

Domain Understanding

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Abstract

In this document I describe how I managed to reach a better understanding about the domain of the company.

1 Structure

To gain a better understanding of the company's domain, I used several research methods. This document is divided into sections, with each section representing a different method.

2 Analyze Project Assignment (Field)

The project assignment is the first document that I received. In this document¹ the assignment is described together with the problem, Goals and Tech Stack. To understand the assignment, I read through it multiple times and wrote down every question that one could think of. Also did I read through the canvas course "Systematic Problem Analysis", this led me to formulate additional questions. I collected all the questions and listed them (Figure 1). Most of the research questions originated from these questions.

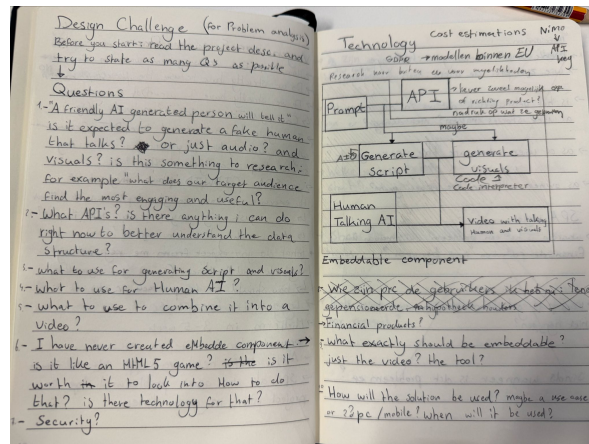


Figure 1: Questions about the domain

3 Sketching Architecture (Field)

After understanding the assignment I tried to roughly sketch the architecture. I made these so I could discuss them with my colleagues. More on that in the other sections.

¹S8 - Internship Assignment

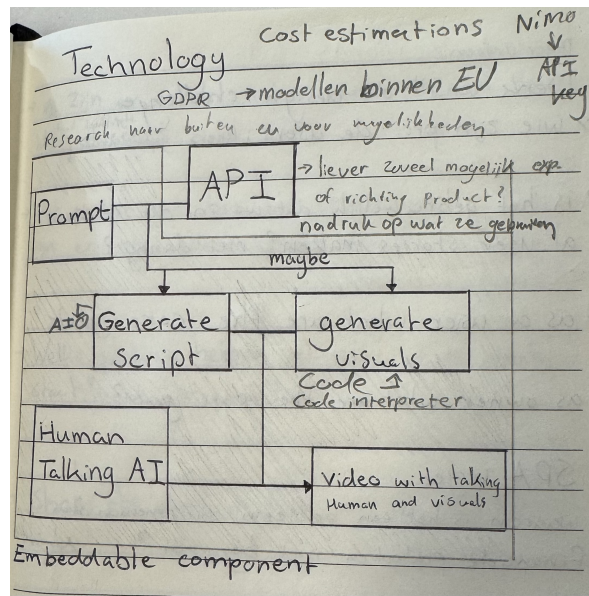


Figure 2: First rough sketch of the architecture

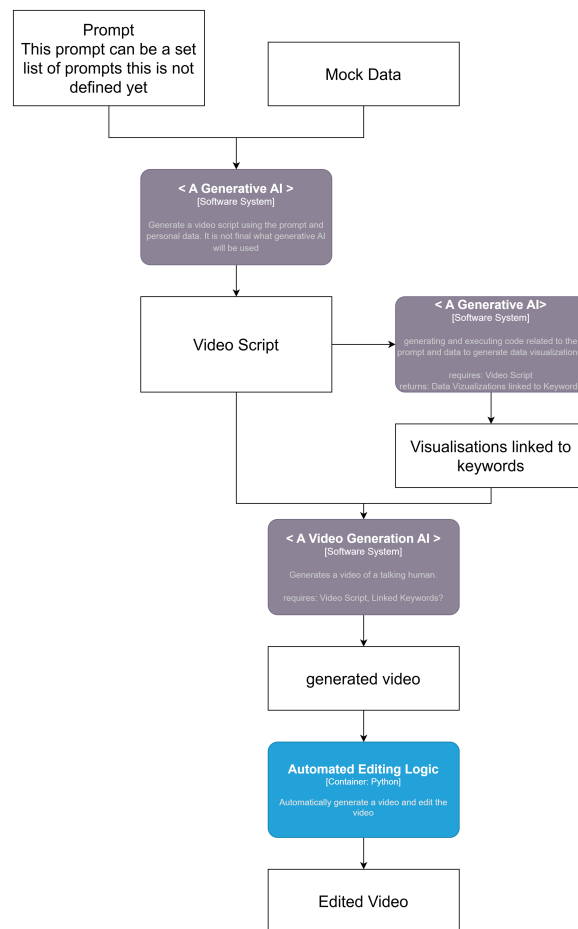


Figure 3: Flow diagram based on the sketch above

4 Interview AI Expert (Library)

I met Nimo, the AI expert of the campus, and sparred with him about the project. I managed to ask him about the domain questions from Figure 1. Together we also discussed the sketches I made, which can be found in Figure 2 and Figure 3. I also showed him a short demo of the AI tools that I was researching². The key point of feedback that I received from Nimo, is that all sensible data should stay within Europe. This one rule makes the project a lot more difficult since most of the tools do not offer the ability to host within Europe. Also, did Nimo ask questions which I had no answers to which I added to the domain questions, so I could later ask them to the stakeholders.

5 Interview Stakeholders (Field)

I met Friso, the technical director at our campus and at the same time the creator of my assignment. I managed to ask all the remaining domain questions 1 to Friso. The demo wherein I was researching AI tools that I showed to Nimo I also showed to Friso. I documented all the feedback I received and combined all the answers to the domain questions I got. This way I managed to create the systematic problem analysis. Creating the SPA helped me creating the project plan, since it gave me a better understanding of the problem and goal, also did it help me create research questions.

5.1 Systematic Problem Analysis

After gathering the answers to all my questions I managed to create the systematic problem analysis. To create this analysis, I used the template provided by Fontys and left out the irrelevant questions.

1. "People don't understand their financial products", which products are we talking about? - Pensions - Product Financing - Life Insurance
2. Why is it a problem that people don't understand their financial products? - People with less knowledge tend to make poorer decisions compared to those who are more familiar with the product. We want customers to make the right decisions.
3. What evidence supports the idea that people do not fully understand their financial products? - It is partly an assumption and partly supported by research. You might want to look into research in financial literacy.
4. Since when is this a problem? - We have been trying to solve this problem for about 10 years now.
5. Have actions been taken against this problem before? - In the past, we have tried to inform customers through text and visualizations. Now, iO wants to take it a step further by generating full-on explanation videos. The previously created visualizations could potentially be used in these videos.
6. Who will be the end users of this project? - Pension holders - Consumers with financial products
7. As a user, what are the core goals of this project? - A better understanding of how financial products work. - Making better decisions. for example, deciding whether to pay off financing earlier.
8. As product owner what are the core goals? - presentable prototype in the form of a generated video or AI assistance.
9. in the project context, why is security pointed out specifically as an technical point? - It it a bad practice to share confidential data with AI tools, we have to find a solutions to this. Both pseudonymisation and anonymisation could potentially be solutions.
10. Will I use confidential data at any point in the project? - No, You will use fake data which shares the same structure as the real data.
11. Is there already a banking API which i could get data from? do i have to build that myself? - Yes, there is an API, but you will most likely have to built your own endpoints.
12. Will this solution be used on both smartphones and PCs? - Yes.
13. What exactly should be embedded? - The explanation video.
14. "A friendly ai generated person will tell it" is it expected to generate a fake human that talks or just audio? and visuals? is this something to research? for example "what does our target audience find the most engaging and useful?" - Fake human would be fun, but we have to make sure it won't get cringe or bad.

²SS - Conversational AI Tools Demo

15. I am now researching tools for human AI's is there anything we don't want to use? for example, no tools that share data outside of Europe? - Limit to tools within Europe. Using tools outside of Europe is okay if everything is anonymised.
16. What other research topics could be interesting to this project? - Tool Pricing - How do we automate everything? - Will we face any legal issues?
17. I have never embedded a piece of code or media, is it worth to start experimenting with it and get the hang of it? - Yes, you can always contact Giel Berkers, he could help with this.
18. (Show a short demo about the current progress). How is this? - This is a good start.
19. What languages? - English, Dutch, French, German.
20. Which parties prefer the old state, and why? - Credit institutions and every other organization that benefits from poor choices.
21. Suppose the tool is ready, can it work immediately? What else might need to be done? Are there any other issues? - To what extent are we allowed to give financial advice, and will we encounter any legal problems?

6 Interview Product Owner (Field)

I met Danny, the product owner of the main use case (BNP Paribas use-case). I asked him questions about the project and Danny responded by showing me the portals they built for BNP. Seeing these portals gave me a better idea of what was going on behind the scenes. He also explained who the stakeholders exactly are. This talk was a good way to get introduced to the company BNP Paribas. The notes of this interview can be found in the evidences names `Notes_Danny_Meeting.pdf`

Also did I meet Bart, the product owner of the secondary use-case. This interview went very similar. The notes for this interview can also be found in the evidence tab names `Notes_Meeting_Bart.pdf`