# Individual project reading guide

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# Introduction

During the individual project I have the opportunity to further develop and experiment within my interests. In previous semester I learned about my interest in user interaction and technology. My specialisation is creative technology, which connects strongly with user interaction and technology. Therefor I chose my project accordingly.

# Approach

My strategy was to define first, which helps me focus on how to attain my objectives. I picked **"define, ideate, and design/prototype"** for the **design process** because it helps me set clear goals and reduces the risk of failure.

# Define

I started to work out a concept, it began with an idea I had in one of the first semesters. I then began brainstorming concepts and came to a final one below. By creating a **Project plan** first, I defined my final concept, envisionment, goal and schedule.

## Concept

A panel that scans your face for emotions prior to entering a room is being used in meetings to lighten the mood. The idea is that forcing a person to smile in a bad mood will, hopefully, spark some sort of up cheering moment. This may also help people express their opinions earlier during meetings, as the lightened mood makes it less daunting.

A more explained version of this can be read in the "Project plan individual project".

## Possibilities

To create the testable prototype described in the project plan, I need suitable software to scan and detect faces and emotions. I researched different languages in the "Research software possibilities" document.

A brief summary of the conclusion: I discovered that for this project, **Python works well with the DeepFace framework**. I also discovered that some hardware requirements exist, such as **processor architecture** and **processing speed**.

During this research, I also experimented with the software and made a **proof of concept**. The conditions of the video recording are not perfect as I was limited by time at that moment. Documentation of this video can be read in the "Research software possibilities" document.

# Ideate

With these new findings, I started **sketching in Figma**. I looked at different tablet design with robotic like faces, these can also be seen in the Figma file. I really wanted a neutral feeling, that can also become very friendly or hostile. While sketching, I also was doing **literate studies** on **best practices** and other examples that already exist.

# Prototype

To create a high-end prototype I further developed my Figma sketches. I used **different emotions** to see if these can **raise** the specified **feeling**. This can also be found in the **Figma document**.

## Test

To evaluate if my prototype does actually does what I want it to do, I constructed a scenario in the **Figma document**. I presented this scenario to a handful of people and asked them to think aloud so I can understand what they are thinking. I am making use of the **usability-testing** method from the CMD methods.

I set up a **user test document** where I explain how I performed this test. Out of this test came that if they came across it in real life, it would make them **smile** and be something they would be interested in. They had a **good time**, and it made them **happy**. They do **not** want to do this at **every meeting.** But if you do it **once a day**, it's enjoyable!

Further explanation is in the user test document, with the approach and result.

## Deliver

As I did not have the time available to ultimately finish this project, I made an **advice document**. It contains all the vital information to continue the project from a technical standpoint.

## Conclusion

I found out that the prototype does deliver the right message. When I saw the participants genuine reactions to the robot, I realised that it could have a significant impact on a person's day and mood. I also discovered that the prototype elicits the desired reaction. The use of only text and the simplicity of the eyes allows the user to fantasise.

# Reflection

I used the STARR reflection approach to help me reflect on my progress during this project.

### Situation

I worked four weeks on a self-initiated project, with the goal of expanding my knowledge of user interaction combined with technology. I work on this project individually. My absolute goal of the project was defined in the project plan and states "*The absolute goal of the experience is to* "*spark some sort of up cheering moment*" when attempting to enter the room." (Project plan individual project, p. 2).

### Task

My tasks were to research the software possibilities, create a testable prototype and test the different scenario's. These task were made to achieve the absolute goal of the project stated above. In a timeline, I created an expected schedule for the task.

### Action

To get a sense of organisation, I began by defining the aim and developing a schedule. Then I refined the concept while investigating software options. I began to sketch once I had thought about these outcomes, and this became a prototype. Then I reviewed the prototype to see if the goal was met.

#### Result

The prototype did do what it was intended. I performed a user test that evaluated this and gave me more information about the use on the longterm. I also made an advice document to further develop this project.

### Reflection

During this project, I was still documenting the previous semesters which was quite time consuming. Therefor I delayed most of the work of this project and that can be seen in the result unfortunately. Although I am still happy with the result, I made important foundlings regarding the user interaction. And made an explanatory document, it helped me with visualising a software system. I learned more about performing user tests and visualising these kind of systems. The next time I would perform a user test, I would have made a longer prototype to test. So that I can see if the user's mood changes during the test. I have developed my interests even more, after creating the prototypes. This helps me with professional focus and what kind of individual I want to be.

	Learning outcomes	Deliverables
1	User Interaction (Analysis & Advice)	Project plan individual project Figma process
2	User Interaction (Execution & Validation)	Figma process Figma prototypes Vibe Check User test individual project
3	Software Design	Research software possibilities Advice individual project POC individual project Project plan individual project
4	Future-oriented organization	Project plan individual project
5	Investigated problem solving	User test individual project
6	Personal leadership	Reflection
7	Goal-oriented interaction	Advice individual project