

# Design methods final report

By: Håvard Furø Pettersen

*Østfold University College*

## Table of contents

1. Introduction .....	2
2. Design Thinking Process.....	2-11
• Investigate: 3-5	
• Design: 5-10	
• Evaluate: 10-11	
2. Discussion.....	11-12
• Critical discussion about the design process	
• Critical discussion about my solutions	
2. References.....	12

# Introduction

This report is on the transition from college with a degree to a workplace. Some questions i had in mind working on this project was, how long did it take for students to find a job, what did they do to find a job?, how was the transition?, was it easy or hard? How could this transition have been easier? And lastly, what could i design to help with this transition for others. In my literature review i searched for litterature on google and google scholar. I used good search queries to find relevant information. From my search i found a lot of different articles. In the rest of this paper you will see what technological solutions i have found, some new ideas and some improvements of already existing solutions. Extra note is that this project was done by one person and this is sole reason why my final report is rushed. A lot of things could have been done better but with the limited amount of time i could not perfect it so please keep that in mind. So let's call this a wireframe report as it lacks the quality i could have done with more time.

## Design Thinking Process

Design is everything. Design means sign, to create something new by drawing or sketching. There are 5 steps in a design thinking process. The first step is the empathy step. In this step you must empathize with your users in order to understand them emotionally. Empathy is the centerpiece in human design. Some ground rules to follow in this step is to be truly curious. Listen attentively. Question everything. Use environments and dont judge. In the define step you must define your problem. Here you will find problems that need solving but in order to do this you must synthesize data. You can do a content analysis, affinity diagram or draw out an empathy map. I would suggest using all three and starting with the content analysis as it would help you further with the other two. In the third step called ideate or creative thinking is the step where you can increase the innovation potential and uncover undiscovered areas. Here you can do some design games and see what creative ideas you can uncover. In the prototyping step you create personas, scenarios and storyboards for your user group using your prototype. A prototype is one manifestation of a design that allows stakeholders to interact with it and to explore its suitability; it is limited in that a prototype will usually emphasize one set of product characteristics and de-emphasize others. Prototypes are widely recognized to be a core means of exploring and expressing design alternatives for interactive computer artifacts. Prototypes are materialization of ideas. In the last step called testing you give your prototype out to your users to see how they interact with it. In this last step you will learn more about your users. You will gain more empathy which is why they call it the centerpiece in human design. Here you ask why they didn't like or like some features. I would say you can go back and forward a lot in these two last steps to make it perfect. The design thinking process to me is a way to find solutions and problems to a topic you have and you do this by following a guide instead of hoping to find a good solution sitting on your ass hoping for it to come to you.

## Investigate

I had no initial ideas for this project at the start apart from that i wanted to help myself i also didn't know the end goal was to design a technological solution for my users. Had i known this i would have seen solutions earlier on instead in the ideate or prototyping phase. My target group was young adults whom just transitioned from college with a degree to a workplace. How could i help them or myself is what i initially thought. Thinking back it might have been better to design for others than myself.. In my research i used google and google scholar. Here i searched in both in the english and norwegian language as this would give me a wider search range. I used terms as “Overgang fra skole til jobb”, in English it translates as « Transition from school to work”. “Fra studier til job intervju», in English it translates as “Transition from school to job interview”, “Jobb etter utdanning” in English it translates as “Job after education”, “The transition from college to work”, “The transition from student to worker”, “Life after an education”. These search terms would give me a lot of different articles. In my interviews i did a semi-structured interview. I had my questions ready but was willing to change them to the conversation flow. In my cultural probes i created 4 different probes.



*Picture of my finished probes*

In the probe called “Play-doh” I ask my participants to create something that would benefit them in their workplace and what would have helped them in college. This item or thing is made with Play-doh and can be anything. This will make them think about the problems they faced and face and think about how things could have been if only they had this item.

In the probe called “Camera”, I ask my participants to take pictures of at work and college that they like and dislike. For college they could use google to find a corresponding image to what they wanted.

In the probe called “Letter exchange” I ask my participants to write two letters. One letter to themselves back in college from present day about how things you could have been done differently and how you saw yourself in a workplace. In letter two I ask them to put themselves back in college and write a letter to the future self about how they pictured themselves at a workplace.

In the probe called “Postcards” I ask them to write how they felt in different situations. These were:

1. How has your routine changed since college?
2. How is it having a boss compared to a professor?
3. How is it working with people at all ages compared to studying with people your age?
4. What has helped you the most to adapt working?
5. What do you regret not doing, thinking back to when you were in college?

How did you picture yourself at a workplace when you were in college?

The data collected in my probes reveal a lot about the participants' life. Their likes and dislikes at work and likes and dislikes at college. They have some regrets about their college time. They wish they had a more social life in college. Both drink coffee and enjoy their sleep. Money is a driving factor for all which is clearly illustrated. Both think work is chill and they feel free after finishing school with a degree.

One of my participants has clearly no creative mind whatsoever. What I learned is that they both needed or wanted more money back in their college days. They also wish they had been more socially active with friends. In college they felt as they were in a jail and once they finished their degrees and found a job they were finally free. But at the same time get nervous around a boss because of the more intimate relationship compared to having a professor. They wish they studied harder to become better in their field so it would be easier in their jobs. Anyone can get a job with a degree, anyone can get a good grade but it's about learning and understanding the information that's useful to you in a job. Having work experience helps you in the transition. From all of this I continued on with my project

## Design

In my ideate phase i did a content analysis and drew a empathy map. Through my research i saw that people needed coffee that's why i wanted to build a workplace app that lets you fill a coffee cup with coffee from your phone. . Another idea is that you can create collaborations inside the app meaning you create a title and write a short description and this board will show up under the collaboration page. Here other workers can click to view and join. If they join they are added to the collaboration and they can write ideas and helpful things. At the end of the project they will as well be credited for their work. This way the boss can see who contributed to what. You can even help from other departments if you wish. Another problem people have is contact all these bosses when they have to call in sick. Now with the sick button in the app you can fill out a form to let them know, and a upload button to upload the proper medical documents to prove it you have been to the doctor after 3 days. Moving forward to the Personas, Scenarios and Storyboards stage:

*Persona 1.*

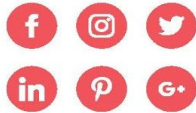
# Gary



**Age**  
18 to 24 years

**Highest Level of Education**  
Bachelor's degree (e.g. I

**Social Networks**



**Industry**  
Architecture

**Organization Size**  
11-50 employees

## Preferred Method of Communication

- Email
- Text Messaging
- Social Media
- 

## Tools They Need to Do Their Job

- Pen and paper
- Scale
- Notebook
- Knife
- Rulers
- A creative environment

## Job Responsibilities

Designing buildings

## Goals or Objectives

Design a building that will stand there until i for my future family to see

## They Gain Information By

Looking at building

## Biggest Challenges

- Arguing the design
- Making time for sketching
- Finding new work
- Finding great materials
- Keeping up with technology

*Persona 2*

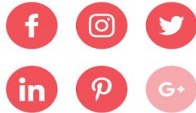
# Lisa



**Age**  
18 to 24 years

**Highest Level of Education**  
Bachelor's degree (e.g. I

**Social Networks**



**Industry**  
Technology

**Organization Size**  
Self-employed

## Preferred Method of Communication

- Phone
- Face-To-face
- Social Media
- Text Messaging

## Tools They Need to Do Their Job

- Good programming skills
- A good computer
- A creative mind
- Pen and paper

## Job Responsibilities

Enter text here

## Their Job Is Measured By

The creative designs she makes

## Reports to

Ross the boss

## Goals or Objectives

Design a logo for a big corporation

## They Gain Information By

Being creative. Outside is where she gets her creativity.

## Biggest Challenges

- Resources

## Enter text here

Enter text here

*Storyboard for lisa*



**Lisa wakes up and thinks she wont be creative at her workplace today**



**She then decides to go on the app to select remote work and work at home**



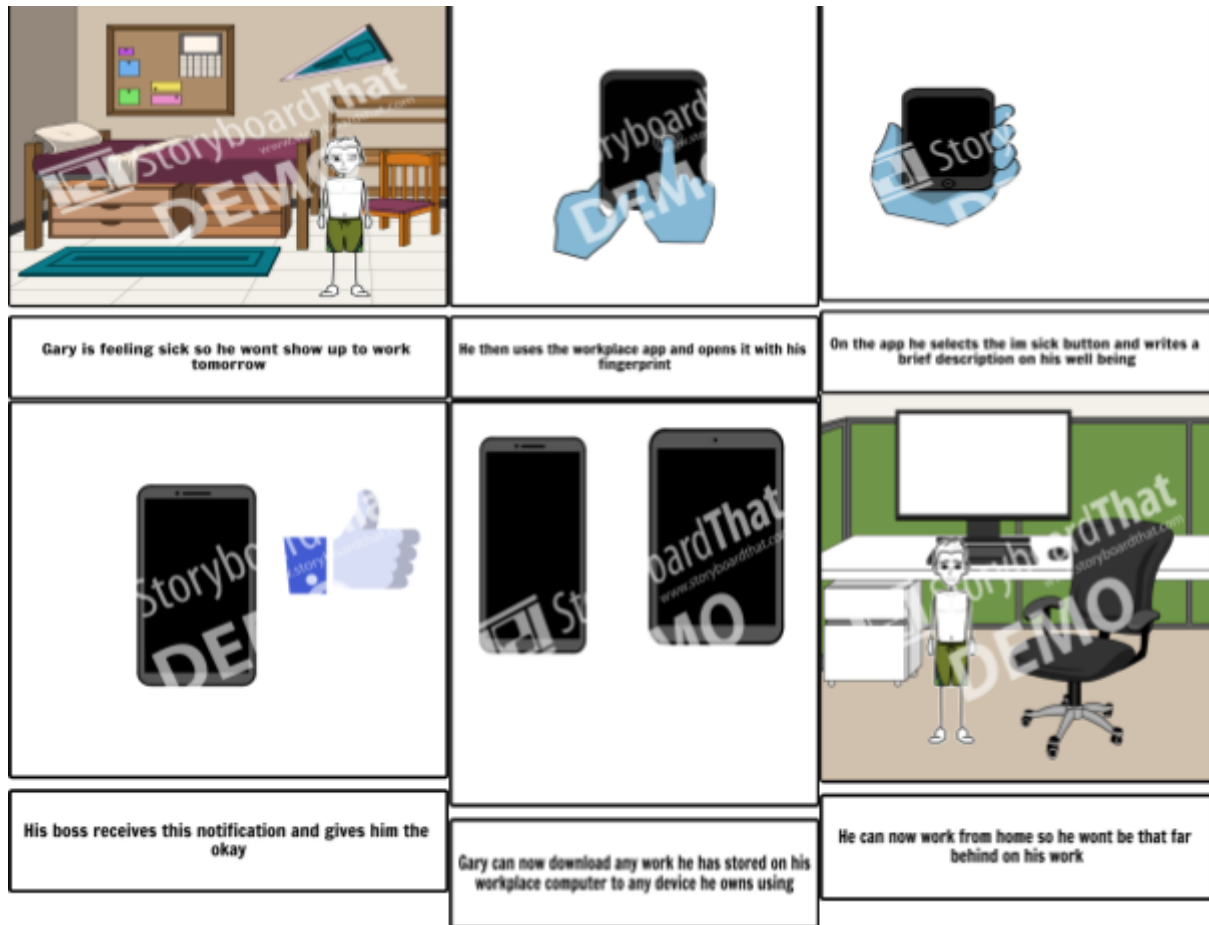
**Files from her computer at work are now downloadable on any device she owns**



**She is now ready to get down and be creative!**

*Storyboard for Gary*





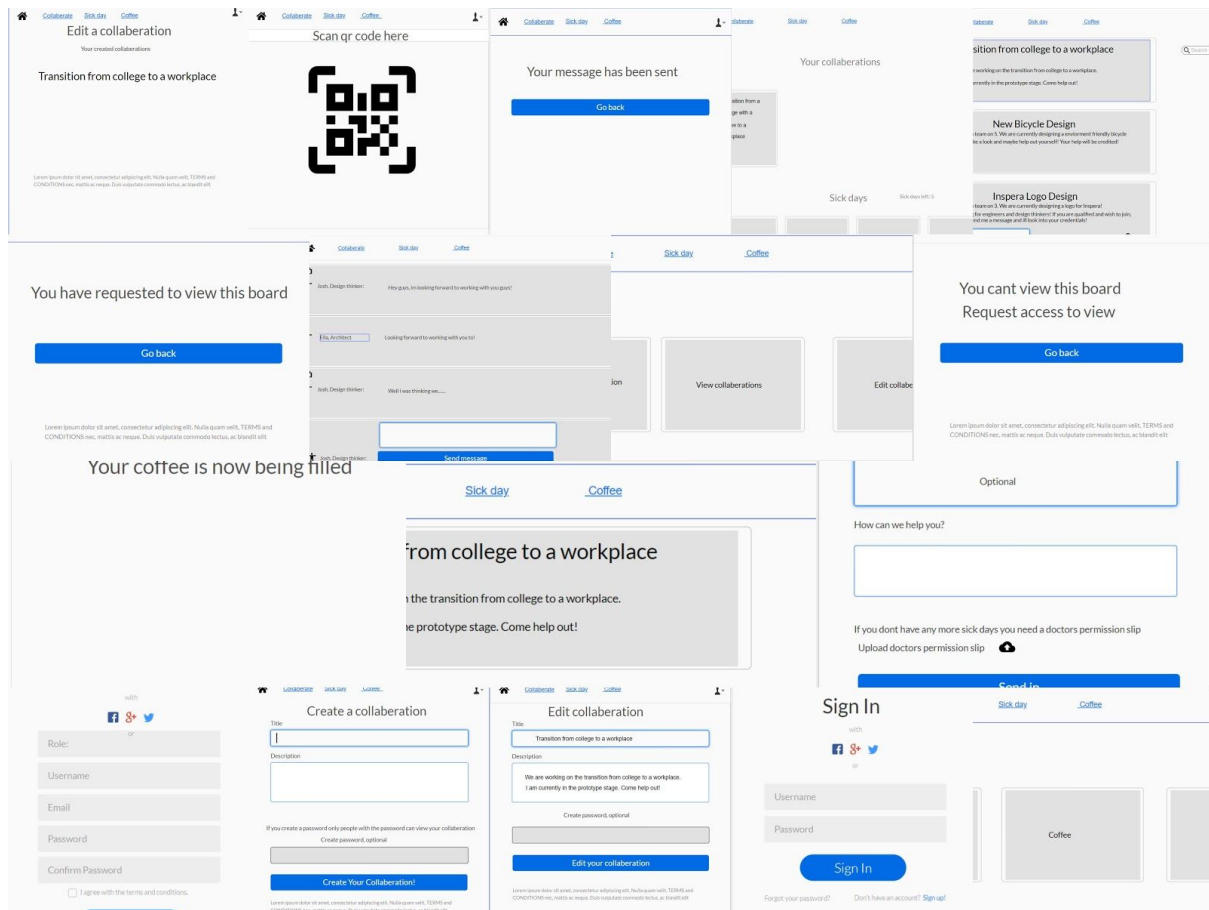
After this i had an idea of what my prototype would look so i went on designing it on mockups.com. Initially I started it using balsamiq mockups on my desktop but the trail ran out. I forgot the original page i downloaded it from and used the wrong site. I used the mockup program in my web browser and it costs money so i did not download it. You can view and edit my mockups here:

<https://app.mockups.com/therealsirwerty@gmail.com/HZvXVW1nHG/view>

My prototype includes three main things. A “collaboration page”, a “buy coffee page” and a “call in sick” page. On the collaboration page you can create, view and edit collaborations. When creating a collaboration you must include a title and a description. You can also choose if you wish you make it password protected or viewed by all. There are perks and disadvantages to doing this. On the coffee page you use the scanner and point it at the coffee code on the machine to make it start. You will have to put the coffee cup in place yourself tho. On the sick day page you contact your boss letting them know you are sick. You will also be able to see that amount of sick days left. There are lots of things I could have done with these

three things, due to the limited amount of time I had to wrap it up there but I'll write about what I could have done in the testing phase.

I have over 17 pictures, set up in a collage this way:



## Evaluate

I could have “faked” some user testing but I have my dignity and its important to do user testing to gain more knowledge and I feel like I would only be cheating myself if I said I had done user testing with my prototype. The reason that I have not been able to do my user testing is because all the participants i used previously are busy. What I would have asked my participants if I had done any user testing is: Create a collaboration. Join a collaboration. Read a collaboration that's already in

progress. Request a password. Scan the coffee machine code. I will say that i can test it myself but that will gain me nothing new as I am the one who created it. I will however explain in detail further down what could have been done or improved on. Keep in mind i am also working alone due to my group disbanding.

## Discussion

### Design process

A critical moment for me was in the ideate phase and I realised I had to come up with a new technological solution because i had no idea what to design until I was at this stage. At this stage I came to the conclusion that a collaboration board system would be a nice fit in a workplace. This collaboration board would let users pick who you want to collaborate with or leave it open for anyone. This design process has been very iterative as I had no idea that eventually I had to create a technological solution therefore in my ideation stage I had to go back my previous assignments and try to reword them and try to reevaluate so to speak in a way. Either way I mean designing should always be an iterative design process. I spent a lot of time prototyping but it is still not finished.

### Solutions

There are lots of improvements I could have done on my prototype, such as when creating a collaboration let the user set a number for max amount of participants being able to join. I also thought that some people might try to grief a collaboration so being able to kick users would be useful. It should also be possible to see the users and their roles in a collaboration. There should also have been a search button to find users and their roles incase they haven't seen your collaboration and send them an invite. I should also have added a inbox on your profile. One should also have a different way of locking a collaboration by locking it to a certain role. You should have been able to create a collaboration and only allow certain roles to join. When entering a collaboration there should be alot more features to the person who created it such as kick, edit messages, give ranks etc. I write etc because there are tons of features i could have added. I also wanted to implement a scannable coffee app inside it and a scannable vending app. It's more of the machine part the app just tell the machine to pour a cup of coffee so i should maybe have designed the coffee machine instead of a workplace app. I could also do some user testing in order to make my prototype better as well as having

more time but that's what all designers say, right? To address my question in the introduction i must say that my few participants did not have it difficult in their jobs, i think however if i had more participants i could have found some problems to make a solution for. I did however find one problem which was they needed and wanted coffee both in college and at work due to the need to stay awake, this i have found a simple solution for which i could maybe have worked on even better than i have. They did neither have a problem with finding a job nor was the transition difficult as they both have had jobs throughout their lives and i did not focus on the transition in my prototyping. From this project we learned that people must have coffee to go to school and at work so maybe a new technological solution to replace coffee could be a new idea.

## References

Dam, R. & Siang, T. (2017). 'What Is Design Thinking and Design Thinking Process viewed 24 November 2018, Available at: <https://think360studio.com/what-is-design-thinking-and-design-thinking-process/> [Accessed 24 November. 2018]