	46	.251	.46825	.40278	-.34251	1.27902	
	Equal variances not assumed			1.161	42.878	.252	.46825	.40342	-.34539	1.28189	
REC	Equal variances assumed	1.365	.249	2.441	46	.019	1.06878	.43785	.18743	1.95014	
	Equal variances not assumed			2.400	40.047	.021	1.06878	.44524	.16895	1.96861	
SUB	Equal variances assumed	3.082	.086	1.379	46	.175	.53968	.39136	-.24809	1.32746	
	Equal variances not assumed			1.322	34.716	.195	.53968	.40811	-.28907	1.36843	
WOM	Equal variances assumed	1.167	.286	.441	46	.662	.22090	.50133	-.78823	1.23003	
	Equal variances not assumed			.433	39.811	.667	.22090	.51038	-.81078	1.25258	
HAB	Equal variances assumed	.019	.890	.498	46	.621	.21340	.42851	-.64914	1.07595	
	Equal variances not assumed			.504	44.827	.617	.21340	.42332	-.63930	1.06610	
BEH	Equal variances assumed	.167	.684	.663	46	.511	.31041	.46829	-.63221	1.25302	
	Equal variances not assumed			.660	42.362	.513	.31041	.47043	-.63873	1.25954	
PEB	Equal variances assumed	.044	.835	.027	46	.978	.00882	.32150	-.63832	.65596	
	Equal variances not assumed			.027	41.976	.978	.00882	.32367	-.64438	.66202	
MOT	Equal variances assumed	.154	.697	1.008	46	.319	.39683	.39350	-.39525	1.18890	
	Equal variances not assumed			1.020	44.784	.313	.39683	.38888	-.38653	1.18018	

BIBLIOGRAPHY

Independent Samples T-Test: 150 kr vs 500 kr

150 kr vs 500 kr								
	Levene's Test for Equality of Variances			t-test for Equality of Means			95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower
SUS	Equal variances assumed	.013	.910	-2.789	32	.009	-.124035	.44470
	Equal variances not assumed			-2.775	29.580	.009	-.124035	.44697
CIU	Equal variances assumed	8.211	.007	-1.820	32	.078	-.72719	.39964
	Equal variances not assumed			-1.721	21.994	.099	-.72719	.42243
CIE	Equal variances assumed	.050	.825	.330	32	.743	.11140	.33733
	Equal variances not assumed			.330	30.073	.744	.11140	.33768
NET	Equal variances assumed	2.140	.153	-.222	32	.826	-.10351	.46617
	Equal variances not assumed			-.213	24.213	.833	-.10351	.48569
POS	Equal variances assumed	1.250	.272	-2.189	32	.036	-1.09474	.50007
	Equal variances not assumed			-2.130	26.321	.043	-1.09474	.51406
NEG	Equal variances assumed	.250	.620	.853	32	.400	.25380	.29740
	Equal variances not assumed			.853	30.152	.400	.25380	.29751
EXE	Equal variances assumed	2.068	.160	.353	32	.726	.20912	.59177
	Equal variances not assumed			.342	25.731	.735	.20912	.61062
REB	Equal variances assumed	.052	.820	-1.801	32	.081	-.78421	.43531
	Equal variances not assumed			-1.816	31.013	.079	-.78421	.43184
REC	Equal variances assumed	.516	.478	-1.142	32	.262	-.59386	.51995
	Equal variances not assumed			-1.125	28.213	.270	-.59386	.52785
SUB	Equal variances assumed	1.910	.177	-2.408	32	.022	-.89649	.37224
	Equal variances not assumed			-2.518	31.422	.017	-.89649	.35608
WOM	Equal variances assumed	.008	.928	-3.580	32	.001	-1.68158	.46977
	Equal variances not assumed			-3.567	29.761	.001	-1.68158	.47149
HAB	Equal variances assumed	6.142	.019	-.393	32	.697	-.19415	.49407
	Equal variances not assumed			-.373	22.592	.712	-.19415	.52016
BEH	Equal variances assumed	1.498	.230	-.290	32	.773	-.16023	.55166
	Equal variances not assumed			-.299	31.996	.767	-.16023	.53518
PEB	Equal variances assumed	.905	.349	-.133	32	.895	-.05146	.38700
	Equal variances not assumed			-.130	27.009	.898	-.05146	.39606
MOT	Equal variances assumed	1.753	.195	-2.074	32	.046	-.83860	.40425
	Equal variances not assumed			-2.126	31.951	.041	-.83860	.39448

Independent Samples T-Test:
Money-group vs no-money-group, Cut point = 100 kr

Money-group vs no-money-group, Cut point = 100 kr									
	Levene's Test for Equality of Variances			t-test for Equality of Means				95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference		
SUS	Equal variances assumed	.363	.550	1.496	46	.141	.64496	.43102	-.22263 1.51255
	Equal variances not assumed			1.602	28.379	.120	.64496	.40260	-.17924 1.46915
CIU	Equal variances assumed	1.059	.309	1.197	46	.237	.43172	.36063	-.29420 1.15764
	Equal variances not assumed			1.311	30.017	.200	.43172	.32918	-.24054 1.10399
CIE	Equal variances assumed	.800	.376	.177	46	.860	.05987	.33879	-.62208 .74183
	Equal variances not assumed			.156	19.227	.877	.05987	.38302	-.74115 .86090
NET	Equal variances assumed	.029	.866	1.257	46	.215	.52311	.41612	-.31451 1.36072
	Equal variances not assumed			1.287	25.567	.210	.52311	.40652	-.31320 1.35942
POS	Equal variances assumed	.228	.635	1.576	46	.122	.75490	.47891	-.20909 1.71890
	Equal variances not assumed			1.610	25.444	.120	.75490	.46887	-.20990 1.71970
NEG	Equal variances assumed	1.025	.317	-.499	46	.620	-.14706	.29463	-.74012 .44600
	Equal variances not assumed			-.452	20.011	.656	-.14706	.32538	-.82578 .53166
EXE	Equal variances assumed	.582	.449	.998	46	.323	.53782	.53882	-.54678 1.62241
	Equal variances not assumed			.993	23.999	.331	.53782	.54184	-.58049 1.65612
REB	Equal variances assumed	.848	.362	1.181	46	.244	.51891	.43940	-.36557 1.40338
	Equal variances not assumed			1.091	20.745	.288	.51891	.47562	-.47094 1.50875
REC	Equal variances assumed	.837	.365	.631	46	.531	.31933	.50570	-.69859 1.33724
	Equal variances not assumed			.589	21.142	.562	.31933	.54180	-.80695 1.44560
SUB	Equal variances assumed	4.726	.035	.717	46	.477	.31092	.43346	-.56159 1.18343
	Equal variances not assumed			.600	17.605	.556	.31092	.51848	-.78011 1.40196
WOM	Equal variances assumed	.379	.541	1.827	46	.074	.96744	.52943	-.09826 2.03313
	Equal variances not assumed			1.708	21.192	.102	.96744	.56652	-.21005 2.14493
HAB	Equal variances assumed	.109	.743	-.603	46	.550	-.28151	.46710	-1.22173 .65871
	Equal variances not assumed			-.570	21.672	.575	-.28151	.49395	-1.30681 .74379
BEH	Equal variances assumed	.055	.815	1.357	46	.181	.68347	.50354	-.33011 1.69705
	Equal variances not assumed			1.344	23.768	.192	.68347	.50868	-.36694 1.73388
PEB	Equal variances assumed	.002	.965	.140	46	.889	.04902	.35081	-.65713 .75517
	Equal variances not assumed			.140	24.211	.890	.04902	.35133	-.67575 .77379
MOT	Equal variances assumed	2.561	.116	3.855	46	.000	1.45518	.37748	.69536 2.21500
	Equal variances not assumed			4.064	27.355	.000	1.45518	.35808	.72091 2.18946