



Project Plan
AI Finance Explainer
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Version History

In my version history colours represent actions. Green means something has been added (as in a new header for example), yellow means something has been modified (modify a text by adding a few lines/removing a few lines) and red means something has been deleted (as in a header for example).

Version	Date	Changes
v0	12-02-2025	Document initialisation
v1	18-02-2025	First Draft
v2	19-02-2025	Add Planning
v3	20-02-2025	Apply feedback from kaka Change iO Digital to iO Changed headers: Version History - 1. Project Assignment - 1.2. Goal of the Project - Problem to be solved - Desired Situation - Project Benefits - 1.3. The Assignment - Specific Requirements/Wishes - Functional Requirements - 1.6. Finished Products - API Integration - 1.7. Research Questions - 2. Approach and Planning - 2.1. Approach - 2.2. Research Methods - What available high quality conversational AI tool can give financial advice? - Will we face any legal problems when giving financial advice? - Breakdown of the project - 2.4. Planning - 4. Project Organization

		- 4.1. Communication
v3.1	20-02-2025	Update table of contents
v4	28-02-2025 & 03-03-2025	Apply Feedback From Simona Changed Name to Full Name on title Added numbers to headers 1.1 Company Context: added more about the company (The scope was added in a previous version) 1.4 Scope: Added this header to the table of content Remove most of the Requirements 2.4 Planning: Made the text more elaborate. 4. Finance and Risks: Add this header
v5	05-03-2025	Company context: add more context Goal of the project: split up in use cases 1.4. Scope: Minor change in included scope, and minimum quality requirement 1.6. finished products > prototype: added 4.3. hosting 2.4 planning: minor change 4.2 finance and risks > risks and fall back activities: add point 6
v6	31-03-2025	1.1 Compant Context 1.2 Goal of the Project 1.3 Assignment (a lot changed) 1.4 Scope 1.6 Finished Products 2.3 Learning Outcomes

v7.6	12-04-2025	Everything Changed
v7.7	23-04-2025	Fix Headline Numbers

Communication

Documentation of which document has been distributed to who and when.

Version	Date	To
v1	18-02-2025	Ka ka Tam Simona Orzan
v4	03-03-2025	Ka ka Tam
v5	05-03-2025	Simona Orzan Michiel Koehorst
v6	31-02-2025	Ka ka Tam
v7.6	12-04-2025	Ka ka Tam Simona Orzan Michiel Koehorst

1. Company Context

My graduation internship is at the company iO. iO operates in many areas such as: Brand, Business & Design; Digital Platforms, Marketing Programs & Campaigns; Creation & Content Production; Cloud, Data & Integration; Transformation & Consulting. I am working on the Software, Engineering and Integration department (SEI).

In this department we work for several e-finance clients. We help businesses successfully integrate e-commerce into their operations by providing support in selecting and implementing the right e-commerce platform for both B2C and B2B. Additionally, we ensure efficient product information management (PIM), product configurators, and marketplace integrations, such as on bol.com and Amazon.

We also develop self-service portals, allowing customers 24/7 access to relevant information and services. With a strong focus on strategy, data, and IT, they drive sustainable and scalable digital growth, including continuous support and optimisation.

The project I will be working on has 2 stake holding companies, BNP Paribas and Nationale Nederlanden (NN).

1.1 BNP Paribas

BNP Paribas is one of our clients. BNP is a leading European banking and financial services group with a strong global presence, operating in 63 countries and employing nearly 178,000 people. The bank serves a wide range of clients, including individuals, entrepreneurs, SMEs, large corporations, and institutions, offering a comprehensive suite of financial services.

Its operations are structured into three main divisions.

- Corporate & Institutional Banking (CIB) provides tailored solutions in capital markets, securities services, financing, treasury, and financial advisory.
- Commercial, Personal Banking & Services (CPBS) focuses on retail banking and specialized financial services, supporting individual customers, professionals, and small businesses.
- Investment & Protection Services (IPS) offers expertise in wealth management, insurance, asset management, and real estate services.

With an integrated business model, BNP supports clients across various markets while prioritizing sustainable finance and corporate social responsibility. Rooted in Europe with a global reach, the bank continuously adapts to the evolving financial landscape, striving to build a sustainable future for its clients and society.

1.2 NN Belgium

NN Belgium is another client of ours. NN is an insurance company that provides financial protection and solutions for different segments of the Belgian market. They focus on three main customer groups: individuals, self-employed professionals, and businesses.

- For individuals, NN offers life insurance, pension plans, investment products, and protection for homes and vehicles. They also provide services related to succession planning to help families manage inheritance matters efficiently.
- Self-employed professionals can benefit from NN's income protection insurance that ensures financial stability during illness or accidents. They also offer pension solutions, business continuity protection, and property financing options. A notable service is their NN Wellbeing Services, which supports the mental health of self-employed clients.
- For businesses and employers, NN provides group insurance plans and employee benefits packages through various programs like MultiPlan, Alto Cash Balance, and Alto Defined Contribution. These solutions help companies attract and retain talent while ensuring employees' financial security.

NN Belgium operates through a network of independent brokers who provide personalized service to clients. They position themselves as a "companion on the journey" and emphasize their commitment to adapting to changing regulations and client needs. Their digital tools, such as NN Connect, allow clients to monitor their investments and coverage conveniently.

2. Problem

There are two main problems driving this project, with one taking priority over the other. The primary problem, which is aimed at the United Kingdom, is as follows:

2.1 Financial Literacy

The challenge addressed in this project lies in the difficulty many individuals face when it comes to understanding complex financial products, such as mortgages, pension schemes, car loans, and investment portfolios. These products often involve a variety of connected factors, and their effects can be significantly influenced by life events, such as changes in income, family status, or career. This complexity makes it difficult for consumers to fully understand how these products work and how their decisions or changes in their personal circumstances can impact their financial well-being.

Research on financial literacy in the United Kingdom underscores the scale of this issue. For example, a survey conducted by Shepherds Friendly found that only 27% of UK respondents could correctly answer half or more of basic financial literacy questions, highlighting a significant gap in financial understanding across the population. There are noticeable regional differences, with some areas, like Glasgow, showing particularly low levels of financial literacy, as only 16% of its residents answered half or more of the questions correctly. This gap in knowledge has serious implications, as individuals may miss opportunities to optimize savings, adjust investment strategies, or take necessary actions when their financial situation changes.

This lack of financial understanding can lead to suboptimal financial decisions, with people being unaware of strategies to improve their financial security, such as maximizing pension savings or adjusting their risk tolerance in investments. Additionally, many individuals lack easy or regular access to professional financial advice, which leaves them uncertain about how to make the best financial decisions for their unique circumstances. As a result, there is an urgent need for solutions that can assist consumers with clear financial insights to help them navigate these complexities.

2.2 Insurance Literacy

The secondary problem, closely related to the primary one, focuses specifically on the context of insurance in the country Belgium. Many individuals struggle to fully understand how their insurance works or determine which insurance product is best suited for their needs. There are numerous factors that influence the choice of the most appropriate insurance, such as coverage options, premiums, deductibles, and personal circumstances, making it challenging for consumers to make informed decisions about their insurance needs.

The remainder of the project plan will focus solely on the primary problem to avoid confusion and prevent the document from merging two closely related projects. Since the secondary project's problem, goal, and approach are largely similar, they will be omitted, with any key differences mentioned when relevant

3. Goal

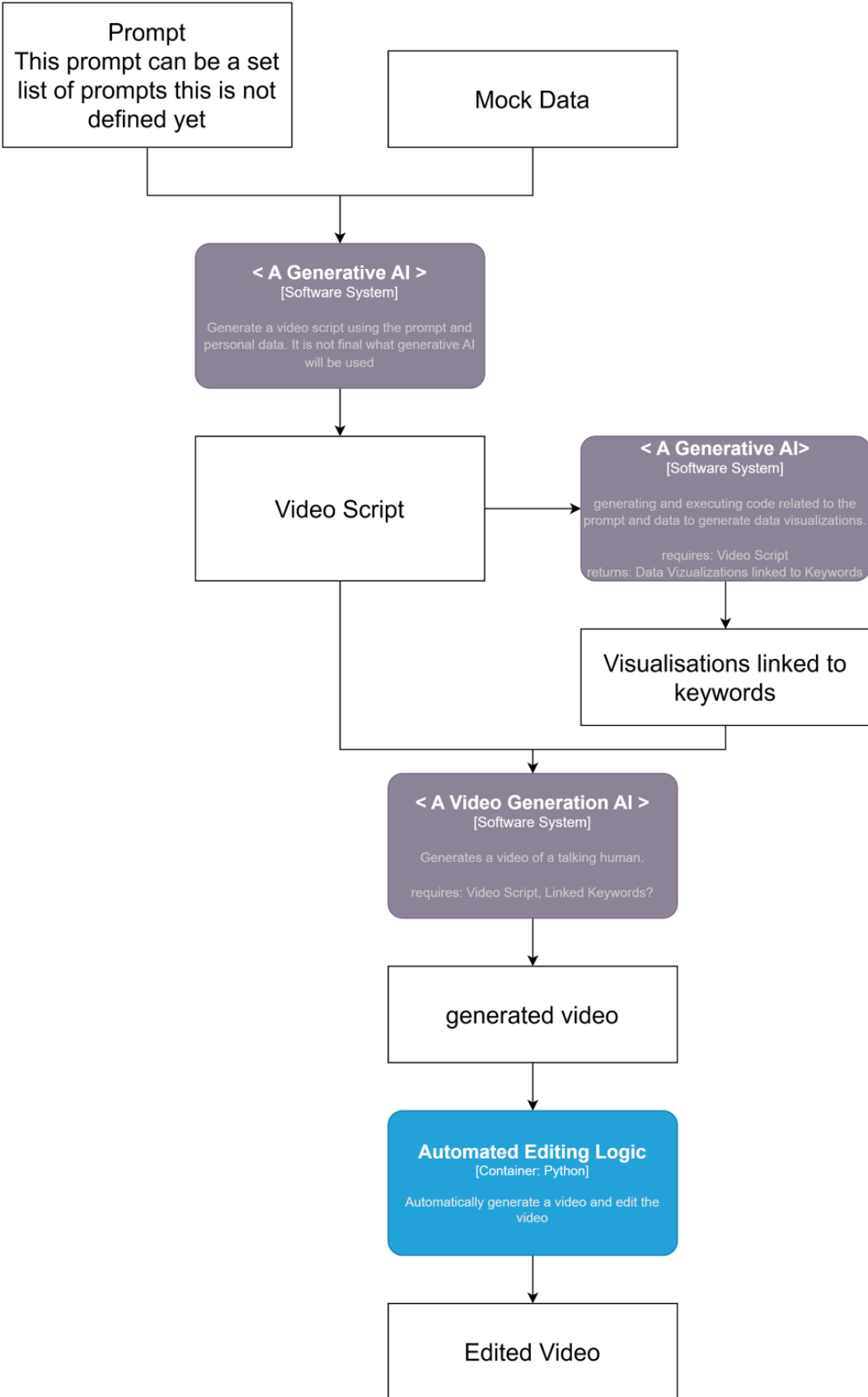
The main goal of the project is to improve the financial literacy of the consumers. Ideally, you would have your own financial advisor-in-a-box to give you an update on things to do or your unique situation a few times a year.

The secondary goal of the project is to enhance insurance literacy by ensuring the solution can be scaled and applied across multiple domains.

3.1 Solution

The solution iO came up with is to generate personalised financial explanation videos with the use of AI. These videos could be sent to the consumer once it bought a financial product. This video could then explain you how the financial product works and or give you overall advise on your current financial state. Then it could also periodically send updated for example 2 videos a year, explaining your current financial state and if you should take action or not. It is important that the tool is a modular system which can be used with the use of API calls, where the input could be as simple as client data with a generated video as output.

Below a high-level flowchart of what the final tool could look like. This must not be taken as the final architecture but more as an concept or first draft.



This solution will be applicable to both cases. The only big difference is that we are planning not to make the insurance explanation videos personalised. In fact, we are planning to make a set collection of videos that can be reused multiple times by different consumers. A use case for the video could be: A consumer goes to an insurance company to talk with a broker. The consumer and the broker agree to an insurance product. The broker explains about the insurance product, and finally the consumer gets a video in his mail which summarizes everything the broker has said, preventing information from fading away.

3.2 Possible Challenges

The biggest challenge in this project is maintaining a high quality of financial advice. This brings a lot of questions as: How do you define “good” financial advice? How can we make sure the financial advice is always correct?

The other biggest challenge is to make videos personalised. Personalising videos is not difficult on its own, but when using online tools, it is not permitted to provide client data or any other confidential data into these tools. This is challenging because most of the tools that exist are hosting within the United States of America, and most of them don't provide an option to host within Europe. This means that we would have to anonymize the data to use these tools or find a tool that is qualitative and hosted within Europe which is borderline impossible.

Related to the previous challenge, the quality of generated videos. As of 2025, video generation isn't as good as image generation and can still be improved a lot. It might be difficult to find a consistent qualitative video generation tool especially when having additional requirements as: hosted in Europe and GDPR compliant.

Not the biggest issue but still worthy to mention. The way to show images inside of videos at certain moments. And generating visualisations. For generating visuals, we could try to use the code executor of generative AI and try to export it and give it as a parameter to the final tool. For showing images as certain moments, we can try to link an image to certain words that are being said which are related to it.

3.3 Scope

The following components are included in the project scope:

- Development of an AI-powered tool for generating personalised financial explanation videos

- Focus on financing products
- Creation of a presentable prototype
- Support for both smartphones and PC's
- Video embedding functionality
- Use of fake data for development and testing
- Ability to create Dutch, German and French videos

The following components are excluded from the project scope:

- Full implementation of the system in a production environment
- Ongoing management and maintenance of the system
- Integration with real customer data (we will use the data structure of the real data)
- Integration with existing banking API or propose new API

3.4 Definition of Done

The project will be completed as soon as there is a prototype which is able to generate financial explanation videos. If the secondary problem, the insurance literacy case, cannot be solved, it's totally fine. I cannot mention any requirements or user stories, since there are none yet.

The project will be considered complete once a prototype is developed that can generate financial explanation videos. Solving the secondary problem, improving insurance literacy, is not mandatory. At this stage, there are no defined requirements or user stories.

3.5 Minimum Quality Requirements

These are some requirements I managed to state from the multiple meetings that I've had with my stakeholders. This is not final yet.

- Security: Ensure proper handling of AI and personal data, considering pseudonymisation or anonymisation.
- Compliance: Address potential legal issues with providing financial advice (*WFT and *FSMA laws).
- Data Privacy: Use tools and services that comply with EU data protection regulations.
- Language: Initially in English, with future expansion to Dutch, French and German.
- User Experience: Create engaging content that doesn't appear "cringe" or off-putting.
- Video Quality: All components in the video must have high quality to avoid making it look unprofessional.

*WFT Law: The Dutch law that prevents anyone from giving financial advice unless you have the appropriate certificates for it

*FSMA Law: The Law in the United Kingdom and Belgium that prevents anyone from giving financial advice unless you have the appropriate certificates for it

4. Approach

I will be working using the Scrum methodology, with two stand-up meetings per week with my company mentor. Additionally, I'll have a bi-weekly meeting with my product owner, stakeholders, or both, which will serve as a sprint review or delivery moment.

4.1 Planning (High Level)

My planning consists of 4 main phases: domain understanding, research, design and development.

4.1.1 Domain Understanding

This phase focuses on gaining a clear understanding of the problem, goals, and desired outcomes. It involves exploring the project domain and the context within the company, identifying key challenges, available resources, risks, budget constraints, stakeholders, potential approaches, deliverables, and the overall project scope—everything needed to lay a solid foundation for the project plan.

4.1.2 Research

This phase focuses on answering the research questions. Most of these questions involve exploring and experimenting with AI-powered tools to test their capabilities, limitations, and suitability for generating financial explanation content.

4.1.3 Design

Once the research is complete, I will use the gathered insights to design the final product. This phase involves creating a clear and informed design, supported by well-founded reasoning behind each decision made. The goal is to ensure that every design choice can be justified based on research findings and project requirements.

4.1.4 Development

The final phase involves developing the tool. At this stage, the design and research will have provided a clear understanding of how to build the tool using the most suitable technical decisions.

Date	Phase
February 28 th	Finish domain understanding phase
April 30 th	Finish research phase
May 14 th	Finish design phase
June 30 th	Finish development phase

I will be keeping track of my planning in more detail using a kanban board. This board will contain a wide collection of smaller tasks. These smaller tasks are small actions within the research reports, domain understanding or deliverables. For my research on conversational AI tools, a smaller task could be: *“Test all conversational AI tools on phonetic capabilities”*. Or for my research on legal issues: *“Interview an expert on legal regulations”*.

4.2 Deadlines and Important Dates

The deadlines and important dates provided by school:




Date	Duty/Deliverable
March 21 st	First portfolio delivery, project plan, first company visit
April 22 nd	Midterm Review, final project plan deadline
May 16 th	Required information for your graduation session
June 3 rd	Portfolio delivery
June 17 th	Portfolio Deadline
July 2 nd – July 9 th	Graduation Sessions
July 9 th	Last internship day

4.3 Research Reports

I will deliver several research reports. Below an explanation on how I plan to approach these research reports.



4.3.1 What available high quality conversational AI tool can give financial advice?

We need a tool that can generate conversational AI tools which can output quality videos with realistic humans which are able to give financial advice. I divided this research into research methods.

Method	Strategy	Description	Phase	Deliverables
Available product analysis		Research what conversational AI tools are available for use.	Analysis	Many small videos
Prototyping		Use all the tools to create one video which would resemble the output of the final product	Analysis	One big video
Pitch		Present the video to stakeholders to receive their feedback and opinions.	Analysis	Conversational AI Tools Comparison

4.3.2 How can we automate the process of editing videos?




In 2025, automatically editing videos using logic is still not easy or widely accessible. This process requires creative problem solving, as the available tools are very limited.

Method	Strategy	Description	Phase	Deliverables
Available product analysis		Explore what tools are already out there	Analysis	Automatic Video Editing Tools Comparison
Prototyping		Use various tools to create multiple	Analysis	Multiple Videos and Definitive Tool

		examples of what's possible and aim to identify one tool that meets all our requirements.		
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4.3.3 Will we face any legal issues when giving financial advice?



When giving financial advice it is required for that one person to have the appropriate certifications. But what if the financial advice is given by an application generated by AI?

Method	Strategy	Description	Phase	Deliverables
Literature Study		Research how the WFT Law works	Analysis	WFT Law Analysis
Literature Study		Research how the FSMA Law works	Analysis	FSMA Law Analysis
Expert Interview		Interview the legal department at iO	Analysis	Report

4.3.4 How can we ensure that the generated videos are clear, useful and engaging?




AI-generated videos offer a lot of flexibility in design and presentation. To ensure that these videos are clear, useful, and engaging, it is essential to collect a lot of user feedback. This will help me better understand user preferences and expectations, allowing me to refine the content accordingly.

Method	Strategy	Description	Phase	Deliverables
Brainstorm		Create storyboards of what the video could / should look like	Analysis	Storyboards
Prototyping		Create a video which contains as many	Analysis	A "Final" video which can be

		elements as possible		used to collect feedback
Survey		Distribute a survey to collect feedback on the current “Final” video	Analysis	Feedback
Pitch		Discuss the results with the UX team and the project owner	Analysis	Definitive Video Structure

4.3.5 Which generative AI can give correct and reliable financial advice?

Ultimately, the tool will automatically generate financial advice. But it is important that the given financial advice is correct and reliable, meaning it isn’t just correct once, but it should be always correct.

Method	Strategy	Description	Phase	Deliverables
Available product analysis		Research what generative AI’s, specialised on finance if possible, are publicly available	Analysis	Many Generative AI Tools
Expert Interview		Talk with the AI expert on the campus to see if he has any ideas on how to test / compare these tools	Analysis	Testing Guideline
Experimenting Tools		Test the Generative AI on correctness	Analysis	A comparison of the generative AI tools

4.4 Learning Outcomes

There are four learning outcomes defined by school that I need to achieve at a specific level. A short description what I will do per learning outcome.

4.4.1 Learning Outcome 1 – Professional Duties

For Learning Outcome 1 I plan to deliver professional products. The products I plan to deliver are described in 4. *Deliverables*.

4.4.2 Learning Outcome 2 – Situation Orientation

For learning outcome 2 I will try to implement as much as possible from everything I have learned in the past 4 years. Think of the SOLID principles, agile way of working, advanced level of problem solving and acting professionally.

4.4.3 Learning Outcome 3 – Professional Standard

For learning outcome 3 I will finish my research that uses the DOT-framework. I will do this by individually answering each sub question which will ultimately answer the main question.

4.4.4 Learning Outcome 4 – Personal Leadership

For learning outcome 4, I will track my planning, set and achieve personal goals, and actively seek feedback from both my company mentor and teacher.

4.5 Personal Development Outcomes

I have also formed personal development outcomes. These are learning outcomes which are not provided by school and can be customized to my liking. I've chosen to focus on improving skills where I feel I am currently lacking.

4.5.1 Writing Skills

Up until now, I haven't taken writing documents very seriously, as Fontys hasn't put strong emphasis on writing skills. However, I've noticed that this semester there is a higher expectation for professional writing. That's why I've made it a personal development goal to improve in this area. This outcome also includes working on the visual presentation of documents, such as aligning with the company's house style and using LaTeX for research documents. Developing these skills will not only benefit my current project but also prepare me for the master's program I plan to pursue after this study.

4.5.2 Research using DOT framework

Most of the semesters it is highly recommended to use the DOT framework for the main research in your semester. However, I have never really used it since it was always too vague in my opinion. This semester I have decided to take action and do whatever it takes to understand this research methodology.

4.5.3 Testing Code and CI/CD

The same applies to testing code and CI/CD automation. There isn't really a hard emphasis on testing code and CI/CD, and I know I should have more experience at it in this stage of my study. That is why I want to spend more attention on testing code and CI/CD automation if applicable in my project.

5. Deliverables

When the project is finished, I should have the following deliverables

5.1 Project Documentation

This includes the **project plan** (current document) and the **requirement document** or a document with user stories or anything similar.

5.2 Research Reports

There are several research reports to be delivered in this project. Here is a list with all of them. Noteworthy to mention, each research report follows the DOT-framework research methodology.

- Domain Understanding
- Conversational AI Tool Research
- Automated Video Editing Research
- Legal Regulation Research
- Financial Generative AI Research
- UX Research

5.3 Design Documents

There are a few design documents to be delivered. Think of the **Architectural Design Records**, the document wherein I explain each technical design choice I make, and the **API specification** for the tool that I am making, since ideally, the tool will have a REST API built in which can be called.

5.4 Prototype

An online hosted prototype which can be used using API calls.

5.5 Presentation

For my presentation I will need to prepare the **presentation** and prepare **presentation slides**.

6. Stakeholders / Project Organisation

There are several people involved in this project. Here is a collection of all the stakeholders, mentors, accessors and everyone else that is involved. For the people that work at the company, I can always walk up to them whenever I want to or send them a message via Teams. For my accessors, I can contact them via Teams if necessary.

Name	e-mail	Title (+ Role)
Kaan Gögcay	Kaan.gogcay@iodigital.com 457632@student.fontys.nl	AI Engineer & Intern
Ka ka Tam	kaka.tam@iodigital.com	Senior Software Engineer (Company Mentor)
Friso Geerlings	friso.geerlings@iodigital.com	Technology Director (Assignment Creator)
Danny Gloudemans	danny.gloudemans@iodigital.com	Solution Architect (Product Owner)
Nimo Beeren	nimo.beeren@iodigital.com	Software Engineer (AI Expert)
Dylan Fanego	dylan.fanego@iodigital.com	Senior UX Designer
Laura Debruyne	laura.debruyne@iodigital.com	Head of Legal Department
Simona Orzan	s.orzan@fontys.nl	Software Engineer (1 st Accessor)
Michiel Koehorst	m.koehorst@fontys.nl	IT Lecturer (2 nd Accessor)

I also have reoccurring meetings. I have a stand-up with my company mentor twice a week (usually on the Mondays and Wednesdays) and a bi-weekly meeting with my product owner.

7. Budget & Available Tools

The assignment itself sounds extremely difficult to execute within 6 months, but the use of online tools makes this assignment feasible to realise within 6 months. An estimation of the tools that will be used are: A generative AI for generating financial advice, an AI for generating conversational/explanation videos containing realistic humans, a generative AI for generating visualizations which can be used in the videos.

When researching tools, experimenting is allowed with the use of fake data. However, when selecting a tool which will be used in the final product, it is important to ensure that the tool is GDPR-compliant and stores the data within Europe. If the data is not stored within Europe, an alternative would be to self-host the tool. If self-hosting is not an option, the data must be anonymized, as sharing any sensitive data outside of Europe is not permitted.

For experimenting purposes, I have a budget of \$200 a month. This could be used to generate more videos on specific platforms when researching conversational AI. Or to test other tools which can be beneficial to the project.

8. Risks

There are several risks that could occur in this project. Below a table with the risks and their prevention activities and the fall-back activities.

Risk	Prevention activities included in plan	Fall-back Activities
All good AI tools are hosted in US or share data to the US.	Anonymize the data to not provide any sensible info.	Use tools that are hosted in Europe, or host one ourselves.
Company mentor absent	-	There are many others that can help me by answering questions or guiding me to the right person to ask something.
Giving financial advice requires proper certification.	Obtain this certificate.	-

Since there are two use-cases (BNP and NN) the NN use-case might not be finished since the BNP use-case has the higher priority.	Focus on the finance explainer use case.	-
AI might give bad financial advice.	-	Use a different model?
Video generation is time consuming. Videos cannot be generated on the spot.	Find a fitting event that would trigger a video generation (i.e. buying a financial product).	-
7 Laptop crashes / doesn't work anymore	Use cloud based version history (e.g. GitLab/GitHub)	
Risk	Prevention activities included in plan	Fall-back Activities

9. References

Shepherds Friendly. (2023, June). *New survey reveals a worrying level of financial literacy in Britain*. Retrieved from <https://www.nswm.co.uk/insights/northstar-blog/new-survey-reveals-a-worrying-level-of-financial-literacy-in-britain>NorthS