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OCTO: light your game

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TÍTULO: OCTO: light your game

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RESUMEN:

Octo es un juego de desarrollo de habilidades para profesionales del videojuego, pero también una fuente de luz. Consiste en 12 botones, una base y una aplicación. Los botones pueden colocarse en cualquier parte, y en la base cuando se necesitan cargar. Con ellos se puede practicar dos juegos diferentes: uno para mejorar los reflejos en el que hay que apagar las luces lo más rápido posible, o uno de toma de decisiones en el que dos luces de distinto color aparecen a la vez y hay que apagar la correcta. Todo ello fuera de la pantalla, lo que es un incentivo que ayuda a los jugadores a despejarse del videojuego. Octo cuenta también con una aplicación, en la que se puede ver información de los equipos, así como un ranking, y desde la que se pueden controlar las luces cuando está en modo lámpara.

PALABRAS CLAVE:

E-SPORTS / ENTRENAMIENTO / LÁMPARA / REFLEJOS / VIDEOJUEGOS



ELISE SANDVIK, MARI MOTHES AND PABLO MARINERO



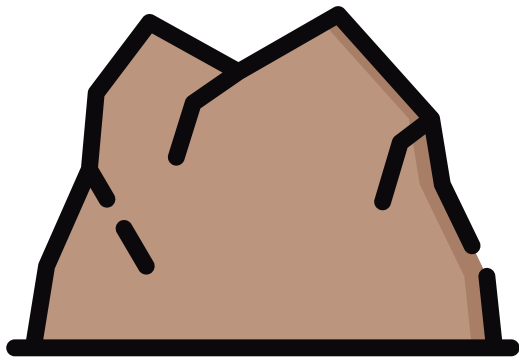
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ABSTRACT

This report is assessing the cultural group of e-sport and the design process which leads up to the finished product designed specifically for the cultural group. The report will show how a cultural understanding was established, how it was used in the design process, and how it was implemented in the finished product.

There was no initial knowledge about the culture of e-sport prior to the project, and in addition, a lack of interest for the gaming community. One person's reply to this was:



“HAVE YOU NEVER HEARD ABOUT E-SPORT, HAVE YOU BEEN LIVING UNDER A ROCK?”

Throughout the report, the understanding of the culture will expand after several encounters and interviews with individuals from the culture. Using the information gathered, an ideation process, feedback and iterations, resulted in the design of a game that makes the user become a better professional gamer.

INTRODUCTION

One way of separating one person from the other, is by a person's interest. This is a way to divide people into different cultural groups.

In this project a cultural group is chosen, based on the disinterests and non-relevant cultures of the members of the team. To fulfill the assignment, one could not be a part of this culture, or have any relations to it. In this report the cultural group of gamers, and later on, more specifically the group of e-sport players, will be targeted.

The research that was done to get an understanding of the chosen cultural group, will be going to be discussed in the report. The purpose of this is to be able to design a product which the cultural group can enjoy and relate to. Furthermore, the report will include reasons for why the product, which will be presented, is suitable for the cultural group of e-sport.

At the start of the project, it was assumed that most gamers have their own space or room where they play. It will be interesting to experience such a space which could be very personal and closed of. The same goes for the space of the actual game, which is in a way is the complete opposite, open and for everyone. Because the assignment specifies that the product must be a collapsible space, this personal gamer space or the in-game space can become quite intriguing.



Fig 2. Each person belongs to a different cultural group. Retrieved from <https://www.freepik.com/>

The logo for 'E-SPORT' features a stylized blue vertical bar on the left with three white diagonal stripes. To its right, the text 'E-SPORT' is written in a bold, blue, sans-serif font.

For some, gaming is now no longer just a hobby, it's a real job and with a salary. That is what E-sport (electronic sports) is about; playing video games at a professional level (Dwan, 2017). Huge e-sport tournaments now take place all over the world in big arenas with large crowds (BBC, 2017).

The e-sport community has rapidly been growing for the past years. It is a business that is estimated to be worth almost 8 billion kroner by 2020 (Dwan, 2017). In countries like South-Korea, Sweden and Norway you can now watch e-sport on national TV channels. Some competitions even attract millions of viewers from all over the world. It's not uncommon that the best players become full time e-sport professionals with sponsorships. In South-Korea, some of the best players even achieve celebrity status, just like well-known athletes in more traditional sports (Holm, 2017).

The Norwegian gaming web-page Gamer.no are covering e-sport events, and they even succeeded in creating their own league, which is called Telenorligaen (Holm, 2017). In the 1st division of the league, the players are competing for a prize pool of 150 000 kr. In lower divisions they are playing for a promotion to a higher division. (Gamer.no, 2017).

Coming in to the project, not knowing anything about e-sport or the players competing, has been challenging, but also interesting. A whole new world has opened, that is the world of e-sport.

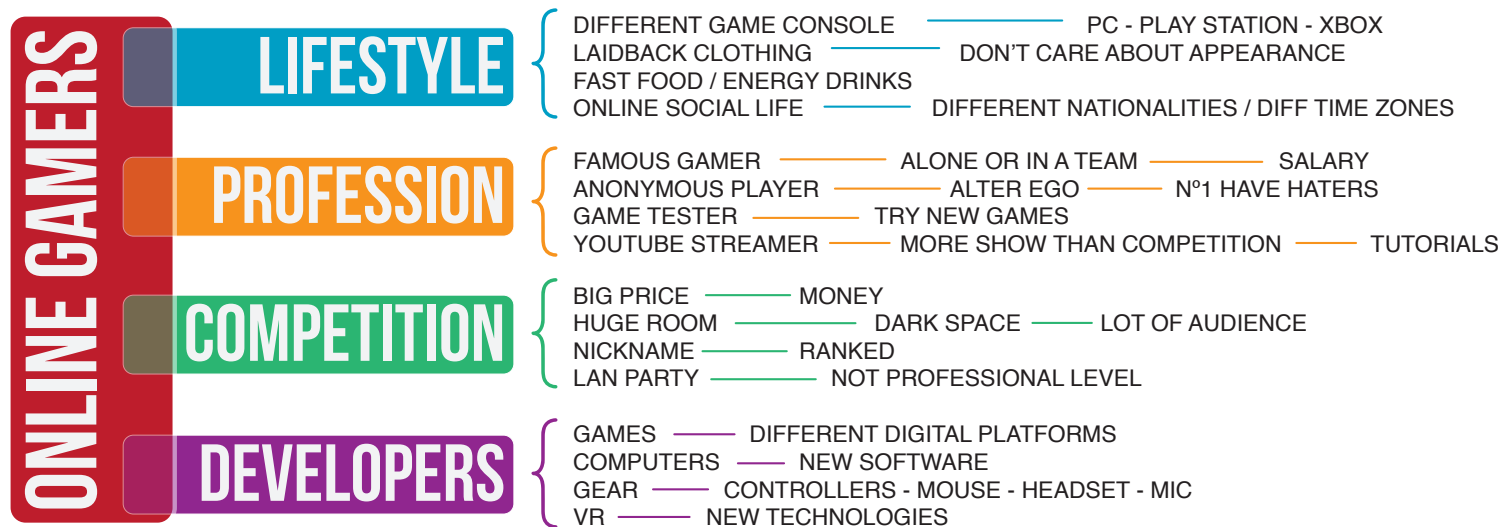


“HOW CAN WE DESIGN A COLLAPSIBLE SPACE FOR THE E-SPORT PLAYERS BY RESEARCHING AND UNDERSTANDING THEIR CULTURE AND WHAT IS IMPORTANT TO THEM?”

Fig 3. E-sport team training before a competition. Retrieved from <https://cstarleague.com/>

STEREOTYPE MAP

Before starting any research, a stereotype map of online gamers was made. The map portrays an overview of the initial expectations of what an online gamer is, and key words concerning them. The map was only based upon assumptions, and lists thoughts around their profession, lifestyle, the developer's standpoint, and the competitions and conventions. The main purpose of doing this, was to be aware of stereotypes and the knowledge of gamers before the research started.



ESTABLISHING CONTACT WITH THE CULTURAL GROUP

After mainly researching the e-sport players online, a closer understanding of the cultural group was needed. Questions like what is an e-sport player like, and what is important to them came to mind. This led to an online search of e-sport players to come in contact with. The goal was to obtain a valid research base of subjects which could be interviewed or observed throughout the project. The search was done by reaching out to different teams or players that was listed to play in Telenorligaen.

The first few responses came quickly and with enthusiasm towards the project. After requesting an interview or an observation of them, the replies stopped coming. It seemed that answering online was not the issue, but rather meeting in person. This left an impression of this cultural group to be somewhat shy or introverted, and uncomfortable outside the virtual reality.

During the research process, not only was the culture of professional e-sport players researched, gamers in general were to some extent also covered. The reason for this was directly related to the pursuit of coming in contact with the professionals. Since there is a sort of hierarchy in the gaming community - most games include a ranking system, the basics of gaming in general needed to be covered. To understand something completely, one needs to start at the bottom to understand the essentials.

A trip to a few game related stores in the city center of Oslo was done to collect more people to the research base. Targeting the store employees, in stores thought to know more about gaming, some connections could be made. Unfortunately, it never resulted in the connections that was hoped for. However, talking to people who consider themselves as gamers was to some degree useful – it provided a small sense of the gamer community and people connected to it.

Fortunately, the luck turned shortly after this. Contact with the e-sport team Nordvind was made through Facebook, and they were willing to meet after a few messages back and forth. These five e-sport players were now considered to be the representatives for the cultural group.

ARCHETYPES

After gathering a basic overview of what gaming consists of and what kind of people are connected to this community, a map of archetypes was made. This helped to clarify the lines between some of the subgroups the gaming society consists of. Dividing them into visual groups made working further in a specific direction easier.



INTERVIEW: JASMEET AND HAAKON



A meeting with two e-sport players was finally in progress. Their names were Jasmeet and Haakon, and they play the game Counter Strike for a team called Nordavind. The team recently signed a contract with Vålerenga, a Norwegian sports organization, which makes them the first paid Norwegian e-sport team. They have a big support system surrounding them, including a manager, a mental and physical trainer, a nutritionist, and a physiotherapist (Appendix section A, page 7).

The main goal was to get to know the players first hand, and more about the culture of e-sport. The underlying objective was to find a source to problems which could be solved. Considering this, the basis of who they are, why they are in e-sport and what it is like, was touched upon.

The assumptions of them prior to the meeting was mainly based upon stereotypes. These assumptions changed rapidly throughout the interview. The initial view of them was that they only liked to play games and were more socially restricted than non-games. It became very clear that these were only just assumptions and not based on any facts.

Jasmeet explained that he was gaming for a while when he was younger before quitting when he turned 17. He was in the army after college, and then had a job in IT before starting gaming again (Appendix section A, page 2). Haakon, who had been gaming almost his entire life, also played the violin, table tennis and volleyball while growing up (Appendix section A, page 6)

A discovery was made when asking about how the team works. They explained that they have separate roles in the game, and this requires them to do different tasks. What goes for all the roles in general is the need for good communication and teamwork. (Appendix section A, page 3).

One of the main skills which is required to be a good e-sport player, is reaction time (Appendix section A, page 7). It takes a great amount of practice to improve upon such skills and to be at a certain level. Jasmeet and Haakon said that they play about 6-7 hours, sometimes even 10 hours a day (Appendix section A, page 4). And now, since they are signed by Vålerenga, they get their own space to practice and even an apartment where the whole team will be living together.

Their priority, and now their job, is to compete and hopefully win the tournaments they are competing in (Appendix section A, page 7). The competition seems to be something that drives them, and this might be the link to why both ended up having gaming as a profession. Still, like any other athlete, one must have the skills to do it. By Vålerenga taking a risk on them and making investments on their behalves (Appendix section A, page 7), it could seem that these guys must be talented .

They end the interview with stating that this season they are going to be confident, be the best team in Norway, and be top 30 in the world (Appendix section A, page 7). It appears that this is not just a fun hobby for them. To them, it is a job they take very seriously, and people are counting on them. Considering this, it seemed that some of the personality traits to an e-sport player includes an drive to practice to become the best at what they do, that the drive to practice a lot of hours to improve, since they are highly competitive, is a part of the character to an e-sport player.



“IT’S A LOT OF WORK TO BE A PROFESSIONAL E-SPORT PLAYER, I DON’T THINK PEOPLE REALIZE THAT. IT’S A JOB, WE MUST PRACTICE A LOT, IT’S NOT ALWAYS FUN, YOU CAN GET TIRED OF IT.”
- JASMEET GIL “ROSEY”

*Fig 4. BX3 won the match.
 (Fabian Framdal Fjeldvik/Gamer.no)*

INTERVIEW: GABRIEL



Gabriel is a 23 years old man from Kristiansand, who used to be gaming at a professional level, but now only as a hobby. While in the research phase it was valuable to make contact with someone who has played at a competitive level, to get more knowledge about the cultural group.

It was especially interesting to see if there was any similarities to Gabriel and the cultural group, and in terms of playing many hours a day, it seemed to be the same;

“I use gaming primarily to avoid having any dead time, if I have nothing to do, I'd rather play games than watch tv. So, for me if I have nothing to do, I could easily play 10 hours a day.” (Appendix section A, page 12)

When it comes to the to the competitive mindset of the cultural group, Gabriel definitely had a part of that himself;

“When I start a game, I start it to become good at the game. I have that primary goal in my mind. Whatever I do for the first 1000 hours of playing a game, which sounds like a long time, but really isn't when you are playing, I basically just focus on how to become better”. (Appendix section A, page 13)

When comparing this interview, and the one with Jasmeet and Haakon, it appeared to be a lot of similarities between them. The main difference seemed to be that Gabriel did not wish to pursue gaming at a professional level. He explained that when it's hard making progression in the game, he finds it less fun (Appendix section A, page 13). It seems that professional players have an inner drive to become the best, that not everyone else has.

HOUSE OF NERDS

House of nerds (HoN), located at Løren in Oslo, is a gaming facility where people can come together and play various games with high quality gaming equipment. There are computers, gaming consoles and different rooms for playing, with both open and closed off spaces, available for the customers. There is also a bar and a lounge area, where you can get a drink and play board games.

While talking to Jenny, a girl that works at HoN, it appears that people come there for several reasons; they come to play and be social, they have roommates who have visitors so they need somewhere else to play, some don't have the right equipment at home, and some want to come and test out a new game before they buy it. People also come in groups and rent a room for themselves. Here they can socialize and have a fun gaming together.

According to their website, e-sport players sometimes visits HoN. They go here to get out of the apartment and play in a different environment than what they usually are playing in. The professional e-sport players also work as trainers for young and inexperienced players that want to become better.

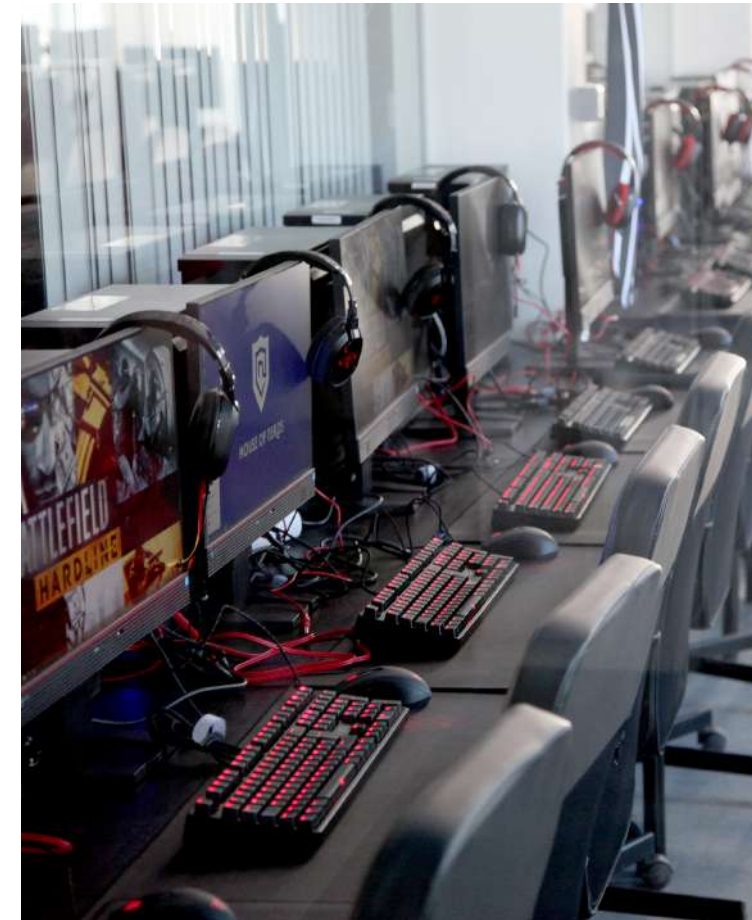
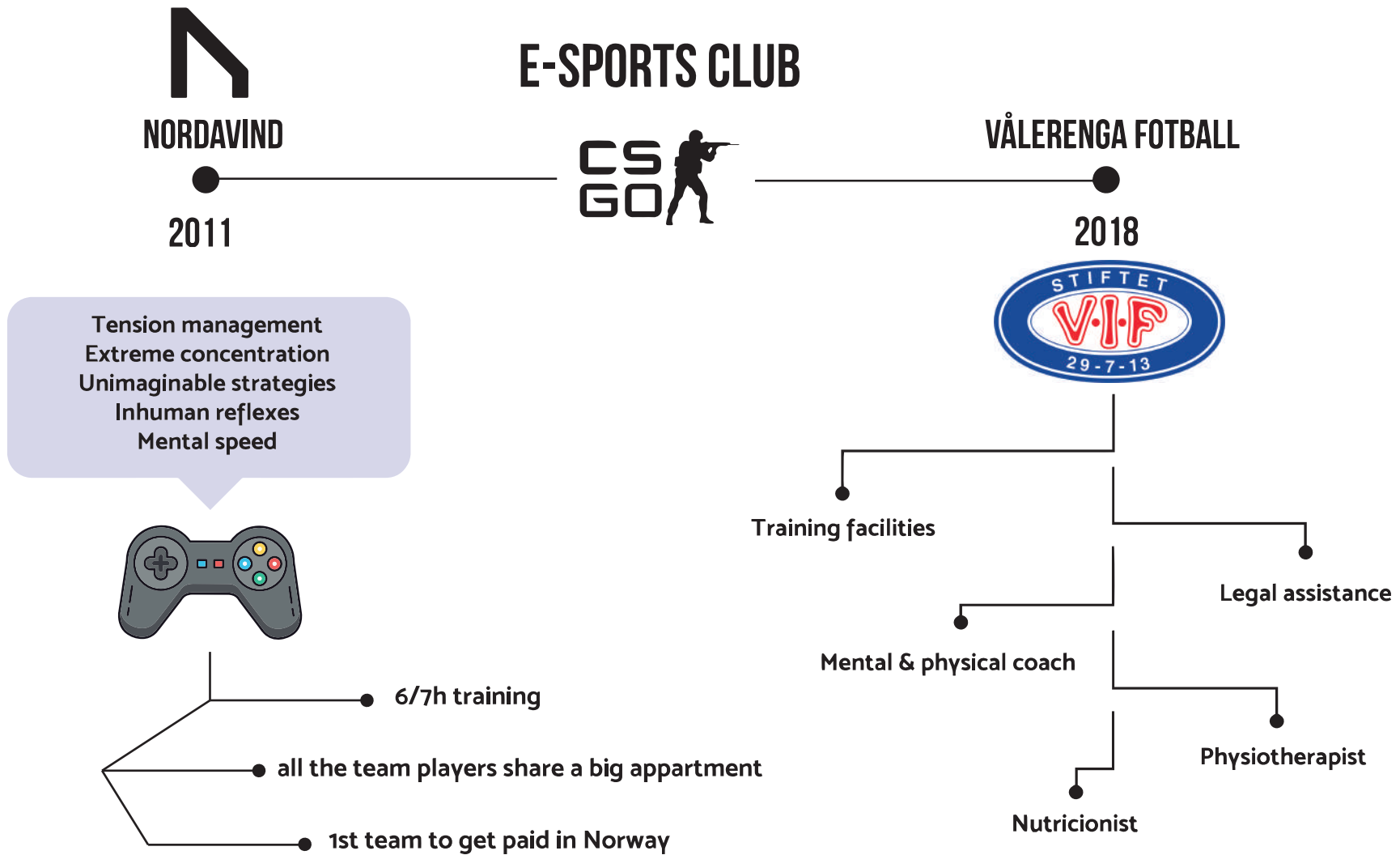


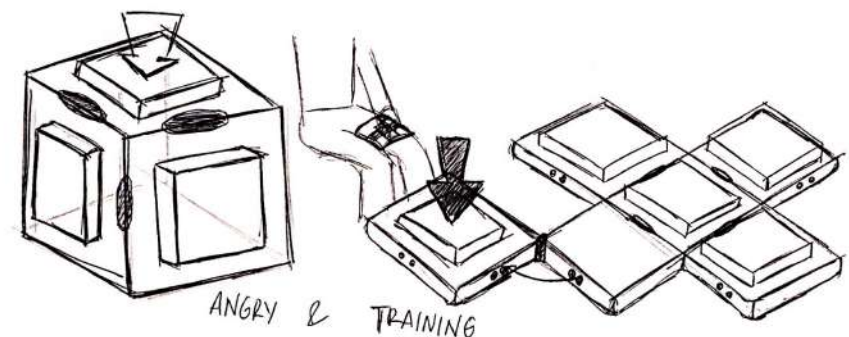
Fig 5. Computers with the required equipment at HoN. Retrieved from <http://houseofnerds.no>

INFOGRAPHICS E-SPORT TEAM



STARTING TO UNDERSTAND THE CULTURAL GROUP

Our initial assumptions about the cultural group had now changed due to more effective research being done. The word cloud shows to what degree certain words describes the cultural group at this stage in the process. The produced ideas was then based on this information, which are shown in the sketch. Functionality was key at this point.



INTERVIEW: SIGGY



At this point in the process there were still a lack of firsthand knowledge around the cultural group of e-sport. For that reason, a better understanding needed to be established by observation or contact with more members of the group. When visiting House of Nerds for a second time, a contact was made with another employee. He went by the name Siggy and was a former e-sport player. He was very willing to help, and the conversation with him lead to a much greater understanding of him as a person, a former e-sport player and the culture of e-sport.

With Siggy, a broad specter of e-sport and gaming in general was covered. Firstly, what caught attention and later would be deliberated more in the project, was his mentions of living in a house with his teammates (Appendix section A, page 15). This was after he got into the professional scene of e-sport. It was a very interesting find, mainly because it was a familiar statement. In the previous meeting with Jesmeet and Haakon, they explained that they were going to move in together for gaming related reasons (Appendix section A, page 4). Since Siggy said he had done this as well, it became clear that this might be a cultural ritual. That moving in together when playing games professionally and in a team, is a common thing in the culture of e-sport.

Other things that became apparent while talking with Siggy was how huge the industry of gaming appliances and equipment were. Since this is a very technical sport and requires new technology, the gaming equipment and gear industry must keep up with the high demand. By showing and talking about different equipment and their specific features, Siggy made it clear that the industry is right on track (Appendix section A, page 15-16).

It appears that the equipment features are mostly based on functionality, and not so much esthetic design. The discovery of how well the industry already supplies the demand and to that extent it is established into the gaming community, made the field of gaming equipment and tools less desirable for future work. Hence a decision was made to keep away from any more ideas towards these grounds. The conclusion was also based on the lack of knowledge from a technical and functional standpoint, and for that reason moving in this direction was avoided.

What also came across throughout the whole talk with Siggy was that there are a lot of different personalities in the gaming and e-sport community. And there are many rituals and choices that depends on the person. This certainly is caused by people being different, and the community being at a large scale. Henceforth it made it difficult to separate and define the different problems which could be work upon in this project. To move forward in the project, it presupposes that a certain problem or matter generates a sense of excitement or triggers some emotions. Because of the search for problems was done with such a large group of people, it made it hard to catch any specific cultural difficulties.

This lead up to the decision of narrowing the e-sport community and the cultural group down to only consisting of the e-sport team in Norway called Nordavind. Siggy explained that he was in charge of the events and sponsors for the team (Appendix section A, page 26). He had insight and information about how the team worked and functioned together. Considering the reason for deciding to make the cultural group for this assignment the Nordavind team, Siggy became a close connection for further work and progression.

“Making sure that they are getting back and forth when they are supposed to, I usually travel with them, because they are like four years old sometimes. I have to get them up in the morning, and make sure that they eat and drink for some reason. They are five, they have no idea how to cook a steak.” (Appendix section A, page 26). This quote made by Siggy had a teasing feel to it, but in all seriousness, it had strong indicators that the players couldn’t handle things on their own. This opened for a discussion about how living together would work out for them. A problem seemed to be forming. Digging deeper into their living situation, and problems occurring with living with your teammates.

“The thing is that we now have a bigger budget than everyone else. So, we made every single player move to Oslo. We want the whole team spirit and team feeling. We want to build that up” (Appendix section A, page 26). The problem to solve had raised to the surface, their living situation. This quote made the goal of doing it apparent, to build team spirit. The following path of the design process was then based on preventing friction between the team, make living together fun, and to build the team feeling.

THE SOCIAL ASPECT OF GAMING

It is important for a designer to have tried to walk in the user's shoes. If not, the image which the designer makes of any research could be misleading. To get a better understanding of what it is like to be a gamer and what the games contribute, trying to game became the next step in the process.

Fortunately, Siggy was willing to teach about gaming and initiated a gaming session at House of Nerds. He helped with setting up the computers and what game to start with, the game was called Fortnite. He explained the basics of the game, what buttons to press, and the games' purpose. Because there were no initial knowledge or muscle memory of the gaming kind, his help was much appreciated.

Even though Siggy was a new acquaintance, after just few hours of gaming, some sort of bond formed. The reason for this could be linked to the format of playing in a team together. The realization of the social aspect of gaming, was not really expected beforehand. The team must talk to each other in order to collaborate on the tasks. The fact that being in the same team and with the same determination of winning together, essentially made the interaction with the teammates feel more natural.

By playing the game, it helped facing some of the social barriers or codes one can face when meeting new people in the gaming community. An understanding was made for how people become friends in the gaming community. why they feel like people they meet trough gaming is their true friends.

The testing, research and all of the interactions made by this point, came together to establish better grounds for both understanding and for continuing the ideation process.



Fig 7. Elise gaming Fortnite at House of Nerds. Own picture.

LIVING SITUATION: TEAM HOUSE

During the interview with the cultural group, it was discovered that the group was planning to move in together and live together as a team. To get a better understanding of why the group think it is beneficial for them to live together, other e-sport teams were investigated. There is a some information about e-sport teams and their living situation online. This provided insight in why the teams are doing this and how it is for them to live together.

There are multiple beneficial reasons for why e-sport teams choose to live together. The players will naturally spend more time together, and that will help to build chemistry and strengthen the relationship between them. Another reason is that all players can get together much faster to play, practice and give each other constant feedback on what they need to improve upon (Mark, 2017).

Living in a house where the sole goal is to train the e-sport players has some pros, but also cons. Being highly competitive, it is likely that tension can rise if the team loses. On top of that, having lack of space could bring players into close quarters. Cleanliness of the space can also be an issue, with young players who has their main focus on the playing the game (Mark, 2017).

When researching why e-sport teams are living together, and understanding that this living situation could lead to some problems, it seemed like an issue that could be targeted while moving forward in the project.



Fig 8. Team training in the living room. Retrieved from <http://www.businessinsider.com>

GAMING IN SOCIETY

The 28th of february, HoN hosted the event Oslo Startup Day: Gaming in Society, together with Oslo Business Region, which is a company that supports and help to enable startups. Oslo StartUp Day is a free event designed especially for entrepreneurs, and is held monthly on relevant subjects. The event information gave a good description on what event was about;

“Games are everywhere.

In your living room, on your phone, and in schools all over the world.

But gaming isn't just for fun. Can gamification foster good habits and change how we use products and services?

Join us for Oslo Startup Day: Gaming In Society and learn how gaming mechanisms influence education and healthcare, meet some of the leading founders and experts, and see why investors look at gaming as one of the most interesting sectors in tech.”

(Oslo business region, undated)



Fig 9. Promotion of Gaming in society event.

Retrieved from <https://t-i.-no/2017/09/21/playpulse-lokker-nerdene-spinning/>

At the event there were 5 presentations in total, that all showed how one can use gamification to motivate the user to do boring and/or repetitive tasks. Gamification mechanics (Appendix section B) were used as tools to make work training, exercise, education and even rehabilitation a more fun and giving experience.

Seeing what gamification can achieve was inspiring and showed that there was an opportunity to use these mechanics to solve problems. Considering the cultural group is highly competitive, and is playing games for a living, it could be argued that gamification would apply to them.



Fig 10. Presentation of the event at HoN. Own picture.

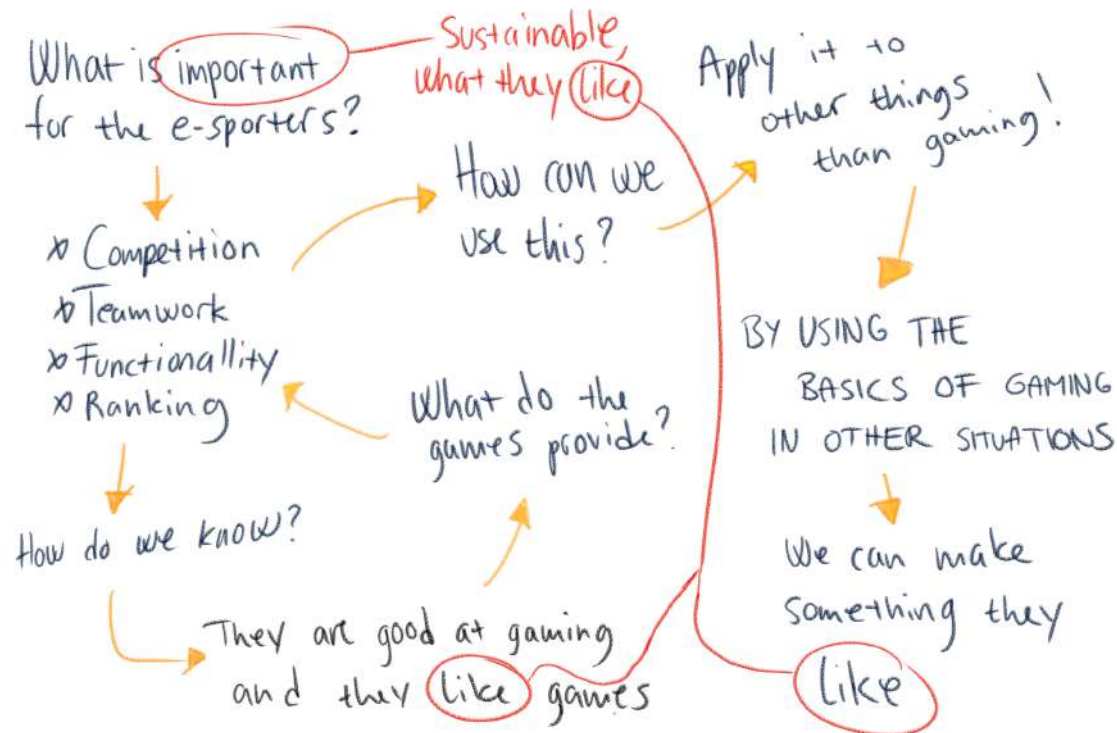


Fig 11. Playpulse: A computer game concept for spinning bikes, where the gaming experience is in focus, rather than the physical performance. Retrieved from <https://t-i.-no/2017/09/21/playpulse-lokker-nerdene-spinning/>

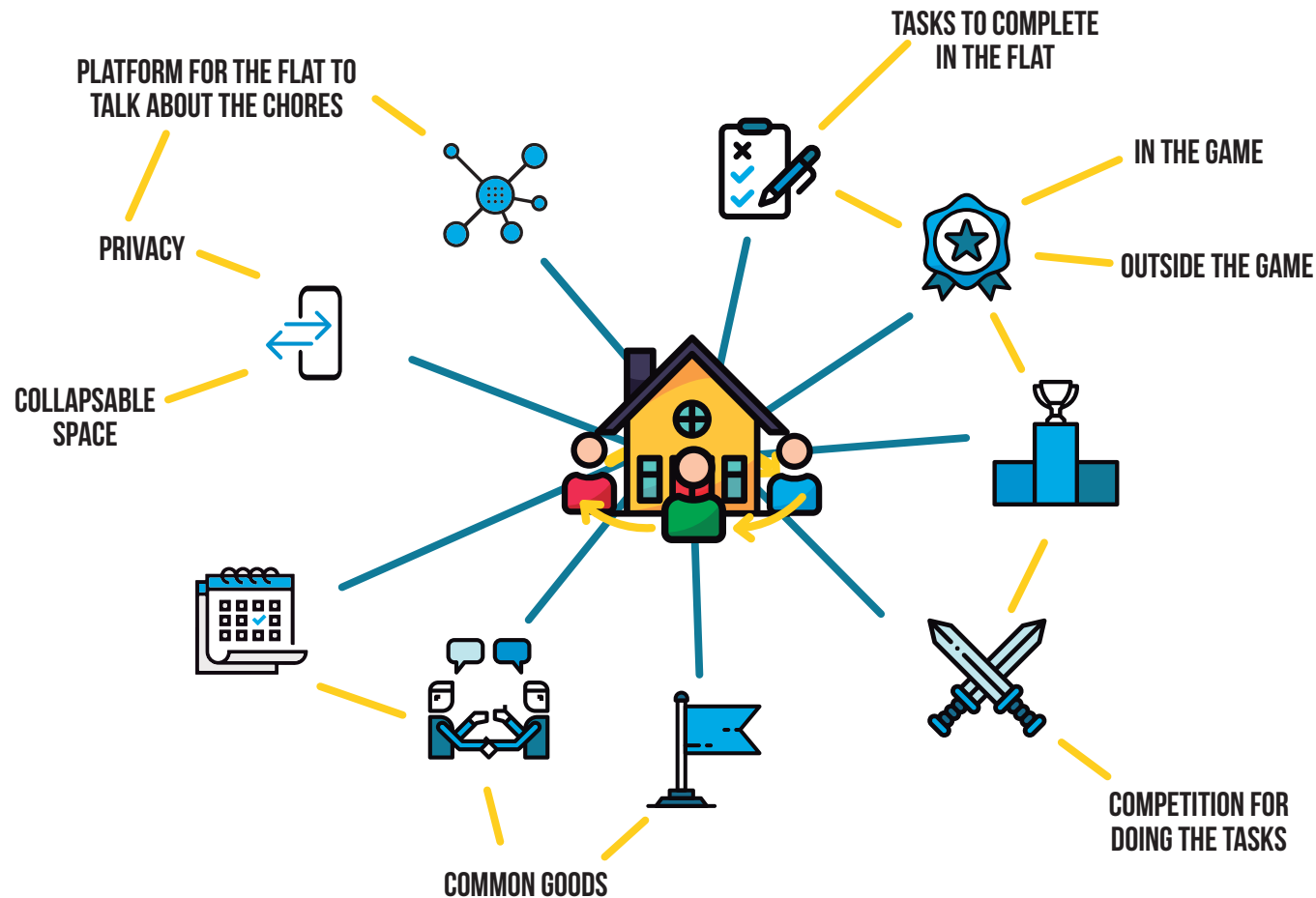
CHORES GAME

After learning about the living situation, and the benefits of gamification, ideas occurred. One idea in particular was to make a game that would help making chores more fun to do. Considering that cleanliness could be an issue in some team houses, and the competitive qualities in the cultural group, it seemed suitable.

Game mechanics (Appendix section B) is something that obviously apply to this cultural group - they are making a living out of playing a game where they encounter them everyday, The chores game is based on game mechanics, what is sustainable to them and uses of gamification to catch interest.

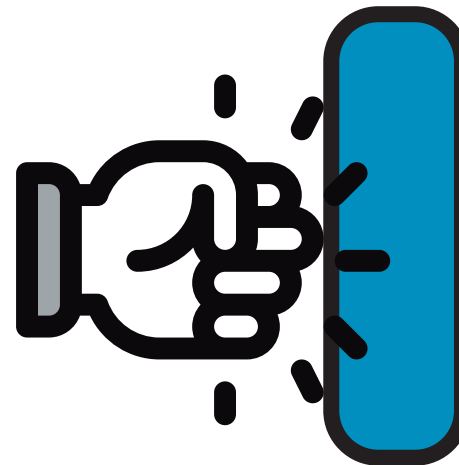


The idea of the Chores game is to make the chores and tasks you have to do at home fun. By making the players compete against each other and collect points. This way one could collapse the space of tension offered by doing or not doing boring chores. The game could also collapse the stressful-space which might occur by having people depending on the chores being done. Additionally, it opens up the relationship-space, and for it to have a better foundation.



FACING CHALLENGES

During the interview with Jasmeet and Haakon, they agreed to meetings and an observation to take place at a later time in the project, to help provide more information and feedback. There was attempted to schedule several meetings, and make an observation take place. When contacting them, they always seemed positive at first, but would always cancel or stop answering. It's not clear why it was so challenging to make a meeting happen, but they seemed to be very busy. Considering it was not possible to meet the actual cultural group, other ways of getting feedback had to be put in place.



GAME DEVELOPER

After milestone meeting 1, where the concept of the chores game was presented, it was necessary to get some feedback. The goal was to use gamification to make chores into a fun and competitive game, to prevent tension to rise between the group living together. Since there is a lack of knowledge about gamification and game design in the group, it was necessary to collect more information. During the gaming in society event, it was scheduled a meeting with the game developer Jørgen Tharaldsen. He is the co-founder and CEO of Megapop, and could provide a lot of insight in what it means to develop a game, and what is important to think about to make sure you get the right outcome.

When explaining the cultural group, their living situation, and the goal with the game, he immediately responded;

"I think you are going to have some huge balance issues with it. In gaming everything is data mind, what it means is that your results and actions are based upon your actual input, bytes and data and you know. If you do the dishes, and you do it bad, or you go from 2 to 7 dishes because you wait a few days, you need an input-system that can balance your inputs. Otherwise the system can be gamed, which means you can hoax the system to get further and on top. When you define it, you must sort it into lesser components. If you are going to do a game with doing chores, you will immediately see that you are going to get hundreds of components. So, you have to classify it to as few components as possible, and make sure that is actually super simple for people to give the input." (Appendix section A, page 31)

"A problem with making a game in the first place, is that it soon becomes very complex." (Appendix section A, page 33)

It appears that developing a game is a highly complex process with a lot of variables to consider.



Fig 12. Characters from Trolls vs Vikings, game made by MegaPop. Retrieved from <http://www.noguchi.no/>

Jørgen also pointed out some other concerns that questioned if this kind of game would actually help this cultural group.

"You will get data on who is the worst, and who is the best. What does this actually do to the best or worst person? It means that you are creating a system that proves who is better at something. This is a human thing, the guy or the girl that is the worst at cleaning, the one that is good at it, will keep being good at it, and the one that is bad at it, will keep being bad at it. I don't know if this is correct, just a theory. " (Appendix section A, page 32)

There was then mentioned a different proposal, that would benefit the group more;

"Probably a better way to solve this, would be to create it from the ground up not as one vs one competition, but perhaps a team gamification. So, it's not about who does the dishes, if someone doesn't do the dishes that day, the team doesn't get anything. It means that everyone are all important pieces in making this result.

If 4 out of 5 do their task, and the fifth doesn't do it, the team don't get anything. It will become a peer pressure. The other guys will say, hey guys we need to fix this, otherwise we will not get the award, and we need this reward to be able to get x y z, meaning any value you put into it. If you do it like this, you will have people working together to solve something." (Appendix section A, page 32-33)

"Out of all this stuff, the most important thing you can do for a e-sport team, is to nurture their team feeling. Make them work together as a team, in life, in games, or whatever they do together." (Appendix section A, page 33)

The goal of the game was to help the group achieve a better living situation, but it appeared that this was a better way of helping the group; by making them work together as a team, rather than competing against each other.

At the end of the talk, Jørgen had a valid point about one important part of making games;

A part of the difficulty and dilemma of making games, is that there is so many solutions to making the same thing, and none of them are right, since different things works for different people. And you don't really know if any of them is going to work, before you test it.

It could then be concluded that testing, and having a test group, is vital for developing a new game. Considering that our cultural group was very busy and challenging to plan meetings with, it seemed doubtful that developing a new game like the chores game, would be possible.

FEEDBACK SESSION

After the chores game was no longer an option, a meeting with Siggy was much needed to get more information and present some ideas to get a new direction in the project.

From previous research, the living situation had been a source to problems. This now needed further exploring to see if there was anything except the chores game, that could help the group. Since Siggy used to be a professional player and lived in e-sport team house, it was interesting to see if he experienced any challenges with the living situation, especially the need for private space.

"When I was living with the team, you also had your own space out of your room cause when you came out in the living room people had their headphones on or doing something else. You still had your personal space wherever you wanted." (Appendix section A, page 41)

Given this information, it seemed that the need for private space was not an issue. These things of course tend to vary from person to person, how much personal space one needs. Considering the lack of access to the home of the cultural group, the possibility of creating something that provides more private space for the group, was not pursued.

When presenting some other ideas, there were two ideas that got a good response; a table that has a mix of different games built in, and a game that challenges the user's reaction time. Later on, when discussing these ideas, Siggy mentioned that it would be valuable to create a game that challenges the user's hand-eye coordination, since this is a very important skill for an e-sport player. From this it was concluded to move forward with a game that challenges both the user's reaction time, and hand-eye coordination.

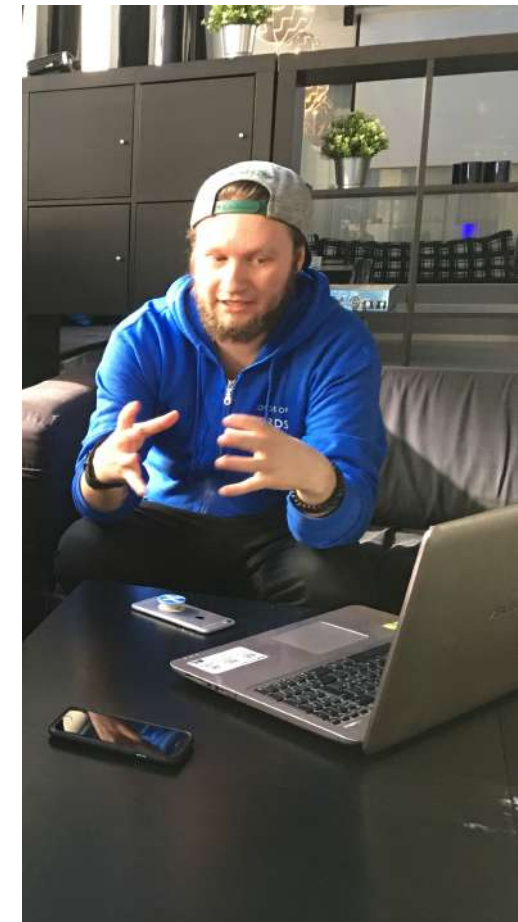


Fig 13. Siggy. Own picture.

DEVELOPING THE CONCEPT

Given the feedback from Siggy, the development of a concept that challenges the user's reaction time and hand-eye coordination was initiated. This idea is based upon games that already exist, for an example the BATAK (BATAK, undated). Since it was concluded after the talk with Jørgen to not develop a new game;

"Maybe the solution here is to not make it yourself, maybe a part of the solution is that the software already exists. Often in many countries, you don't actually have to invent the thing itself, you can find the company who makes it, import it, and adapt to your cultural market.

A part of the difficulty and dilemma of making games, is that there are so many solutions to making the same thing, and none of them are right, since different things work for different people. And you don't really know if any of them is going to work, before you test them. Unless you copy something, then you know with a good degree what is going to happen". (Appendix section A, page 33)

Given this information, the testing wouldn't be necessary to the extent it would have been for a new game. An iteration process of how the game could work, and look like was started, to adapt the game to fit professional e-sport players in the best way.

Considering the living situation of the cultural group – five players living together in an apartment in Oslo with limited space, it could be argued that having a large machine taking up much space would be a poor solution.

THE CONCEPT GROWS

The developing of a game that improves the players' reaction time, hand-eye coordination and nurtures the team spirit, was the main objective at this point.

The concept consists of; detachable light buttons, with a system in place to make the buttons light up at different times. This checks the boxes for reaction time and hand-eye coordination.

The system also allows different colored lights to appear which makes the multiplayer mode possible. With this function, team spirit could also be added to the list of improvements.

The game was continuously improved upon as the design process moved forward, and as feedback from the research subjects came back.



*Fig 14. Study of the shape for the buttons.
Own picture.*

ADJUSTING TO FEEDBACK

When presenting the concept to Siggy, it got a very positive response; “The game looks really cool, and I think it would work for not only e-sport teams, but for regular sport teams as well.” -Siggy. (Right way of ref.?)

While asking if he preferred a scoreboard or an app, or both, he answered;

You can have both a scoreboard and an app. With an app you can connect with others, and if you sell the product to 10 or 20 different teams, you can use the app to play against other teams, and to check the everyone’s high score. Even though the teams play against each other in tournaments, they still talk and play against each other outside of tournaments.

With this feedback, it was concluded to make both a scoreboard, and an app. By implementing a way for the team to compete against other teams, it was considered a better solution to work on the team spirit, by giving the team an opportunity to work together to win over other teams.

When presenting to Gabriel, he pointed out some valid points on what makes an e-sport player even better;

“Everyone in the team needs to be good at decision making, otherwise they're not good at all. The players can become as good as they want to mechanically, but if their decision making is poor, they're going to be poor players. They can have bad mechanical skills, but if they have good decision making, they're going to be way better than anyone else.”

Given this feedback, it was decided to bring some more elements into the game, that could challenge the players’ decision making.



**BY USING OUR PRODUCT
YOU CAN BECOME A BETTER E-SPORT GAMER.**





12 BUTTONS

BASE



APP

SPECS

Buttons can easily be attached and detached with the use of pads with Nano-suction, a technology that generates a strong suction force to hold a large amount of weight. It allows easy removal and is reusable.

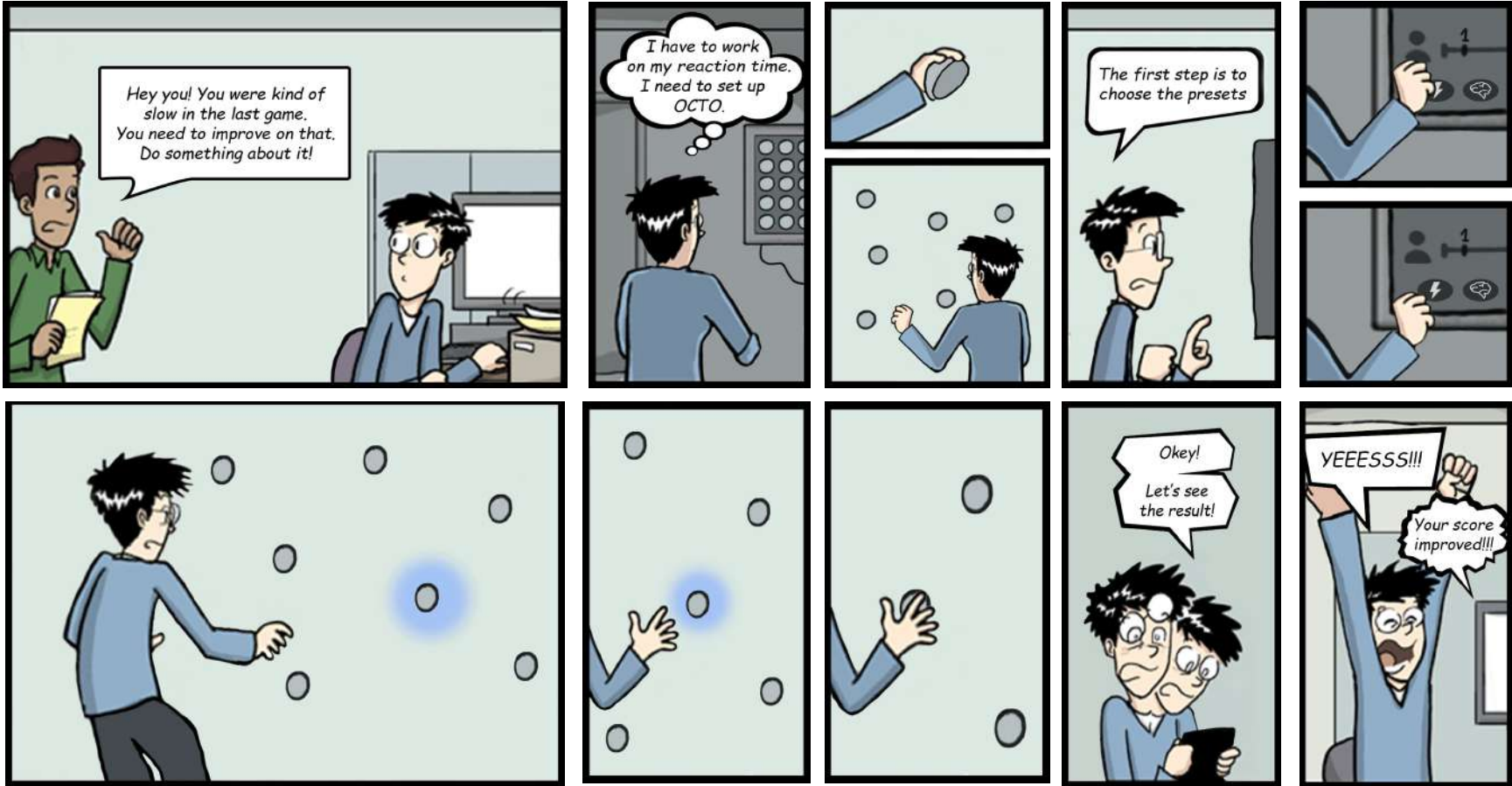
With the use of NFC (near field communication), OCTO buttons can smoothly connect and adjust to your chosen presets controlled by the base or the app.



OCTO uses wireless induction charging, charge the buttons by placing the buttons on the base.

An own personal app, compatible with iPhones and Androids, gives you access to the same information that is on the home base, right in your pocket.

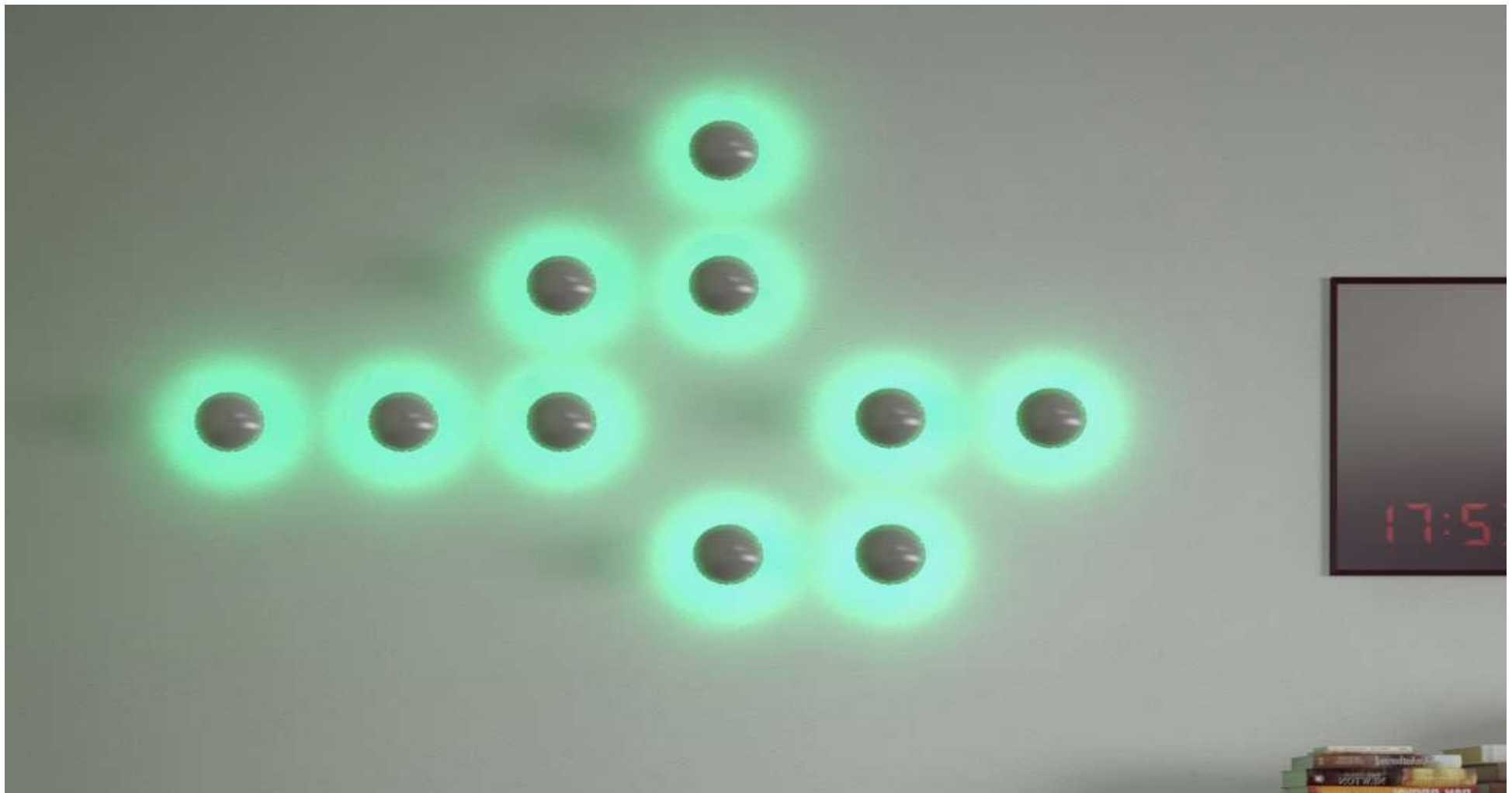
HOW IT WORKS



Watch movie in attachment to fully see how it works.

LIGHT SOURCE

When not playing the game, the product can be used as a light source. This can make the product a part of the interior in the home, working as a lamp or a light installation. The user can choose the color of the lights, depending on which mood they want. With this option, the product can be used by anyone that like this kind of light source.





Information about the different e-sport teams competing against each other in the game, including the best score to the individual players and the team.

Display of ranking in the different modes, both individual and the team.

Remote controller for light source

Choose the presets for the game picking between two modes and single or multiplayer.



CHOOSING THE APPEARANCE

While getting feedback from Siggy and Gabriel, three different shapes, with multiple materials and colors, were presented to them, to see if they had some preferences considering the appearance of the buttons.

Gabriel had a valid argument for why option 2 was the best solution, when considering the shape;

“These ones looks like buttons the most, they're very intuitive in that sense. I also think it would fit the best into any normal house.”

Siggy also thought option 2 was the best;

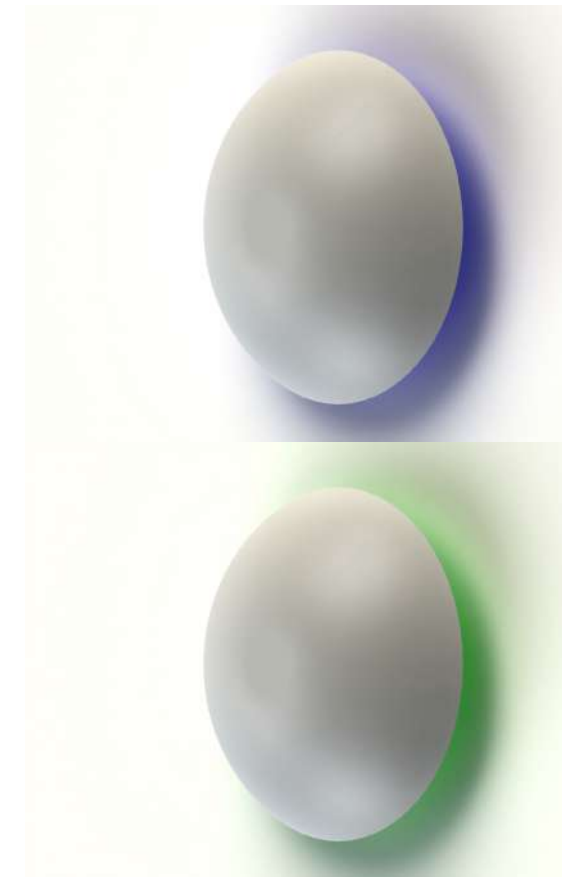
“Yeah, something like these. Playing-wise and how they look, I think these buttons would be the most standard and not sticking out too much, kind of buttons.”

When discussing shape and color, Gabriel said that’s about personal preferences, and that he never does anything with the interior, so anyone of them could work.

Siggy had more of an opinion about how it should look;

“For me the best thing would be for it to not stand out that much, it shouldn’t be like something that kicks you in the face when you look at it. Something as minimalistic as possible. If I were to have it on the wall at home, I would probably pick something with a grey scale.”

Based on this feedback, the shape option 2 was picked, in plastic, in a grey color.



Option 2, gray scale

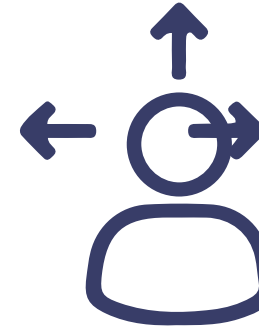
WHY OCTO?



OCTO moves your training space outside of the virtual world and provides a change in environment.



Play a social game together - with the multiplayer option you can play with your team.



With OCTO's Smart-mode you can work on your decision making, by training on doing the right decision under pressure, without hesitating.



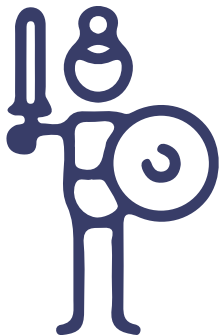
OCTO can strengthen your concentration and focus, by giving you a different approach to training.



By practicing together, you can build chemistry between your teammates.



With OCTO's React-mode, you work on your reaction time, by hitting the buttons as soon as they light up.



OCTO can help you train both mentally and physically, by working on your stamina.



Work together as a team to beat the other teams out there.



With both of the modes, you are working on your hand-eye coordination, which is an important skill for you as a professional gamer.



SEMANTICS

When shut off

When both the game and the light source is off, the different elements of the product can seem to have no connection to each other. The buttons without the lights on, will blend more in, and could seem like decoration. The base next to the buttons shows the time and works like a wall clock. In this state, the product could fit into most homes.

When looking closer at the base, it will show the time and the team's logo when the game is not in use, this communicates directly to the e-sport team, showing their ownership to the product. To others it could be recognized as an e-sport product if they are familiar with the logo. The surface of the base could be compared to a tablet surface, which for those who are used to tablets and smartphones, communicates that the base has an interface and is possible to interact with.

The game

When first interacting with the base, one sees the connection between the base and the buttons. For those familiar with using and/or playing games on a computer, smartphone, or a tablet, it's understandable that it's a game, with the intuitive interface consisting of buttons with recognizable icons and descriptive text where needed. The scoreboard and the app has an corresponding interface, and can be used by anyone who has some experience. The team information in the app, is more aimed towards those who have an interest in the e-sport scene, consisting of players, support system and fans.

With the opportunity of improving certain skills like hand-eye coordination, reaction time and decision making, it can be argued that the product communicates directly to e-sport players, knowing that these skills are important to be a skillful player. On the other hand, it could also be interesting to others, who recognize these skills to be important to them. Regarding the team building aspect of the game, one can say that the product can work for other sport teams as well. Considering this is a product to be hung on the wall of your home, it is targeted more towards e-sport teams living in a team house.

Using game mechanics like ranking, points, leaderboards, missions for individuals and teams, and notifications (Appendix section B), one can argue that the product communicates directly to the e-sport players. The cultural group are playing games for a living and have a special drive to compete and become the best in a game where they are facing these kinds of mechanics daily.

Buttons

Interaction with the buttons are intuitive because of its shape and size, looking very similar to a big red button that most people have seen before. This also suggests pushing with the palm of the hand, rather than the fingers. The space between the button and the wall, helps to show that the button can be pushed inwards.

When playing the game and pushing one button, it gives a clicking sound, which together with the light turning off, gives information back to the player during the game.



*Fig 13. Big red button. Obtained from:
Retrieved from https://designswarm.web-factional.com/blog/wp-content/uploads/2011/07/brb_blog.jpg*

COLLAPSIBLE SPACE

At the start of the project it was assumed that the personal gamer space, their room for instance, would become very interesting. Nonetheless in relation to collapsing this space. By moving further this topic was never elaborated. This was due to never coming close to the core or the inside of this this personal place. This then resolved in a different approach to what space to collapse.

A notice was made of the space inside the actual game. It was intriguing to see and experience how the world inside of the computer is so vivid and real, and how you can spend hours inside it, without noticing the actual space around you.

While discussing this and in relation specifically the e-sport players, who need to play games because it is their profession, it became apparent that this space had another meaning to them. The game-space had in a way become its own training- and workspace. A place they must go to for evolving their skills and to work. And when compared to an actual job, it would be quite similar. They log out of the game when the practice session ends, just like you would close the door to the office.

This discovery resulted in further thoughts about how to collapse their training and work space, to benefit them in becoming a better e-sport player. This was done by making OCTO change the training environment. Since it is not a computer game, it moves the training space outside of the computer screen. This way it collapses the in-game training space and adds a physical training experience. Having the same repeated task in the same environment can become boring over time, and then prevent work and thereby also prevent progression. By then collapsing the regular and obvious training space, OCTO averts this, while still working on improving the same skills that are needed in progressing towards an e-sport players working-goal; to become the best.

EXHIBITION DESIGN

We want to have the exhibition table in a vertical standing position. This is to be able to hang the prototype the way it is intended to be used. It should be hung around face height, which means that the height of the table will be somewhere around 200 cm.

The prototype is not going to be in full function, so it can't be tested at the exhibition. But it can be touched, and the lights then work. That is why we want to present it in the correct height, so the visitors can get the feel of the true product and have some interactions with it. Since the width of our base is 38 cm, and we want to include two buttons outside on the wall as well, we need the width of the table to be around 2 times the size of base. This makes the table width approximately 76 cm. The length of the table legs just needs to be long enough to hold the wall in place. Maybe 80 cm.

Considering our base is black, and because most walls are white, we are choosing to have the tabletop color in white.

We would also like to have a second table standing on the ground. This table is just to fit a screen or monitor for showing the video of how it works (showed in the final presentation) and/or alter with pictures of the app and other explanatory pictures of the product. Also business cards and/or folders could be placed here. Around L80xW50xH120cm.

This is the poster layout that was used for presenting the product to our cultural group and for the final presentation. We think this will be useful to have at the exhibition too, since it worked well for the two previous presentations of the product. The only thing missing is a part describing our cultural group, since the other times it was shown to the cultural group (and the class pretending to be) and was not needed.



WEBPAGE

The webpage is aiming to create interest in the product by first showing the multiple ways of playing OCTO. Then comes a further description of how you can play it, and how it benefits you.

The design of the layout is made to communicate to the e-sport players, by choosing colors, graphics and pictures that speaks to them.

Visit the webpage here:
<http://gamer.byethost7.com/>

FINAL PRESENTATION

The main goal for the final presentation was to have a clear message and to address the audience in a professional and confident way. The core purpose of this was to appeal to the audience, which was made up of professional e-sport players, enough, so they were left with the desire of wanting to buy and use our product.

Research has shown that becoming better is something that drives the audience, and therefore we used this as our message; “by using our product, OCTO, you can become a better professional gamer.”

To give an emotional storyline we began by drawing imaginary images linked to the cultural group, with the use of recognizable phrases they could connect to. This was to build credibility and show the audience that we know who they are, and most importantly; what they need.

One other key factor of our presentation was the movie explaining the sequence of how the product is used. The visual communication was not only necessary because the product was not ready to be tested at the presentation, but because the cultural group tend to connect to digital visuals, such as games.

We wanted to build our presentation as direct and powerful as possible. But still with the importance of containing enough information for the audience to understand everything our product could aid them with. We did this by including different varieties between short and long sentences, with different length pauses in-between.

Most importantly to us was to have valid arguments, so that our message could be positively received. Equally important was to show that we know what is essential for them to achieve their goals, and that is why our product will be suitable for our cultural group.

The presentation overall worked out as it was intended. There were a few mechanical and technical faults, which resulted in a few setbacks. The catching up to the seriousness of a presentation setting, could have been a bit stronger at times, but never fell out completely. Some more preparations beforehand, like checking the sound first, was obviously a thought of reflection for next time.

The group had a good connection with each other, but the interaction with the audience was lacking at times.

The content was good it was said and the movie resourceful. This was a nice confirmation of the content being presented well to some extent.

Some other feedback we got, was that we should have thought about having more slides when explaining the arguments, or that icons/text could be faded out. By doing this our arguments would have been much easier to follow.

CONCLUSION

During this project we have learned a great deal about the e-sport community and its players. To gain this information it was necessary to do online research, conduct several interviews, play games alongside experienced gamers and talk to a game developer. This gave us the knowledge we needed, to be able to design a fitting collapsible space for e-sport players.

From the insight we obtained, it was clear that the product should aim towards the cultural group's interests and what drives them. Considering that e-sport players has a strong competitive mindset and are on a mission to be the best professional gamers they can be, our goal was to create something that helps them achieve their ambitions. Ultimately, we made a game that directly challenges some important skills for a e-sport player, and nurtures their team feeling.





REFERENCES

BATAK. (Undated). Obtained from <http://www.batak.com/index.htm>

BBC. (2017, April 6th). Guide: What are eSports? Obtained from <http://www.bbc.co.uk/newsround/37773832>

Dwan, Hannah. (2017, October 18th). What are esports? | A beginner's guide. Obtained from <https://www.telegraph.co.uk/gaming/guides/esports-beginners-guide/>

Gamer.no (2017, December 14th) Premiepotten i Telenorligaen våren 2018. Obtained from <https://www.gamer.no/artikler/e-sport-premiepotten-i-telenorligaen-varen-2018/414461>

Holm, A. (2017, December 18th). E-sport. Obtained from <https://snl.no/e-sport>

Oslo business region, (undated). Oslo Startup Day: Gaming in Society. Obtained from <http://www.oslobusinessregion.no/event/oslo-startup-day-gaming-society/>

Register, Mark. (2017, April 18th). Why esports teams live in gaming houses, and how they could evolve. Obtained from <https://blitzesports.com/lol/video/848/why-esports-teams-live-gaming-houses-evolve>



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INTERVIEW: JASMEET AND HAAKON

1TH OF FEBRUARY 2018 AT JARMANN GASTROPUB, OSLO.

We met with two professional e-sport players, Haakon and Jasmeet. They are playing for the team Nordavind, a Norwegian e-sport team.

How did you start gaming?

- Haakon was young when he started playing games, about 6 years. But gaming for him did not get serious before the age of 14. Then he started playing CS (Counter Strike), and that game got him hooked. After he started joining different teams, and going to LANs and competitions, gaming became more and more a part of his life.
- Jasmeet said that he had sort of the same story. When he was about 13 or 14 years old, gaming was just for fun. When he got older, at the age of 17 he stopped playing for a while. His focus changed to the military and after that collage. At 22 he decided to give gaming and CS another try.

Who old where you?

- Haakon is turning 19. He did not finish his third-year of high school, because he got the opportunity to become a professional gamer. There are some gamers who will do that, if they have the skills which are needed, but it is not common.
- Jasmeet is 25 years old. He smiles, and comments on how he thinks he is old.

So, you guys play in a team together, right? Can you tell us a little bit of how that works?

- The guys explain the different roles which the team consists of. You have the Entry killer, he usually goes in first. They must communicate all the information they get to their teammates. Then you have the In-game-leader. He delegates and make decisions on what the team are supposed to do. The Support role helps the other players and are supporting them in the game. He is the one throwing grades for example. For the normal guys the main goal is to get the frags (kills). And then you also have the Lurk which mainly operates alone. He plays his “own” game and distract the other team. But even though there are different roles, everybody must know all the parts.
- There are five players in a team, because you must be five to sign up for the competitions.
- The most important thing for a team to work, is that the players go well together. They are also going get a coach, which coaches, analyses and goes through the stats so the team can get better.

How long have you been playing together?

- About 2 to 3 years. Then they played in a lower division. They had the right mindset and wished to be the best. They wanted to beat the higher teams.
- Haakon was trying out another team first, but was asked by Jasmeet to join his team instead. And since he rather would play with Jasmeet, they ended up in the same team.
- There was also a case where Haakon got blamed for for cheating. It led to a lot of drama in gaming community, and the media covered it. But he managed to shake that off, because they ended up winning that season, playing in first division.

How is the e-sport the environment?

- They say that since it is now their job they must have a sense of professionalism. They can't trash talk because now they have an image to withhold. But since the sport is not that big here in Norway, there is a lack of professionalism around e-sport. For example, in Denmark and Sweden, they have come much further in that process. They say that they are the first and only team to do this full time and make it their career in Norway. They get a regular salary, just like a normal job.
- The e-sport scene is much bigger outside of Norway, they mention that there is a guy from Stavanger, who is on the 2nd best CS team in the world.
- It takes a lot of work and practice to get there and some people don't realize that. It is fun, but not that fun, because it is a job as well.
- Jasmeet and Haakon tell us that they practice every day for 6-7 hrs. Some days they play for 10 hours a day, because they play at home as well.
- Before the team played online from different locations. But now, they got a place to train together and soon also a place where they are going to live together.
- The guys are teammates, but also friends out of practice. And when they are not at work they also do normal stuff, like drink and socialize.

Telenorligaen, can you tell us a bit more about it?

- There are seven divisions, and the first division gets showed on tv sumo and streamed on Twitch. In the end of the season, the finals are held at The Spilleexpo in Lillestrøm with a live audience.

That e-sport is a sport, is a much-debated issue. What to you guys think of that?

- They don't seem to care too much about this topic, but they argue for that it is a sport. It has spectators, and it is fun. Maybe it is not so physical, but then again chess is considered a sport. It has even been considered for the Olympics. In Korea some players are like superstars, and they have huge stadiums, just like football arenas.

Yes, we get that it is getting bigger and bigger.

- They agree. But as mentioned before, not big enough in Norway yet, so you must play internationally. That is what they are doing.

Do you also attend LANs?

- They go sometimes, but just for competitions. They say it is a lot of younger people who goes there to have fun and hang out. But they want to win competitions, that is their priority
- They play mostly because of the competitions. They travel a lot to attend different competitions, and they are there to win. They are not doing it for the attention. But they want to be the best and make good role models for people who look up to them.

How is it to explain what you do to other people?

- They had to explain what we do for a living to sign for a new apartment. They tried to get around it and not explain exactly what we do. It seemed like it is usually hard for them to explain what they do. But now that they got signed by Vålerenga, it is much easier to just say that they are hired by them.

Does someone around say that you should move on from gaming?

- Not now, it is too late for that, at their level. But their parents said that before, they had the stereotype parents who didn't see a future with gaming.

What do you like to do on your spare time?

- Jasmeet answered that he used to work out, but don't have time anymore. People say that it is always time to fit in some exercise, but he really does not have the time.
- Haakon said that he used play the violin and played shows in orchestra before. He also did some table tennis and volleyball, but not anymore.

Are some of you on any streaming sites, doing tutorials or other social media?

- They have done some tutorials, and are going to do this more and more because of the sponsors.

Do you have any kind of specific gear that you use?

- Jasmeet has the mouse and his keyboard, a mouse pad and the screen and computer. The regular needed stuff. He has a good chair, because his back hurts.
- Haakon uses glasses, because he can't see well without them but also because of the computer screen light. He also has to wear a t-shirt, because he can't play with a sweater on. The length of his arm can not come in the way when he uses the mouse.

- They also tell us about hand warmers for gamers. It is not a good thing for them to have cold hands.

How long can you be a e-sport player?

- They explain to us that the tipping point is at age thirty. Or that is their opinion. The average is maybe around 22-27. The oldest they know about is 32, and he still plays okay. The main reason for people quitting is that their reactions get slower, but also social reasons.

What is next for you guys?

- Haakon is soon going to China for a competition. And then there are the Telenorliga.
- The team are moving in together. It is mostly because of their professional stand point, but they are friends as well. It might be some problems with living together, but they have the same goal for the playing and team. So, they think it will be okay.
- They now have a signed contract, with have mental coaches. physiotherapists, a support team. There is a lot of people who are taking a risk on them, and this brings a lot of pressure upon them. Also, a lot of money is invested, so they really are wanting to perform. This season they are going to be CONFIDENT!! Be the best team in Norway! And be top 30 in world in 2018.
- “We have to succeed.”

INTERVIEW: GABRIEL

6TH OF FEBRUARY AT BYGG, OSLO

To start off, tell us a little bit about yourself.

- I'm 23 years old, from the South, next to Kristiansand. Student at BI, studying finance. I do gaming, and some sports, tennis – just for fun.

When you hear the word gamer; what are your thoughts?

- With the word gaming, I associate it with someone who plays games basically, like anyone who can spend an evening just playing games. Not someone who just have a phone and a Flash-game.

Do you consider yourself a gamer?

- Yes.

What kind of games do you usually play?

- I usually play games where I can play versus other people. So that's the primary thing that I do. You have league of legends (lol), you have rocket league and you have world of worldcraft. These are the main games that I play.

Any of them your favorite game?

- It depends on the mood. It's kind of phases. Switching between those 3 games. Gamers in general tend to go to the newest thing, I don't really like that. If you heard about Steam, It's a gaming platform, where new games are published, like Fortnite, player unknown battleground, it's basically shooting games. But I usually stick to those 3.

Is it online games?

- Yes, everything is online.

Do you game on the computer now, not PlayStation?

- Yes, not every game is playable on the PlayStation. PS is basically a bad computer, that things have to be adjusted to. I have games that I have on PS and on PC, but I rarely play them on PS because it's worse due to like everything around PS. When you play at a competitive level, you want everything to be working optimally, so frame rates is something that is important, on PS you are limited on a lot of games to 30 frame rates per second, on a PC you are not limited. So it's much smoother, and it is easier to play on a competitive level.

What kind of equipment do you use when you play?

- I have to brands that I use, it's Alienware, and razor. I use them because of the performance of the equipment. And headset I use Steelseries. I guess you guys want to create a product for gamers, so these products I guess are relevant. Ailenware is a luxury brand, so it is not really performance based, even though they are, it is more appearance based. I don't really care about it looking nice, I just have it.

Why did you start gaming?

- I have two older brothers, I have been gaming with all my life, so from I was a child, I can remember waking up sitting by the PlayStation with my brothers, and that was kind of my childhood, and then we just kept on playing with each other. They are 26 and 30 years old. Don't have any sisters, three older brothers.

Do you think it is a guy thing then?

- It used to be, I think it is now shifting towards females, as now it is entering a esports scene, so that it is actually entertaining to watch and is not only about the level of play, cause guys usually tend to play more then girls,

Do you think the games are made especially for guys, or do they now advertise towards girls as well?

- If you think about girls in that matter, I think that the game design that the games has been adapting now a days, is a lot easier to understand, it is supposed to be easy to watch, then it is more about the decision making in the game, and not necessarily how fast you click the buttons, like it used to be before. It is more towards everyone, girls and younger people too.

How long have you been gaming?

- Probably since four years old, I bought my first PS game when I was five I think.

When you started gaming, did you have any problems with the people close to you – in a social matter?

- Yes, that has been a big issue, like over the years. It is not an issue anymore I feel, because that was mainly due to the

products that has come to the market, that helps you socialize with other people. Not necessarily face to face, even though you have virtual reality now, which might make that even better. In the game you could write with people, but you couldn't talk with them. Discord has been released, which is tailormade for gaming, so it's easy to socialize and not be in just a closed group – in skype you have to invite people in, and this is a more open platform. You can make a server, and then everyone who wants to can socialize on that server.

This is also a big part of the games I choose personally, playing a game alone is not necessarily fun. If it wasn't for the social aspect, I wouldn't be playing.

Did your parents have any problems with you and your brothers gaming?

- They did, they didn't support it, but they didn't shut it down.

Did you look at it as a hobby?

- I used to play at a competitive level, I was considered among the top players in world of Warcraft, at a very high level there. In league of legends I've played at a national level. I've been a coach and played in a team. But it is a hobby, I never wanted to pursuit gaming.

How is it to explain to others that you are a gamer?

- I'm not ashamed to be a gamer, so I haven't had a problem with it, if someone has played the same game, I'm proud of what I'm doing, and I guess I will always be. So in telling other persons about, I haven't had a problem with it. But I guess I can see why others have, because it's stereotyped.

Have you been watching or making any YouTube tutorials?

- I have not made one, but yes, I've watched them. If you are looking into a product, the main thing in gaming is information, because the game design today is all about decision making. Take football as an example, it's not about how good you dribble the ball, it's about the decisions you make on the field. So, information is key in any games. The more information you make, the better decisions you make. That's basically why you have to make tutorials.

Do you have any favorite youtubers that you watch?

- In terms of gaming, it's usually the ones playing at the highest level.

It's been a debated issue, if e-sport is a sport or not, what do you think?

- Think it's a sport, mainly because if you take away the physical aspect, you still have a very strong mental aspect. If you look at the professionals playing league of legends in Korea, they have a sleeping pattern for about 6 hours a day, and then they practice the rest of the time, and this they have been doing for year. This says something about the high level of competitiveness. In my eyes it's a sport in a competitive sense. It's more about how competitive it is, and how hard it is to actually to be on top. Like chess, obviously a sport.

For how long are you usually gamin?

- I use gaming primarily to avoid having any dead time, if I have nothing to do, I'd rather play games than watch tv. So, for me if I have nothing to do, I could easily play 10 hours a day.

Generally speaking, what is important to you when it comes to gaming?

- When I start a game, I start it to become good at the game. I have that primary goal in my mind. Whatever I do for the first 1000 hours of playing a game, which sounds like a long time, but really isn't when you are playing, I basically just focus on how to become better. Once I stop having a progression, that would mainly be because of motivation or that it's hard to make a progression, at that time I find a game less fun. Which is also why I don't want to go competitive, because at that stage it's just about keeping it going.

Do you have any rituals when you play?

- That's a good question, not really. I check if people are on I guess.

INTERVIEW: SIGGY

22TH OF FEBRUARY 2018 AT HOUSE OF NERDS, OSLO.

What kind of people visits House of Nerds?

- Regular people who wants to game. You have kids coming over for birthday parties, people coming with friends, or people coming alone because they might have a small apartment. We also have the Gaming rooms, which you can hire and there you can drink beers. So, in that case you have people coming for the social aspects.

Well we are having a school project about cultural understanding, and we choose gamers and e-sporters. We didn't know anything about it before we started, but we want to know everything about it. We don't really know where to start, but maybe you could help us out a little bit?

- Well I was an e-sporter for a long time, but not anymore. And yes, I can tell you what I know, that's not a problem.

What kind of games did you play?

- I played Call of duty, and some CS (Counter Strike).

How much time did you spend gaming?

- You have to play a lot, to become good. A lot of hours goes to gaming. You have to be smart about getting practice, so you game whenever you have time for it.

How did you feel about that?

- Well, after I signed the contract, it got more serious. It was not for fun anymore. It became more like a job. I skipped out of college just before my last year to peruse this, but that was also because I was good at it. I lived in a house with my teammates which we practiced in. And I probably went to 58-59 countries, so it's a lot of traveling.

So event though the game is online, you have to travel to the different competitions and be there in person?

- Yes, you usually do that. But in the Telenorligaen for example only the finals is like that, and is held at the Spille Expo at Lillestrøm.

What kind of equipment do you use?

- I use this keyboard (Shows it to us.) But there is a lot of different ones, with different functions out there. This is a MX Cherry key (shows us another keyboard, with specific buttons). You hear the click, and then its still a long travel before it hits the bottom. You don't need to push it the whole way down with this keyboard. This is something that is called MX blue. (He opens the keyboard for us to see the inside) This one is blue, that is why it's called the blue MX Cherry key. And then you have red, brown, black, white, green.

And blue, is that the color for hardness?

- Yes, it is because of the tactical feel I guess they call it. The clicking sound.

Is it better to have it harder or softer?

- It depends on the person. People that play RTs games, Real Time Strategy Games, like Starcraft and Redalert, and games that you have push a lot, like you have a lot of action per minute, they prefer red or black. They are without the tactical feedback and the clicking. They are linear, so they are just straight out. You don't have the clicking feeling.

What about the position or the space between the buttons?

- That also depends on the person. Some of keyboards have really short spacing like a laptop keyboard, and some of them have long spacing between the keys.

Do you use all the buttons for gaming?

- It's mainly these ones that are used for gaming. (Showing us the area on the keyboard, mostly the left side and the arrows)

Do you think that if there was a compliment where you have only had these buttons people would use it?

- They have something that is called a gamepad. I think Razer and Logitech are making them. It's only this part (shows us the left area on the keyboard). It's more ergonomic, but I don't think it's good. Because you can't write. You need to be able to send some shitty messages.

(He shows us another keyboard)

- This is the keyboard that I use every single day, as you can see these are brown switches. They don't have the clicking sounds, but they still have the tactile feedback, they still have the bump. The other one (refers to the MX Cherry blue) is

just noise. And as you can see its really small, the switches are different, the keycaps are different. The spacing on the other one is bigger and higher. It all depends on the preferences and who created it.

Do you ever get tired when you are pressing the keys?

- No, never.

You started out gaming for fun, was it more for the social aspect too?

- Yes, and to do something else. Because I used to play hockey, and all my friends they played hockey or soccer. So it was just to do something else than playing soccer or hockey, or running or being at the gym. Just to do something different.

Did your hockey teammates also game?

- Yes, but they didn't play computer-games. They usually played like NHL or FIFA, something on PlayStation. They still played somethings instead of the usual things. But they played different games, like Call of Duty on the Xbox or PlayStation.

Do you think the ergonomic and the comfort part of the equipment is an important thing?

- Yes, it is.

Like what is more important?

- The most important part for me when it comes to equipment is that I am comfortable with it. Like I said earlier, if I am using this, you will probably think it is really bad or you don't like the keyboard at all. And if you look at big tournaments or people playing, they use different equipment, everybody uses different equipment. And you can go way back, and you can see there are people are still using the same keyboard. This keyboard (showing a picture of a keyboard on his phone) is the new generation from Cooler Master. They have the same keyboard, but they have made the last six series just copying it. In stead of changing everything that is on top, they are changing everything that is insides to make it better and more durable. And you can punch it and throw it around and it won't be broken. Trust me I have done that. I have broken many keyboards over the years, and screens for that matter. I have broken a lot of equipment over the years because I get angry.

Is it because you lost?

- Not because I loose, but because I think I play bad. When I feel I play shit I get angry at myself, because I know I can play better.

Is it also because you are a part of a team, and don't want to fail the team?

- Yes, if one of my teammates are not doing well I tell them at they need to step up. But if I do something really really bad or play like shit I tend to get mad at myself.

What about the mouse, do you have a mouse with buttons on it?

- My mouse has five keys I think, that's all. I know that a lot of people that play World of Warcraft or massive multiplayer games, they have mouse with sixteen or seventeen keys. I like my equipment to be as clean as possible, no fancy-

schmancy, no lights. Turn that shit of. Like this keyboard has probably 10.2 million different colors or something. You can even play snake on it, like you used to do on your cellphone. You could play snake on the keyboard, with the buttons and the colored keys. But for me its mostly like the comfort, as long as its ergonomic I like it. But I know most kids wants a lot of colors, they want it to look like fireworks.

So, function before design?

- Yes, and most keyboards they have a lot of macro keys and a lot of extra buttons all around it. I want it to be small, nothing fancy. Like an old kind, I don't like cruse control or adapted driving, I just want something simple.
- I'll find a photo on the mouse that I am using right now. This is the mouse I have been using the last, I think it's four years I have been using this mouse. I have just changed it because I wear it out, that is the only reason I changed it. I didn't change it because I didn't like it or anything.

Have you seen the mouse that is supposed to be more ergonomic, and flipped vertical to the side?

- Yes, I never every liked those. I have tried them, but the thing is when most people when they sit down at the computer they are doing this (Shows us with the palm and wrist sideways) But I whenever I put my hand down I automatically put it the way I play and then I move it around (Shows us with the palm and wrist down towards the table). Most gamers, the people that sits a lot in front of the computer and play, they put their hand on the keyboard like this. Like okey, now I am going to play, but even if I am not going to play, I actually have to write an e-mail. I put my hand straight down, I don't put it on the side, I put it straight down. It's in my muscles.

It's almost instinctive?

- Yes, its muscle memory. You end up putting it on the direction of the keys on the keyboard, like instant. And you don't

even think about it. Like I am going to play.

Do you have your own things to do before playing, like rituals?

- Both yes and no. I tend to sit down, find a server and just do something called a deathmatch. It is everyone against everyone. There are no teams, you just run around, start practicing, get your fingers warm and get your head started.

Is it like a warmup?

- Yes, it is a warmup. I never go for like a jog for half an hour. I am not like that. It's more like a basic thing. I find a deathmatch server that I usually play on, and I just sit down and play for like half, hour to forty-five minutes. Just to get my fingers going, my mind going, everything like that.

Is this the same thing you do for fun as for the e-sport?

- Yes, even if I just want to play with friends I still do it.

Do you arrange a time with your friends when you are playing together? So that you know you have time to sit down 30 minutes before?

- Most of my friends are like, everyone is a gamer. There is always someone online. This guy (point to another employee) lives in front of his computer. I always know that he is online when I get there.

How is your sleeping schedule?

- I probably have the most fucked up sleeping schedule when it comes to like every single one. I sleep for about 4-5 hours every single day. And then I work or play the rest. He (points at the employee) sleeps a lot more. It depends on the person.

Is it because of gaming?

- No, I have done it my whole life. I have always slept like nothing my whole life. It doesn't come down to that I feel like I have to play games. It is just because I can't fall asleep, and I wake up by myself. Like today I fell asleep at 5.30 or something like that, and I woke up at 10. And I didn't set an alarm. I was like right awake and ready to start the day. So, it depends on the person.

Have you heard other people say to you that you do things, without knowing you are doing it?

- Yes, its instinct. I just end up doing it because I have done it so many times. Usually I don't have an explanation for why I am doing it. It just instinct. I do it because I think it is the right move. Instead of going left, I go right or something. It's really hard to explain why you end up doing something. The decision-making, I end up doing that instead of that. That kind of changes for everyone.
- Say that me and Espen is playing, and I say let's go right. And he says no I think left is a good call. And we end up going left and we end up surviving that turn, and if we went right we probably would have died. So, sometimes if my decision-making is on point, then everything I do is right. And if it not, I end up playing bad and destroy the keyboard. Or punch my keyboard or screen.
- It's really different when it comes to people. If you are playing in a team, a team with five or six people, you will always have person in the team that is the shot-caller. That calls all the strategy that your doing. Say you are going to plant a

bomb on A or B. And they kind of leading the situation. Say you are starting out, you get the first opening kill, and the team is like super sweet. And then the shot-caller say we are going with B, even though we pushed to A. Because everyone has written A and then you go over to A and then to B and there is like no one else there. Some people have that mentality that they can cool down in a stressful situation. I don't have that, I'm more of a follower.

You have these people that drives the team?

- Yes, there are people on a team that are in charge of the shout-calling. The strategy you use. If you are doing a B split or an A split. Where do you smoke, and where do you flash? So, there is always people like that on one team.

But is there a person that doesn't play and just observes all the players? Like a coach.

- Yes, the last couple of years, especially in CS GO, that popped up and became really popular. That they have like a sixed player that don't play. But is standing behind them in the same common room that they are playing in. And he says that you guys have been doing this and have been really successful this way. So, try to do that with a twist. He is not playing, he is standing behind them talking.
- The shot-caller is the one who is in charge of every single one. You always have one, maybe two, if you are lucky, in one team that are doing all the strategies, and telling them what to do. And has a 100 percent control of what everyone are doing, where they are staying and what corners they are peaking in. And that is a really really hard job. To keep calm and don't get angry if someone screws up, is almost impossible.

Are there a lot of people like you that hits stuff or wants to, when they feel that they do something wrong?

- They get angry. Almost every single one I think. Or I have had teammates in the past that are really calm, no matter what. It takes a lot before they get angry, or before they raise their voice or something like that. And they are probably

my best teammates, that is the best teammates I ever had, like people that stay calm all the time. I you have a hothead that kind of just gets angry for nothing or for just a small thing. It's not a good teammate. Because when someone gets angry, everyone gets angry. It kind of brings the mood down in the whole team. Even though you are doing bad or have a lot of bad rounds or something like that. If you, let's say you loose five round in a row, and you still are able to keep the spirit up. Its easier to turn it around and win a couple of rounds. Instead of continue losing. If one person gets mad he kind of drags everyone else with him. That is the reason why I punch keyboards or throw my mouse around.

Would it be better to have something else to throw around?

- The thing is that you are so chough up in the moment and you are so caught up in what you are doing. So, instead of fumbling around, trying to find, lest say a box of snus or a pencil or something like that. You just punch the nearest thing. I gotten punched myself for some reason. A couple times when I have played tournaments, where it just came straight left, at my shoulder. He was straight up angry. Yes, people have hit me during tournaments, because they ended up angry. The thing is that, when they are really trying to hold the spirit or mood up and try to just get everyone to get up again, to hold the team. You end up joking around. For him (points at his employee), we call him the saltiest kid on earth. And if you are salty in the gaming community you are just always angry or there is always something wrong. But just say it as a joke. And sometimes it just gets overboard, and you say to someone that they are actually really really bad. And if you say it way too many times they end up being fed up and they punch you. There is sometimes you're just in a mocking mood, and you just want to talk smack, and it ends up on one person. And it is usually him (points at his employee) for some reason (the laugh together). He is hands down the saltiest kid on earth. So, you kind of have to find the balance between when you are joking and kind of have to hear when someone is fed up, and you have to stop. Because he is going to leave if I don't stop.

Is it a difference between playing with your friends and other people in the game?

- Yes, it is. When you are playing with randoms, people you actually don't know, people you just end on in the lobby with, you kind of scale down how bad you are talking. Like the shit talking and making fun of someone. Because you have no

idea of how they will react. But the biggest problem in the gaming community when it comes to saying shit about someone, is that you usually use homophobic slurs, or you talk about their mom. You end up shit talking, calling them you are a fucking gay or your mom is a whore I have fucked a lot. Its words that don't actually have any meaning. Its just something that you end up saying. Which is really really bad. It's better to say something about that person, instead of saying your gay. Its not a bad word at all, it is not a bad thing to love someone of the same sex.

If one is to go into the gaming community, is it then a given that people will talk shit about you?

- Yes, but it is a bad thing. A really really really bad thing. But some communities are worse then others. Say the League of legends community. They are saying that they are the most toxic community ever. Everyone hates each other and even though you are doing really bad, you always blame someone else. In League of legends you always blame the Jungler, even though Jungler has not done shit. And in CS:GO you always blame everybody even though you played really bad.

Is League of Legions more of a strategy game?

- League of Legions, it is just a bunch of shit kids playing that game. They have no idea how to play. (LOL, Laughs out loud) But the thing is that the League of legions community has always had a bad reputation of being really toxic and really bad. The same goes for the CS:GO community, it is also toxic when it comes to the lower ranks. Because people there they think they are the best in the world, but they can see that they play really bad.

Do you shit talk in the competitions as well, or in the e-sport community?

- When you are playing in the game, you usually only communicate with your team. But the thing is that, over the years I have played against the same people almost every single time. And whenever there is some new team coming in, you

are kind of like the big brother. You got to be cool and try to set an example and showing them that you have been there way longer than they have. I don't care if you qualify for this tournament, or if it is your first tournament, I am going to let you hear it. It's just one way of establishing the grounds. The thing is that, even though you are playing on a different team, you still see them on a regular basis. And you still go and grab a beer, or something too eat after the games. Even though you don't see them every single day, you still see them twice or three times a month. They end of being your friend, even though you are not on the same team. But then it comes down to the friendly backtalking. If someone does something good, say someone kills three people in a round, or always write nice or good job or something. Give them acknowledgement, acknowledge that they did something good. And you will do the same if it is a teammate or someone on the other team. Just because you want them to know that they did a good job on that. But I am going to shoot you in the face next month.

So, it is kind of a hierarchy? And is it based on who played the longest, or the best player?

- It depends. Sometimes it is the person who has been there the longest, or team that has always been there. And if there is a newly qualified team that never played the big tournaments, you kind of have to show them no mercy. Because if you are thinking that this team has never played her, and you end up loosing, you get really really angry. Because you feel like you didn't do your best. It's like say, Manchester United played a Norwegian soccer team in fifth division. They would not take it seriously. Because they run around thinking they are the best team in the world. And if they end up losing, it would not look good. It would look really really bad. Its basically the same thing. You have to establish dominance. And you have to show them no mercy even though they are a new team. You have to tread lightly, because you are there to win as well.

You stopped playing e-sport now?

- Yes, I have stopped. I stopped 5 or 6 years ago. Because I ended up being, not too old, but I got a girlfriend, I wanted to finish my education, and I wanted to do something else. And I ended up together with too other people, starting a gaming organization with a lot of different teams. Which now in November last year, they signed a partnership contract

with Vålerenga. Vålerenga football, just like the biggest football team in Norway. So right now, we are setting up our offices at the football stadium of Vålerenga. The team is called Nordavind.

When they are playing, are they playing at home?

- No. The thing is that we now have a bigger budget than everyone else. So, we made every single player move to Oslo. We want the whole team spirit and team feeling. We want to build that up

Are you one of the leaders of the team?

- Me? I am one of the board members. I am in charge of the events and partnerships, like sponsors. So, whenever they are traveling somewhere, I need to get together with their manager. I am in charge of ordering their plane tickets and fixing up the hotels. I am not the manager of the team. All the teams has their own managers, but all of their managers they talk to me. I am the manager of the team managers. Whenever they are traveling I am in charge of setting everything up. Making sure that they are getting back and forth when they are supposed to. I usually travel with them, because they are like four years old sometimes. I have to get them up in the morning, and make sure that they eat and drink for some reason. They are five, they have no idea how to cook a steak. It is mostly because we want them to focus on their job. They get paid by us to play the game. And for them to be able to play a couple of hours extra every single day or practice a couple of hours, instead of thinking; I have to order plane tickets, I have to order a hotel, I have to fix that, badges and things. We do everything for them, so they can concentrate on whatever they are doing that day. We are doing our best to tailor everything they are doing every single day. And now we have access to a physiotherapist, they have mental coaches. We are giving them a schedule. From 8-10 they have to exercise, from 11-11.30 you are talking with a mental coach. And between that then you are going to play together, and the you are going to do this and the you are going to that. So they have a schedule every single day.

Is this the first time this has happened in Norway?

- Yes. We are running Nordavind just like any another sports organization. Where we have the pro teams. And then we have the academy teams, that are players that are up-and-coming. They just need the last push to become even better. So, we are giving them the possibility to become better.

When you are playing in the Telenoliga, or where they are playing. Are they playing at the place that you are setting up now?

- Yes. When everything is set up and everything is up and going, they are going to start paying there. But as of now and the last season they played at home. So, we are kind of just changing it up this year.

Then they are sitting together?

- Yes, they are sitting like five people in the room and playing.

Did they do that when they played at home as well, or can you play from separate locations?

- Yes, you can play all over Norway.

So, it is all online?

- Yes. In the Telenorliga everything is online, except the playoffs. The playoffs and the finals are played at Spill Expo in Lillestrøm every single October or November I think. Then everything is on a stage.

Is it the same league?

- Yes, the thing is that the Telenorliga is divided up to from first to seventh division or something. So, the best players are playing in the first division.

It goes all the way until October?

- Yes, and they have the Spring split, they call it. Which is from January until June, I think. Then they have two months off because of summer vacation and things like that. And then they start up after that.

How many often do you have a match?

- Every week.

For almost a whole year?

- No, they divide it in two. Say that you are playing in the second division in the start of the year, and if you win that you bump up to the first division. And then two bottom teams in the first division they go down to the second. And then if your top four before the Spill Expo, you then get qualified to the playoffs. And then Gamer.no, the people that are hosting the Telenorliga, they are flying the players from the four top teams from the first division to Lillestrøm or to Oslo. And then they are sitting on the stage and are playing the playoffs there. Instead of sitting at home, then you have an audience and get streaming.

Do you play at home, did you say that?

- Yes, but sometimes I play here (HoN). The ting is that I don't have the same equipment here, or I have the same equipment at my office space upstairs. So, if I play here, I just bring it down and play here. We usually have groups that comes here and knows all the people. And when they are her, and I don't have to help out down here or just finishing upstairs, I go down and play with them. Sometimes I sit here, and sometimes I just travel, I go home, and play at home.

Are there e-sport teams that comes here as well?

- Yes, sometimes, especially during the playoffs or before big tournaments that they qualify to, we rent them a space for them to sit and play. It is called "boot camp". Sometimes we have teams here, and sometimes we don't have teams here. It depends, sometimes yes, and sometimes no.

We really want to observe somebody while they are playing. But here I feel like people here are kind of in their own space.

- Yes, most the people that sit here and play, they don't play for a team. They just play for fun, casual gaming. The best way to observe a team that are siting together, would be to go to Utillity arena and watch Jasmeet and the guys playing.

I think it would be good to watching a team, and that you can watch more than one person. And also, they are playing the same game, so you can compare.

- Yes, and then it is really easy to see all the different equipment they are using. And the way they are placing it. Its super easy to see that some of them have a really strange way of having the equipment.

I think that that will be the most helpful thing for our project right now. Just hope that they answer back.

- Yes, he is almost impossible to talk with. Most of the players that we have they are kind of famous in Norway, because they are playing for the team. So they get spammed down with messages. If it is a person I am not a friend with or even though it is people I know, I end up using like four days before I answer. I am really bad when it comes to that. My cellphone right now it looks like shit. (Checks his phone) Like today I have 12 missed calls, 1109 text messages I haven't read, and 14 500 e-mails I haven't seen. And I probably have like 600-700 messages on Facebook I have never seen. Or I never would have replied to. Because you get spammed down so much, people are asking the most ridiculous questions. You don't have time to do that. I have other things to attend than telling 15 years olds what mousepad I am using or yes I think it is good. Just buy something, and if you don't like it, buy something else. Its just like every other regular sport. Say if you play soccer, you find a pair of shoes that you really like. Even though you buy the same shoes as Cristiano Ronaldo you probably would not be as good as him anyway. You just have to find something you like.

(Asks to add him on Facebook to have further contact)

Okey, well we have one more in our group that is on vacation right now. So, we need to find out what we want to know and what we need to do as a group. But if there is something more, could we come by again and ask you more questions?

- Yes, that's no problem. Just write me a message and I will try to reply as soon as possible.

And we can use your name in our report?

- Yes, sure. No problem.

JØRGEN THARALDSEN - GAME DEVELOPER

9TH OF MARCH 2018 AT DRONNINGENS GATE, OSLO.

We want to use gamification with our cultural group and develop a game for doing chores.

- I think you are going to have some huge balance issues with it. In gaming everything is data mind, what it means is that your results and actions are based upon your actual input, bytes and data and you know. If you do the dishes, and you do it bad, or you go from 2 to 7 dishes because you wait a few days, you need an input-system that can balance your inputs. Otherwise the system can be gamed, which means you can hoax the system to get further and on top. When you define it, you must sort it into lesser components. If you are going to do a game with doing chores, you will immediately see that you are going to get hundreds of components. So, you have to classify it to as few components as possible, and make sure that is actually super simple for people to give the input.

Jørgen asks us why we want to do this, and we explain more about our assignment. (The rest of the time he explains a lot, without us asking questions)

- If you look at product design, and furniture is a part of product design, probably living together in Oslo or any city, on a low wedge, haven't broken through in whatever you are doing, unless you are rich team and have made it, space is obviously going to be a big issue for you, I presume. I got to say gaming table, I got to see someone who can bring them along with them, the camping tables. Some of them are horrible, and some of them are good. You can make a new gaming rig, that can adjust the correct height. I have not seen them.
- You should do some research on portable desks for e-sporters. They are going to go on a lot of different LANs, a lot of various places. They need a comfortable setup, they need to make sure the setup is the same every time, hence the gaming chairs and other equipment. They need to know the playing field. It's like with Aksel Lund Svindal when he

has his preparations, he does the same thing every single time. I think a lot of the e-sporters are facing different conditions every time they are out. So, if you are super professional and have a routine on how you are going through it, they could have a way of prepping themselves.

- In terms of getting them to do chores at home, to get better motivation in between themselves, I think it is a really cool idea. It's not just for gamers, it's for everybody, it's for parents, particularly for parents and kids, couples – young and old, everybody who lives together in the first place.
- First you have to figure out; who is it for, why are you making it, and what is the goal for making it. If the goal for making it, is making coexisting easier, it is a super loose intangible goal. If the goal is to see who can clean the most in the house, one person wins – will it make that person unhappier? "Okay I won again, and I won for the third time, and the fourth time, fuck this is wrong". Is there punishment in the system, because in the gamification systems today are mostly based upon positive affirmation design, which means that most of the things you do, you never get punished for it. In a lot of the games they play, they get killed by getting killed, but they keep getting back at it, it is not hard punishment – it is not like you get killed and you are out, it's temporarily punishment which means you still have a shot doing it. But here, if you keep on being last in this game, you will be the worst cleaner of the pack, and it will create more problems.
- You will get data on who is the worst, and who is the best. What does this actually do to the best person? It means that you are creating a system that proves who is better at something. This is a human thing, the guy or the girl that is the worst at cleaning, the one that is good at it, will keep being good at it, and the one that is bad at it, will keep being bad at it. I don't know if this is correct, just a theory.
- Probably a better way to solve this, would be to create it from the ground and up not as one vs one competition, but perhaps a team gamification. So, it's not about who does the dishes, if someone doesn't do the dishes that day, the team doesn't get anything. It means that you are all important pieces in making this result.
- If 4 out of 5 do their task, and the fifth doesn't do it, the team don't get anything. It will become a peer pressure. The other guys will say, hey guys we need to fix this, otherwise we will not get the award, and we need this reward to be able

to get x y z, meaning any value you put into it. If you do it like this, you will have people working together to solve something. If it's just about the competition, which probably these guys (our cultural group) love, then on week 5 they maybe will get tired of it.

You can break it a lot of sub goals, each assignment (listing different chores) could have different bars (listing stuff like who doesn't go to bed at night, who smokes inside etc.) but the more stuff like this you put in, the more complex it becomes. You could also include badges and rewards for achievements. You're going to end up with this huge tree of potential technologies that must be put together. If this is going to be communicated back to these guys, on whatever device they're on, and they have to put inputs back on the device, you also need a server, that can read data and also send back data. The best way to see if this idea flies and is really good, is to focus on one or two things. Make it super simple. A problem with making a game in the first place, is that it soon becomes very complex.

- Out of all this stuff, the most important thing you can do for a e-sport team, is to nurture their team feeling. Make them work together as a team, in life, in games, or whatever they do together.
- Then you are solving the real issue; how do you get these guys to function over time. Not just in the virtual world, but when they interact with each other.
- The second you start braking all these components down, into goals and sub goals, and sending information back and forth, and seeing leaderboards, timing on the leaderboard, messages and notification from the game, apps. There is a lot of tech.
- Maybe the solution here is to not make it yourself, maybe a part of the solution is that the software already exists. Often in many countries, you don't actually have to invent the thing itself, you can find the company who makes it, import it, and adapt to your cultural market.
- A part of the difficulty and dilemma of making games, is that there is so many solutions to making the same thing, and none of them are right, since different things works for different people. And you don't really know if any of them is going to work, before you test it. Unless you copy something, then you know with a good degree what is going to happen.

INTERVIEW - SIGGY 2

14TH OF MARCH 2018 AT HOUSE OF NERDS, OSLO.

When you were a professional e-sport player, did you live together with your teammates?

- Yes, I did live in a house with other players for one and a half year, in Belgium.

Is it normal for e-sport players to live together?

- We were probably one of the first who did it, but with the years it has become more normal. More and more teams are doing it right now, if you look at the CS team Nordavind, the players Jasmeet, John and Hendrik, are living together now. Just to stay together and play together all the time. They are moving to a bigger apartment, so six players can live together.

Did you find it a positive or negative experience to live in a team house?

- I saw those guys like 200 days per year anyway, so it was no problem to see them the other 65 days. It was a quite big house too, and we had our respective areas where we could just relax and do whatever we wanted. We also had our own room. And we had a living room that was like this (the room we are sitting in at HoN, where they have a lot of tables, chairs, computers and other gear).

Was it only computers and gaming gear in the living room?

- Yeah, almost, we also had a TV, couches and other stuff like that, but it was mostly computers and boxes and stuff.

You did a lot of training in the house?

- Yeah, or gaming together, not like exercise. We had someone who helped us to exercise every single day, because if you are exercising you are doing better in computer experience. Play computer games for a lot of hours every single day is mentally exhausting, so you need to find something else to do for exercising, play paintball, or whatever helps you to turn your mind off. We did a lot of different things.

Your living space is also like your working space, did you find that challenging?

- In the start it was a challenging cause I was only 17 years old when I moved, and my parents didn't like it. I also had all my friends in Norway, and I broke up with my girlfriend at the time, because she was studying in Oslo and didn't have the possibility of moving, so in the start it was hard. After a couple of months all the pieces fell in to place and it was probably one of the best years, or 15 months of my life.

Did you play with your team before moving in with them?

- Yeah, I we played for at least half a year, travelling around, and whenever we didn't play a tournament we were doing stuff for our sponsors, we did a lot of different stuff, so they became my best friends at that moment, and now I still talk with them and we sometimes play together just for fun.

You never had any problems with any of them?

- No, I think it's mostly about how I am as a person, because someone has to do something really really serious for me to hate them. But there was also a lot of arguments and stuff we were struggling with. It was like a relationship... it was like five friends who had a big house and lived together, doing whatever they want.

Did you have a manager, or did you manage yourself?

- We had a manager, Frederik, a 35-year-old guy, who took care of us. He was really good at making us work as a group. He was like a guardian to us, he woke us up in the morning, made breakfast, made sure that we cleaned our rooms. He was more like a dad figure actually. We also walked around and thought "Oh fuck the kitchen looks like..." and he cleaned it for us. But you grow up really fast because you actually go and live alone when your 17. So, it was really nice to have that guy and i think that helped a lot with the atmosphere in the house.

Did you have a chef too?

- No, Frederik was the only one in charge of making all the food, so we could focus on what we were supposed to do. We never ate in front the computer as long as we were sitting there, so we also had other things to do instead of sitting in front of the computer.

You use your kitchen and the living room, but you didn't use the TV room that much?

- We rarely used the TV, well, we use the TV to watch replays and see where we did something wrong, but we didn't lay down and watch TV shows.

Did you socialize mostly with your teammates, or also with others?

- We still met a lot of people when we weren't playing, we had our group of friends that we met during our spare time, so sometimes I went out with them and others went to the cinema or something else. We didn't just socialize with each other, we did stuff individually too.

Some people say that maybe it's a challenge to live and work in the same place, you have to mentally prepare yourself to start gaming and also decompress after. Is that hard to do in the same space?

- Because we had our own bedrooms, bathrooms, everything was separated apart from the gaming or the living room I didn't find it really hard. If you wanted to do something else, it was easy cause we lived almost in the middle of the city, so we just took a walk outside and you found a restaurant or a cafe or a place to take a couple of beers. For me it was sometimes a challenge, but after some time it became normal. It just took some time. We had one guy who moved from England and for him everything was an issue, he was struggling a lot. At the end they became your family and when people asked me how you could be travelling 200 times per year, I answered that I had two families, the family I was born into and the family I've gotten over the years. I've seen the same people even though I travel around over the world, the same sponsors, the same companies and everyone is doing the same.

When you are travelling, is there something special you pack?

- In the start we packed clothes, shoes and things like that and also the uniform that everyone had where the sponsors put their name. We had jackets and sweaters and more stuff that we usually wear at the airport, back and forth. If we talk about the equipment, in the start we pack all the equipment that we use but over the years people had been cheating and actually cheating at the events. The mouse and the keyboards became a tool to cheat with, it has a memory stick inside so people found a way to install it into the mouse instead of into the computer. Over the years the organization saw that, and found the way to contact the sponsors that all the different teams have to send them the equipment for each player. They send a new one for every single tournament and it's not

an issue cause they have a large list with all the gear. Now they can't use their phones for the same thing, and if you watch any tournament nowadays they have a guy behind them who take all the phones.

It's important to have the same set up every time, but what about the chair and the desk?

- At the end of when I played, there was a company who gave chairs to every single event. But chairs are not as important as the keyboard or the mouse, well, or the size of the mouse. There are different shapes of mouses and also different ways to hold it. I hold it different that any of you probably. If I need to try a new mouse I need three or four weeks to get used to the shape or the sense of the mouse. But casual players don't care about it, maybe for you it's not a big issue but for me it is.

Does every player get equally amount of space in the tournaments?

- I think that there is like a regulation of one half a meter each player, since each player has like their own strange style to play computer games, some need more space than others. At home you don't have a regulation, you can have the space as big as you want, but normaly we used the space as it is in tournaments to get used to.

Are you playing a lot while you are travelling, for example at the airport?

- Mostly no. We have laptops, but not all the equipment with us. If we had the opportunity of not playing one day, we would take it. Normaly we spent like 13-15 hours per day in front of a computer, so it's nice to take a break if you get an oppurtunity.

We would like for you to give us some feedbacks on our ideas:

One idea is an adjustable, portable game desk because we met a gamedeveloper who said that he hasn't seen one of those before.

- I know there is something not like a gaming desk, but something you put your laptop on while sitting on the sofa.

Could it be a desk for the tournaments, that you bring and can set up like you want?

- You normally have everything already set up.

We explain a game that could be similar to a game that is in the TV-show mesternes mester, where there is one vs one competing - who's reacts first and catches a stick when it falls.

Could this be a game for gamers? Since competition drives you, and it challenges your reaction time?

- Yeah, because you want to be the best. If the game is done right, and if it doesn't take too much space and time to set up, I think it could be a good idea.

We were also thinking on a gaming table but not for computer games, more for games that you can play to socialize, for example beer pong but with other games aswell. It's to spend time together when not on the computer and having fun together.

- You are thinking of mixing a lot of games in one table. It could help to get the team spirit up.

We were thinking on something that gives you an award if all the team works together but if one of them can't be there the team can't get the prize so it's something for the whole team and that force you to get this team spirit sharing moments. That's the last part of a game that we were thinking on but maybe we dont want to do it anymore. We talked with the game developer, and it's a lot of different inputs, the more inputs the more challenge is to make and we are not game developers...

- Yeah, it's really hard to create a game cause you need 3d models, you need a lot of things. You can make a platform easy game but you will get bored after half an hour.

And what do you think about get rewards if you do your chores or your home stuff, and maybe have a locker with some beers so if you do it together you can unlock it. When you do it, you open it! Something like that. We have seen that for us is difficult to make something that technical.

- Well, create a remote control lock it's not that hard but I agree that make a game it's not a easy thing but you guys are making products, right? So just skip that and focus on a good idea of whatever you can make.

We also have the concept of dividing the space - the work space, personal and social space.

- The living room looks like this room (with the computers HoN), we have the set up ready always, and we only change it one by one if the sponsor create something new that we need to try, so we never change the whole set up. Even when you change the sponsor, they don't force you to use their equipment at the moment cause they know that you are used to the mouse and the keybord that you already have so as long as you promote it they don't care if you use it at home.

What if you want have friends over, or have a party?

- Well, we don't care. It was no problem with the placement, I set up my equipment at home or even when I'm working with small bites of tapes that can tell me where the screen or the mouse was. At home I have ten or twelve pieces

of tape around the table, so I know the exact same thing when I need to move my set up. So, the placement is not that big problem. And if you mean the desk where we have everything, it's just in the corner and we don't move it. If we threw a party and something got broken, we had like 15 extra in the garage.

Are you living with someone now? So, you have your own room for the computer or you need to have it on your room?

- I'm living alone in a house, so I have a lot of rooms I don't use at all, only for storage. It's 180 m2 and I use the living room, the kitchen, my bedroom and my bathroom. Two rooms that I use for storage and the base I use it for... nothing. But when I was living with the team, also you had your own space out of your room cause when you came out the other people were with their headphones or doing something else. You still had your personal space wherever you want.

Using your headset, you realize that there are someone else?

- Hahahaha, you get an atmosphere that everyone else get when you are gaming at a tournament or wherever you play. It's the same that you get at your office. You also use it for tell people not disturb you while you are working. It's a good way to space out. If you want to contact someone who is playing and with headphones you just send them a message at steam hahahahahah. One time when I was at a tournament in Thailand during tsunamis season and it was raining as hel, but we stay training at home and one big tree fell down and destroyed the front porch but none of us realized of that. You block out everything and live in that atmosphere.

To sum up, what do you think about all these ideas?

- I think the reaction thing is really cool, and the table with social games if you make it in the right way, easy to set up and it do something else, that could be also a good idea. Imagine play computer games for 8-10 hours every single day, you need to find something else to do.

Is it hard to motivate yourself to practice?

- Not actually, I played hockey for 14 years of my life before I started gaming, so I have been kind of competitive my whole life. If I sit down and try a new game I get angry at myself really fast if I don't play it as good as I was thinking. I can't sit down and play games for fun, that's one of my issues. I play a game because I want to be the best at that game or whatever I'm doing. I know that most people just have fun when they are trying a new game but for me it's not that way. For me to motivate myself it's never been an issue.

We also know that you had a coach. You do something else apart from gaming?

- Yes, we had in a contract that we need to go to the gym every second day. If you are physically fit, you are better mentally prepared. We also tried demos and watch games to get more tactics. So, it wasn't play game after game, we had individual tasks.

Can you tell us how every day is like for the Nordavind team?

- They wake up in the morning at 9/10 and go to the arena because they share mental coach and physios with the football team, and we have the office there. They also go to the nutritionist to know how to eat properly, because they don't spend time cooking, just focus on the things they get paid for. It's like having 15 parents around teaching you how to do everything.

GAME MECHANICS

Gamification is built upon 10 primary game mechanics, proven to motivate and engage users.

Game Dynamics		Competition	Collaboration	Community	Collection	Achievement	Surprise	Progress (emotional)	Exploration
Game Mechanics	Points					●		●	
	Levels	●			●	●		●	
	Missions (individual & team)	●		●		●	●		●
	Badges			●	●	●	●	●	●
	Leaderboards (individual & team)	●	●	●		●			
	Unlocks					●	●		●
	Events Feed	●	●	●				●	●
	Notifications			●				●	
	Quiz	●		●		●		●	
	Progress (visual)					●		●	

Fast Feedback: Immediate feedback or response to actions

Encourage users to continue or adjust their activities with onscreen notifications, text messages or emails. Congratulate a user for reaching a goal, encourage the next step to a milestone or promote a new reward.

Transparency: Where everyone stands

Show users exactly where they stand on the metrics that matter to you and to your audience. Individual and team profiles show progress in real-time and historically. Leaderboards show who's just ahead and who's behind as well as overall ranking on any number of metrics.

Goals: Short- and long-term goals to achieve

Missions or challenges give users a purpose for interaction, and educate users about what is valued and possible within the experience.

Badges: Evidence of accomplishments

An indicator of accomplishment or mastery of a skill is especially meaningful within a community that understands its value. Often used to identify skills and expertise within a group.

Leveling Up: Status within my community

Levels indicate long-term or sustained achievement. Used to identify status within a community and to unlock new missions, badges, activities, and rewards.

Competition: How I'm doing compared to others

Raise the stakes for accomplishing a goal by showing users how they compare to others, as individuals or in teams. Encourage competition with time-based, team and individualized leaderboards. Where do I rank? How can I overtake my closest competitor?

Collaboration: Accomplish a goal working with others

Connect users as a team to accomplish larger tasks, to drive competition, and to encourage knowledge sharing. Show team members how they are contributing to the group's success. No one wants to let down their team members.

Community: A context for achievement

Community gives meaning to goals, badges, competitions, and other mechanics. Sharing participant achievements creates energy in the community by making people aware of what others are doing. They learn about goals, badges, and rewards that they may want to pursue.

Points: Tangible, measurable evidence of my accomplishments

Used to keep score and establish status or accumulated to purchase virtual or real goods. Earn points through activities, sharing, contributing, or by creating something useful to others.

PRESENTATION OF FOLDING WORKSHOP WITH JULE WAIBEL

ELISE JIN SANDVIK

The workshop with Julie was very good. I learned that you could use one technique and apply it to different materials. I also got a better understanding of how to fold, and mostly how to think when folding something.

I enjoyed the work, but it was very time consuming, so patience is needed when folding. What was interesting was that it took almost the same amount of time when folding something large, as folding something small.

There are so much you can do with folding, and so many different shapes. There is just your imagination that sets the boundaries, that's what was so amazing whit the work we did in this workshop. Also, that something can appear one way, and when you fold/unfold it becomes something else.

This was my final product for the exhibition.





PRESENTATION OF FOLDING WORKSHOP WITH JULE WAIBEL

MARI EMILIE MOTHES

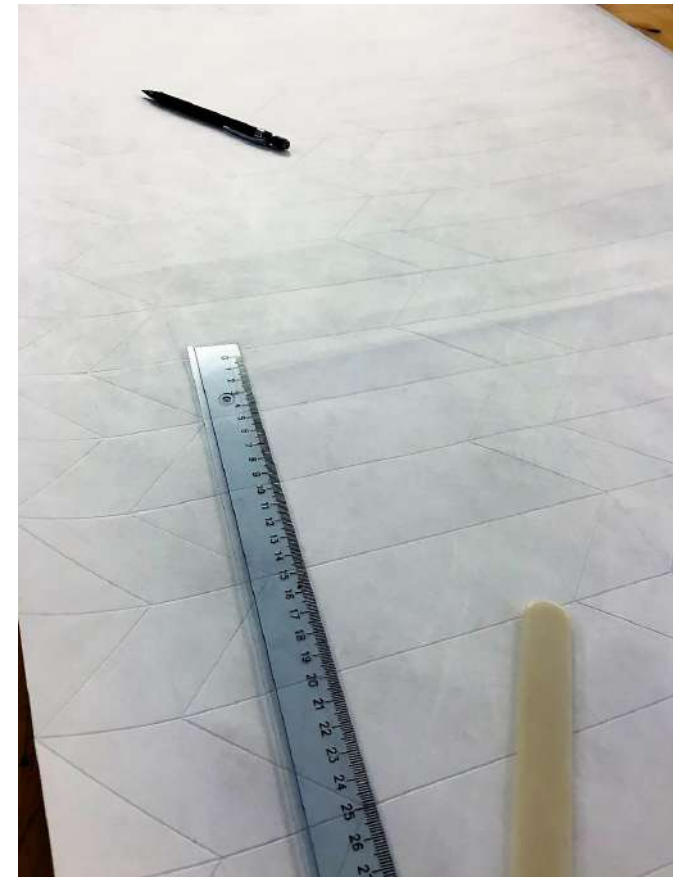
The folding workshop with Jule Waibel was really inspiring. We got to see her journey through a bachelor and master's degree, and how she found her calling in folding. Who knew that many opportunities could come from folding objects?

Since I feel like I still haven't found my direction within design yet, it was good for me to see someone else's calling, and that it can take some time before you get there.

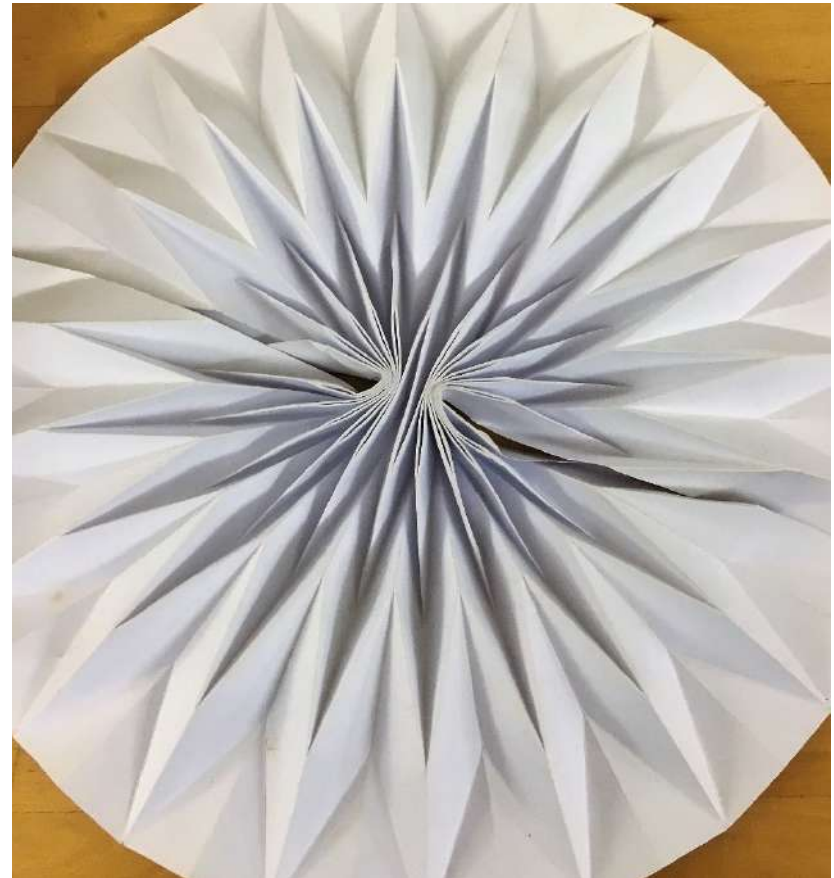
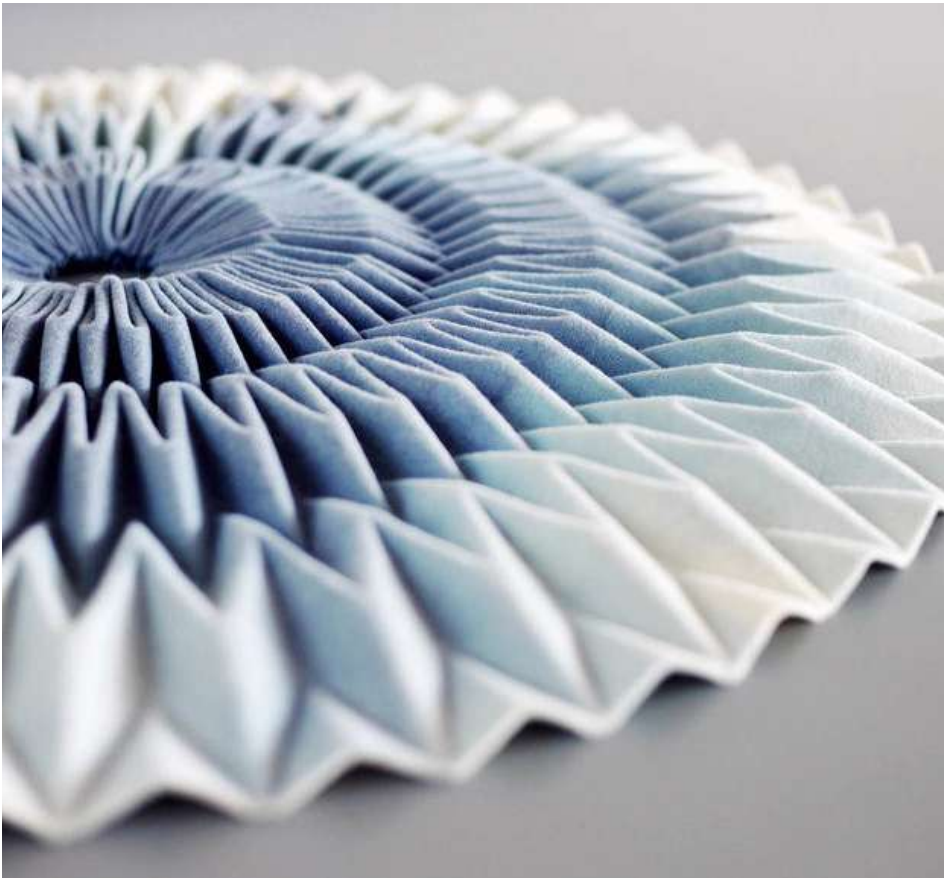
One week of independent workshop was a nice break to the project. For me it felt meditative to fold objects, since I like to work with details and seeing something transform.



Exploring different folding techniques.



One week of independent workshop was a nice break to the project. For me it felt meditative to fold objects, since I like to work with details and seeing something transform.



PRESENTATION OF THE NATURE OF DESIGN WORKSHOP

PABLO MARINERO GARCIA

Going camping is always a good plan if you are surrounded by good people, but for a Spanish guy in Norway, it is also a challenge.

Used to camp, but not below zero, this workshop was a marvelous experience. Place the tent over the snow, collect wood into the forest, make a hole in the ice to get water, survive the cold of the night; everything was a new experience that helped to understand better the activity.



FINDING A SOLUTION TO A PROBLEM

After the field trip into the forest, brainstorming with problems has done. Some of them affect a lot of people, others just a few. Some of the problems are easier to solve, others need more technical solutions.

By making a chart, analyzing and voting for the different options, we got the best solution for each problem.

Finally, a mix of some of this problems was chosen. Tweezers that glow in the dark: a fast and easy solution for the loss of material as well as to mark dangerous areas in the dark of night.

PROBLEM

◦ charging phones /
LIGHTS /

◦ Wet clothes

◦ COLD BEERS

◦ WASTE

◦ FORBIDDEN TO MAKE
FIRE


◦ FOOD STORAGE

◦ DARK

SOLUTION

→ propellor (wind, water) (attachable)
Battery for multiple uses

→ Tent for clothes (for outside the tent)
Shoes

→ HOLDER 

→

→ FIRE ARMADILLO

→ COLD/ WARM COMPARTMENT

→ guiding lights

ASPECTS



SAVE

With the Click-it you and your kids will be safe. You can snap click-it onto the tent rope or onto the stakes so that your kids can easily see them and therefore will not fall. It can also be snapped onto gear that might be laying around



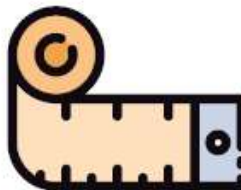
VISIBLE

When the sun is going down, click-it will be visible because of its glow in the dark legs. In the middle of the night, when it is pitch black and people will be using flashlights, the head will reflect the light. Snap the click-it on everything that you want to be visible at night. You can use it on the tent rope, the zipper, your backpack, an axe, a knife,...



SNAP-FIT

Click-it is especially designed so that it snaps onto many different shapes. The tree shape makes sure that a rope is easy to insert but difficult to take out. The round edges make the object self-seeking. A design gap is added to separate the glow in the dark legs from the reflecting head



DIFFERENT SIZES

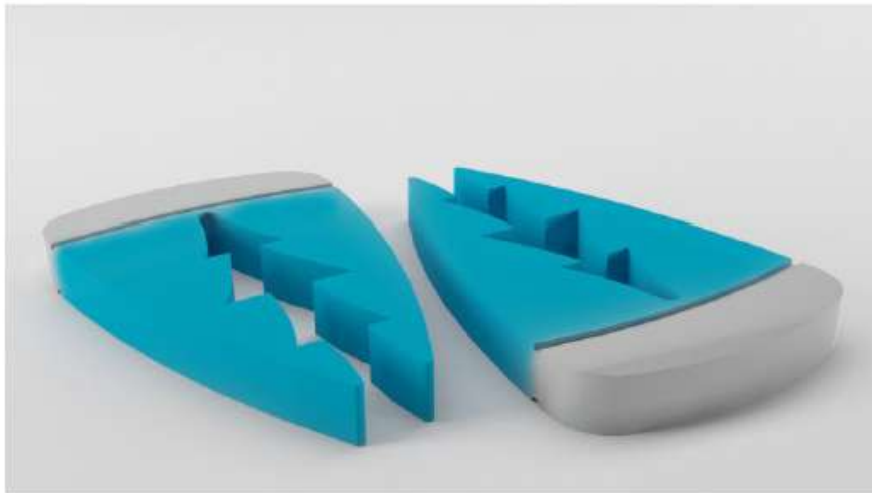
Click-it comes in three different sizes. It is available in a small, medium and large. The smallest ones can be used to clip onto zippers and the biggest ones can be used on gear.

FINAL PRODUCT

After a visit to different shops specializing in sports and camping, a brainstorming session started and many ideas emerged that were captured in sketches.

Discussing the materials, TPU glowing in the dark reinforced with a reflective tape was the final decision.

The variation of sizes goes from 30mm to 60mm with a height of 46mm to 66mm. The thickness of 5 mm is constant in all models.





NOTE OF REFLECTION

ELISE JIN SANDVIK

For this course I have had a great learning experience. There have been so many inputs and varieties of possibilities for us students to experience. The assignment in itself was interesting and well put together, and the way it was handled was very fitting to the timeframe.

I really enjoyed being able to have time for the group to figure out things on our own, but at the same time having lectures and workshops related to the assignment. I particularly liked that we got the opportunities to have guest lecturers teaching us skills which they specialized in. I especially appreciated the communication lectures and the process of becoming a better speaker.

Another good thing about this course was that it almost gave us the recipe for what to do and when to do it. At the beginning of the course the teachers told us to trust “the system”. And that is what I did. Everything went smoothly, and I can see now how much thought went in to making this course come together. There was a lot of room for feedback and tutoring, which was excellent.

I also enjoyed that we got to spend this course in groups, and that the exchange students were here. I am glad that Pablo from Spain joined our group, because he had a lot of good qualities and much to contribute with, like graphics. And of course, it was very nice to get to know him and make new acquaintances from other countries. It was also nice to have the others to collaborate and make decisions with.

I can't leave out that the course has been long, and at times hard and exhausting. There was a lot of individual work, and occasionally difficult to continue working or have the motivation for it. But when thinking back I feel that we grew on every situation we put ourselves in, because we had to think and do things on our own.

I remember thinking at the beginning of the course that studying gamers would be boring. But the experience of forcing ourselves to explore a culture that we never would have thought twice about, was actually very fun. I learned so much about the culture, and in hindsight, I have with a completely different view upon them. I even like certain areas of the culture and how it affects them.

The variety of this course has been so rich, and I am glad I got the opportunity to learn so much. And I feel like I have worked as hard as I could and to my abilities, and that is mainly because the course was so interesting.



NOTE OF REFLECTION

MARI EMILIE MOTHES

This project has been filled with ups and downs. To meet and try to understand a cultural group you know next to nothing about, has been very interesting, but also a struggling. Depending on people that you don't know, to be able to get what you need, isn't always easy, especially when they are not willing to meet you after all. But I feel like we managed to work around the problems that came along, and that gave a good feeling of achievement.

The dynamic in the group has been good, and we have divided the tasks between us fairly. I think it was necessary to work in a group in this project, to have the best outcome. When someone was in doubt, or had lack of motivation, the others would be there to push the project forward. Having someone to always talk to about ideas, and discuss the next best step, really helps when you are unsure about something. It was also nice to rely on others' skills and knowledge, where I fell short.

During this project it has been a lot more lectures than we have had earlier, but I think there was an appropriate amount of them, and it felt helpful to get more theoretical input along the way. I feel way more equipped moving forward after this project, than I have felt with any other. But, by having more lectures and workshops, also made it seem like the project went by way too fast. The group could have done a better job in managing the time, it seems like all of us works best under pressure.



NOTE OF REFLECTION

PABLO MARINERO GARCIA

This course has made me change my mind completely from my idea of what is product design. It has been very useful and moreover, I am going to take advantage of it for my next years.

At the University of Valladolid, where I study Engineering of Industrial Design and Product Development in Spain, we research only the first week, and we don't care so much the cultural group. We focus more on the technical stuff and the definition of the final product. The possibility of using the workshops give you more freedom, and also know about the material feeling. That's the part where I find a lack of in Spain, cause we only use the computer due to the small options variety at the workshops.

Understanding the users, you approach more to the correct design that solves their problems. Getting in contact with them is the best option to get deeply into their culture. As an exchange student, this assignment gave me the task to understand the Norwegian culture too. So I need to thanks my teammates their help, cause I reached both of them.

Having only this subject has been the weirdest thing for me. I'm used to having more than one at the same time, and it has been quite hard to work entirely in that project. Because of that, the short workshops we had during the course had been a breath of fresh air. This helps you develop some skills you have secondary but you need as well.

For all these things, this course has been what I was missing to complete my education, and now I'm more able to design the products that solve the needs people have by understanding them.