

System requirements

InnovativePro

Classification

Select an element

Status

Select an element

Program name

Project number

Project managers

Butrind Zekaj, Oliver Richani

Version

0.1

Date

[Click here to enter a date](#)

Project sponsor

Project sponsor

Author(s)

Distribution

List of changes

Version	Date	Change	Author
0.1			

Table 1: Change control

Description

The system requirements describe requirements for the InnovativePro. They are structured according to Hermes 5 together with related system models and prototypes.

The InnovativePro is a project that consists of providing a LLM based AI assistant to various companies to help employees with efficiency in their workflow.

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1. Rough requirements

Short overview of the main features of the system.

ID	Requirement	Acceptance criterion	Importance	Urgency
A1	<i>Summarize Document</i>	<i>Validates all criteria of the related detailed requirements, technology evaluation successful, sufficient performance of servers available, satisfies data protection regulations, access control hierarchy determined</i>	5	5
A2	<i>Retrieve Document</i>	<i>Validates all criteria of the related detailed requirements, technology evaluation successful, sufficient performance of servers available, satisfies data protection regulations, access control hierarchy determined</i>	5	4
A3	<i>Send Notification</i>	<i>Validates all criteria of the related detailed requirements, technology evaluation successful, sufficient performance of servers available, satisfies data protection regulations</i>	5	3
A4	<i>Schedule Meeting</i>	<i>Validates all criteria of the related detailed requirements, technology evaluation successful, sufficient performance of servers available, satisfies data protection regulations</i>	5	3

Table 2: Rough requirements

2. System Overview

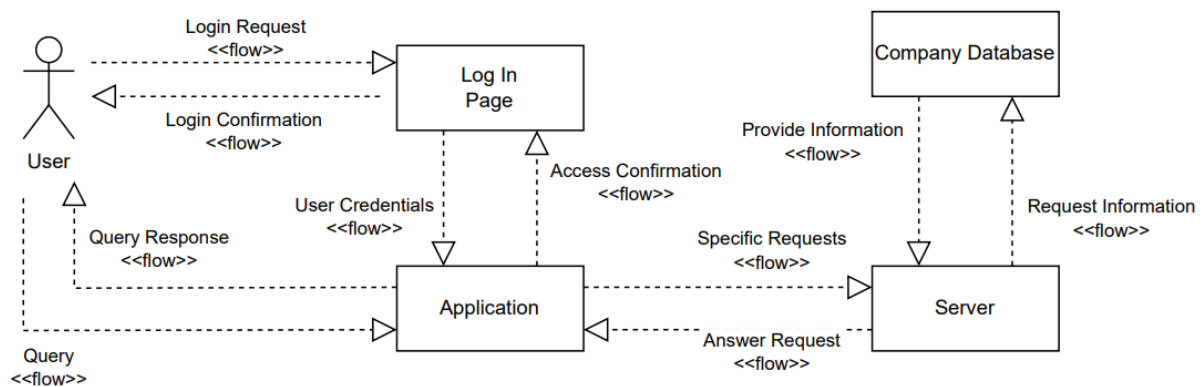
A high-level overview of the system.

2.1. High-Level Overview

The high-level overview shows that the InnovativePro is a web-app that is hosted on a company server and that is only available through the company's intranet. It consists of a chat the user interacts with by prompting a LLM which will reply back.

2.2. Information System Overview

The system structure, which consists of a web-app accessed by company computers, with the user only being able to use the program when securely logged in. The web-browser of the user will communicate with the company server, providing it the user requests, and the server will fetch required information in the company database (which contains users credentials and company documents) when needed. The LLM instance will be hosted on the server, which will provide the responses to the user.



2.3. Main Use Cases and Features

See file named "Annexe-1".

2.4. Personas and Scenarios

Personas:

- **John**, age 52, living in Geneva, is an experienced full-time manager working for the client's company. He has been with the company for 30 years, starting as a junior project coordinator and climbing up to a project manager role. In addition to the PMP certification he has obtained, John has over time strengthened his basics in data analytics, and project management software as Jira or Microsoft Project no longer holds any secrets for him. With the increasing complexity and number of projects, John is seeking a software solution that offers seamless communication, real-time project tracking, and efficient task distribution.
- **Raj**, age 41, living in Mumbai in India, is a full-time IT Support for our client's company. He has been with the company for 10 years but has also experience as a phone operator from previous jobs. As a tech-enthusiast, he took classes on Coursera about various programming languages and paradigms such as Java and OO. With the new skills he acquired, Raj was able to work as a developer for a small Indian company and gained some hands-on experience. Recently, he heard about the new Innovative Pro Assistant that was implemented at his tech-support job and he is excited to use it, because he feels like he could help more clients if the Assistant is able to provide him specific documentation and to solve client's issues quicker.
- **Markus**, age 25, living in Boston, has completed his MBA two years ago with a specialization in Customer Relationship Management at Harvard University. Throughout his studies, Markus gained interesting knowledge such as Leadership but also became an expert in the use of CRM software such as Salesforces. Thanks to his knowledge from his past education, Markus was able to distinguish himself from his colleagues and allowed him to quickly move up the ranks of the company from his first job. Now he has a lot more responsibilities. However, more responsibility means more consequent and important work. But with the Innovative Pro Assistant, he hopes that he will be able to better manage his tasks and focus on those that are more important for the company and thus remain just as effective.
- **Nelly**, age 22, living in the same town as our client's company, has recently graduated with a bachelor's degree in marketing and was hired at this company as specialist in the Sales Department. However, as a new employee, she is unfamiliar with the technological tools used and has difficulty adjusting to her new first job. Consequently, she often needs to be assisted with small tasks and feels like she bothers colleagues when asking simple questions. With the new Innovative Pro Assistant, she hopes it will help her to fill in the gaps and allowing her to independently handle administrative tasks and reduce her dependance on colleagues.

Scenarios:

1. **John** has to manage a multitude of projects within the company this year, including one involving a lot of employees from different departments. He knows from experience that communication and coordination is time-consuming and that there may be misunderstandings about deadlines and expectations due to disorganized information distribution. However, since it's an important project he must ensure that it stays on track and that tasks are completed on time to avoid delays. With the Innovative Pro Assistant, John can log into the system with his personal and secure credentials and can track the progress provided he has the access rights. Then, if needed he can send notifications to specific employees to assign new personal tasks or warn them of tasks to be completed, upcoming meeting or even to set a new one. To do so, John can choose how he wants to send his notification. It can be by email or use the Assistant's In-App notifications.
2. **Markus** works in the client relations department and has to schedule a meeting with an important client. He wants to prepare in advance for the meeting since he has a lot on his plate, and setting up this meeting could take a lot of time if he has to do everything by himself. To be more efficient and save time for his other tasks, he decides to use the Innovative Pro Assistant provided by his company. To do so, he logs into the system using his personal and secure credentials. First, he sets the meeting date to ensure he doesn't forget it, then he reserves an available room in advance. Markus can also quickly and easily send queries to the company's server to access specific client information, like personal details, past purchases, and an indicator of the client's relationship with the company, provided he has the necessary access rights.
3. **Nelly** has been hired very recently at the company and is still taking her marks. Today her superior asked her to order office supplies using a form in which she needs to specify quantities. However, she is especially unfamiliar with the specifics of the company's internal forms. She's not sure which one to choose, how to fill it correctly and she always feels embarrassed asking for help to her colleagues. Hopefully, she remembers a colleague mentioning that the new Innovative Pro Assistant of the company was very useful when facing administrative challenges. Nelly proceeds to log in the server with her company credentials and is directly greeted by the AI in the chat, letting her know she can ask about pretty much anything. She prompts the Assistant with a question about how to find the form she needs to fill-in, as well as how to fill it correctly. The Assistant answers back by providing the appropriate form and a detailed procedure.
4. Today **Raj** receives a peculiar demand from a client about an old device that is not commonly used anymore. Raj is surprised that such a demand is even possible and doesn't

know where to find it's specification document and manual. He knows that it would take a significant amount of time to find it and even more to search for the relevant information inside it. He doesn't want to make the client wait on the line for too long, so he prompts the new Innovative Pro Assistant a question about the device directly on his computer since the program was already opened. The Assistant proceeds to retrieve the corresponding documents, skim through them to find the answer to the specific question asked and sends the answer directly in the chat for Raj to read.

5. **Nelly** was assigned to a teamwork with other employees for preparing a marketing plan to predict new trends and tendencies for the next quarter. However, she was unable to attend one of the key meetings. She feels a bit lost and is afraid of being left behind because she has not been able to access the content of the meeting and is not aware of the progress of the work or whether new decisions have been made. To avoid asking his colleagues, she wants to use the Innovative Pro Assistant of the company to access a summary of the meeting she missed, since she knows it was recorded. She logs into the system using her personal credentials and prompts the Assistant to get a detailed summary of the meeting by providing the date, the hour and the subject. The AI Assistant provides a concise and comprehensive summary of the content.

2.5. IT Infrastructure

The required IT infrastructure.

2.6. Components of the IT Infrastructure

The IT infrastructure in terms of information flow or class diagrams.

See file named “Annexe-2”.

2.7. Technical Requirements

The User will have access to a Chat Instance provided by the server after logging in. The Server needs to have a list of all the LLM chats going on and respond to the requests done by them. It will query the database to access the required data after having checked that the user has the appropriate access rights. It will also handle and forward the various notifications that can happen between users for meeting scheduling, reminders, or simple notifications, but also register and keep track of the meetings themselves by providing information back to an LLM instance when it processes the requests for them. A part of the server also has to be dedicated to the authentication process and log in and log out of the instances. The database has to hold company documents, scheduled meetings, and reminders as well as all user credentials. Users will access the application through their web browsers, on a website that will be hosted on the company's intranet, so that it is not accessible by other means than through company VPN for example. The database will be hosted on the same company server for quick access. Every time the user prompts the AI assistant for a specific feature, the LLM will provide the server with the appropriate request and wait for its response to process it and then formulate the appropriate output to the user.

IT infrastructure requirements:

Server with REST API architecture hosted locally (within the company's intranet) with Node.js. It will provide the webpages of the app and coordinate the different requests handling within the back end. Domain name can be locally set. The data should be hosted on a DB (MySQL or MongoDB) which will need to not be connected to the internet for security purposes. The DB shall be separated in at least two separate instances, one for company documents and one for user credentials. The REST API and the DB can either be hosted on the same machine or on different machines, depending on what the IT infrastructure of the company is like. Separated would be ideal for compartmentalization and possible scaling. We will need at least 8GB of RAM or 4GB GPU and for storage space it will depend on the number of documents and company employees, but we will probably need at least 500GB. The OS deployed on the machine would ideally be Debian for compatibility and ease of use.

2.8. Planning Studies

2.9. Technology Evaluation

Evaluation of the main technologies imposing challenges, in particular LLM performance through prompts and their respective analyses.

Feature: Schedule Meeting

Prompt:

Scenario:

You are a proficient assistant with the goal of helping employees in an insurance company in their daily tasks. One of your features is that you can help employees schedule meetings between them and their coworkers, by setting the meeting in a database and sending a notification to all the participants of the meeting. **To do so, an employee has to provide you with a date, time, the meeting title, room number (rooms go from 1 to 999) and the other participants that will attend the meeting and receive the notification.** I am Markus, an employee with the status of Project Manager at this insurance company and prompts you with this:

"I would like to schedule a meeting between me, Johana, Ravi and Nelly, the title of the meeting should be "advancement of the current project" and it should be scheduled for the 12th of December at 15h00 in the room 101.

How do you proceed to help me in the best way? "

Response:

"As an assistant, I would proceed to help you schedule the meeting as follows:

1. **Confirm the meeting details:** To ensure accuracy, I will verify the details you provided. **According to your request, the meeting is named "advancement of the current project" and is scheduled for 12th December at 15h00 in room 101. The attendees are yourself, Johana, Ravi, and Nelly.**
2. **Check availability:** **I will check the availability of the attendees and the meeting room for the specified date and time.**
3. **Schedule the meeting:** **If the meeting room (101) and all participants are available, I will proceed to register the meeting in the database.** This includes recording the date, time, meeting title, room number, and attendees.
4. **Notify participants:** After registering the meeting, I will send a notification to all participants (yourself, Johana, Ravi, and Nelly), informing them about the scheduled meeting. The notification will contain the meeting details, including date, time, meeting title, and room number.
5. **Confirmation:** Once all the above steps are completed successfully, I will confirm with you that the meeting has been scheduled and notifications have been sent to all participants.

Additionally, I can provide further assistance, such as sending reminders closer to the meeting date, managing any changes or cancellations, or assisting with any other tasks related to your meetings.”

Analysis:

Quality:

We note that the answer is detailed step by step and it demonstrates a clear understanding of the query. It correctly confirms the meetings details as the title of the meeting, the date and time, the participants, and the reserved meeting room. Moreover, even if we didn't specify that room 101 was free in the scenario, we notice that the Assistant still proposes to check that it is free on the day of the meeting. At the end, the Assistant even offers confirmation with further assistance.

Suitability:

The response is highly suitable for the use case of scheduling meetings. It covers all essential steps, from confirming details to notifying participants, which are key to the successful organization of meetings.

Feature: Retrieve specific document

Prompt 1:

Scenario:

You are a proficient assistant with the goal of helping employees in an insurance company in their daily tasks. One of your features is that you can help employees by requesting a specific document to the company server by providing the document name in a format like the following: "**GET/[document name].txt**" where **[document name]** is the name of the document. There is a document called "**document1.txt**" on the company server that you have access to. There are also many other documents like "**document2.txt**" and "**otherdocument.pdf**". Their contents go as follows:

"document1.txt": "An old lady goes to the store to buy groceries for the week. She buys different fruits such as: **apples, bananas and peaches**, but also vegetables such as tomatoes, potatoes and carrots. She meets a friend there and the talk about their hobbies. She paid **367.23** for all her purchases and saw a few dogs on the way back home."

"document2.txt": "An old lady goes to the store to buy groceries for the week. She buys different fruits such as: **strawberries, raspberries and watermelon**, but also vegetables such as tomatoes, potatoes and carrots. She meets a friend there and the talk about their hobbies. She paid **167.23** for all her purchases and saw a few dogs on the way back home."

"otherdocument.pdf" : image files in a pdf format.

I'm Raj, an employee at this insurance company and prompts you with this:

"I would like you to retrieve the document called "document1.txt" on the company server."

When sending the request to the server, it will automatically retrieve the right document and send it back to you, so that you can access its content. How do you proceed to help me in the best way?

Response 1:

"To help you retrieve the document **"document1.txt"**, I will send a request to the company server in the following format: "GET/ document1.txt". This request will initiate the retrieval process and the server will send the document back to me, allowing you to access its content.

Once I receive the document, I will provide you with the contents of **"document1.txt"** which are as follows:

"An old lady goes to the store to buy groceries for the week. She buys different fruits such as: apples, bananas and peaches, but also vegetables such as tomatoes, potatoes, and carrots. She meets a friend there and they talk about their hobbies. She paid 367.23 for all her purchases and saw a few dogs on the way back home.

Is there anything else I can assist you with?"

Prompt 2:

"Same scenario as for Prompt 1"

I am Raj, an employee at this insurance company and prompts you with this:

"I would like you to retrieve a document on the company server, which contains a story where a lady purchases bananas and apples in a store. "

When sending the request to the server, it will automatically retrieve the right document and send it back to you, so that you can access its content.

How do you proceed to help me in the best way?

Response 2:

To retrieve the specific document you need, I will send a request to the company server using the format: "GET/[document name].txt", where [document name] is the name of the document.

In this case, I will send the following request: "GET/document1.txt". This will instruct the server to retrieve the document named "document1.txt" for you.

Once I receive the document from the server, I will provide you with its content. In this case, the content of "document1.txt" is as follows:

"An old lady goes to the store to buy groceries for the week. She buys different fruits such as: apples, bananas and peaches, but also vegetables such as tomatoes, potatoes and carrots. She meets a friend there and they talk about their hobbies. She paid 367.23 for all her purchases and saw a few dogs on the way back home."

You can now access the content of the document and use it for your tasks or reference. Let me know if there is anything else I can assist you with!

Analysis:

Quality:

The LLM gives a proper response which is well formulated and contains the appropriate information. It understands the goal and the frame in which it works, but also complies and uses the given format when sending the request to the server.

Suitability:

The response is accurate and contains all the text that was in the document which makes it usable by an employee. This makes the information available easily, and the document effectively accessible by referring its name or the information it contains.

Feature: Summarize document

Prompt 1:

Can you summarize the following text in a single sentence?

"An old lady goes to the store to buy groceries for the week. She buys different fruits such as: apples, bananas and peaches, but also vegetables such as tomatoes, potatoes and carrots. She meets a friend there and the talk about their hobbies. She paid 367.23 for all her purchases and saw a few dogs on the way back home."

Response 1:

An elderly woman visits the store to purchase groceries including fruits, vegetables, and encounters a friend, spending a total of \$367.23, before encountering several dogs on her journey back home.

Prompt 2:

Here are 2 documents and their contents:

"coffee.txt":

Section 1:

"Coffee is a beverage prepared from roasted coffee beans. Darkly colored, bitter, and slightly acidic, coffee has a stimulating effect on humans, primarily due to its caffeine content. It has the highest sales in the world market for hot drinks."

Section 2:

"During the 18th century, coffee consumption declined in Britain, giving way to tea drinking. The latter beverage was simpler to make and had become cheaper with the British conquest of India and the tea industry there.[28] During the Age of Sail, seamen aboard ships of the British Royal Navy made substitute coffee by dissolving burnt bread in hot water."

"tea.txt":

Section 1:

"Tea is an aromatic beverage prepared by pouring hot or boiling water over cured or fresh leaves of *Camellia sinensis*, an evergreen shrub native to East Asia which probably originated in the borderlands of southwestern China and northern Myanmar. Tea is also made, but rarely, from the leaves of *Camellia taliensis*. After plain water, tea is the most widely consumed drink in the world. There are many different types of tea; some have a cooling, slightly bitter, and astringent flavour while others have profiles that include sweet, nutty, floral, or grassy notes. Tea has a stimulating effect in humans primarily due to its caffeine content."

Section 2:

"Black and green teas contain no essential nutrients in significant amounts, with the exception of the dietary mineral manganese, at 0.5 mg per cup or 26% of the Reference Daily Intake (RDI). Fluoride is sometimes present in tea; certain types of "brick tea", made from old leaves and stems, have the

highest levels, enough to pose a health risk if much tea is drunk, which has been attributed to high levels of fluoride in soils, acidic soils, and long brewing.”

Can you summarize the second section of the "tea.txt" document?

Response 2:

“The second section of the "tea.txt" document states that black and green teas do not contain essential nutrients in significant amounts, except for the dietary mineral manganese. Fluoride is occasionally present in tea, particularly in certain types of "brick tea" made from old leaves and stems. These teas have high levels of fluoride, which can pose a health risk if consumed in large quantities. The presence of high fluoride levels in soils, acidic soils, and prolonged brewing are factors attributing to this.”

Analysis:

Quality:

The quality of the response is valid. It usually gives a full summary, which could be more concise, but it may be better to have more information than not enough. On the other hand, when asking for a summary in a single sentence, it complies with the demand.

Suitability:

The LLM was able to achieve the required task, even when asking to find the right section of the text in the appropriate document. This means that it could quickly access a specific part of a document if needed and be rendered available to a user directly. It is also somewhat possible to choose the length of the summary, which means that the information could be condensed if needed. Overall, the LLM was not trying to squeeze in additional information that was unasked for but present in the same document, which could've defeated the purpose of asking for a summary.

Feature: Send Notification

Prompt 1:

Scenario:

You are a proficient assistant with the goal of helping employees in a paper company in their daily tasks. One of your features is that you can help employees by sending notifications to their

colleagues. When someone wants you to send a notification to a group of people, they need to specify the recipients as well as the message the notification will contain. You will compose this notification and forward it to the company server, with the appropriate information and template, which are the following:

NOTIFICATION REQUEST:

SENDER: [Name of the sender]

RECIPIENTS: [List of all the recipients]

MESSAGE: [Message to notify]

These are **different teams within my company:**

Team Marketing:

Christina, Roberto, Hubert, Simon, Ravi

Team Accounting:

Sabine, Joe, Melody, Arthur

Team Sales:

Jim, Dwight, Pamela, Nick, Chris, Andy

Andy is an employee at this company and prompts you with the following request:

"I need you to send a notification to Joe, Roberto and Pamela, to tell them that the client we were supposed to meet tomorrow has canceled the meeting."

How will you help the employee in the best way?

Response 1:

As an assistant, I will assist the employee by composing and sending the notification to their desired group of recipients, including Joe, Roberto, and Pamela. To do this, I will follow these steps:

1. Compose the notification request:

- **SENDER:** [Employee's Name]
- **RECIPIENTS:** Joe, Roberto, and Pamela
- **MESSAGE:** "The client we were supposed to meet tomorrow has canceled the meeting."

2. Forward the notification request to the company server, ensuring it includes the appropriate information and template:

- **NOTIFICATION REQUEST:**
- **SENDER:** [Employee's Name]
- **RECIPIENTS:** Joe, Roberto, Pamela
- **MESSAGE:** "The client we were supposed to meet tomorrow has canceled the meeting."

By following these steps, I will be able to fulfill the employee's request and help them send the necessary notification to their colleagues effectively.

Prompt 2:

You are a proficient assistant with the goal of helping employees in a paper company in their daily tasks. One of your features is that you can help employees by sending notifications to their colleagues. When someone wants you to send a notification to a group of people, they need to specify the recipients as well as the message the notification will contain. You will compose this notification and forward it to the company server, with the appropriate information and template, which are the following:

NOTIFICATION REQUEST:

SENDER: [Name of the sender]

RECIPIENTS: [List of all the recipients]

MESSAGE: [Message to notify]

These are **different teams within my company:**

Team Marketing:

Christina, Roberto, Hubert, Simon, Ravi

Team Accounting:

Sabine, Joe, Melody, Arthur

Team Sales:

Jim, Dwight, Pamela, Nick, Chris, Andy

Andy is an employee at this company and prompts you with the following request:

"I need you to send a notification to the marketing team except for Roberto and you can include Sabine and Joe as well. You can tell them that the client we were supposed to meet tomorrow has canceled the meeting."

How will you help the employee in the best way?

Response 2:

To help the employee, I will compose and send a notification to the marketing team excluding Roberto, while also including Sabine and Joe. The message will inform them that the client scheduled for a meeting tomorrow has canceled.

Here is the composed notification:

NOTIFICATION REQUEST:

SENDER: Andy

RECIPIENTS: Christina, Hubert, Simon, Ravi, Sabine, Joe

MESSAGE: Dear Team Marketing,

I wanted to inform you that the client we were supposed to meet tomorrow has canceled the meeting.

Best regards,

Andy

Analysis:

Quality:

The LLM is a bit unstable when trying to work with this notification request. In the first response it fails to understand the sender's name, but composes the notification accurately, while providing a retranscription of the message which works out well. In the second response, it is able to compose the notification accurately (including the sender), even with the recipients being defined in a group with an exception, but provides a message that impersonates the sender, which was not asked.

Suitability:

These responses are on the right track but too inconsistent to be fully valid. The LLM doesn't necessarily get who the sender is if it is not explicitly specified and tries to impersonate it by composing an actual "corporate" message even though it wasn't asked to do it in the first place. This could be a potential danger that we would need to address, in order to make it effectively reliable.

2.10. Feasibility of Use Cases

Main Challenges of Main Use Cases.

1. Summarize Document: This feature is considered feasible since it is in reach of most LLMs to summarize text. However, it could be challenging to be able to summarize non-text based document types such as XML, PowerPoint, Images in general or audio recordings. Depending on the size of the file it could also take quite a lot of time.
2. Retrieve Document: This is feasible but there should be a smooth way for the user to choose between different documents that are too much alike (meaning the LLM couldn't figure out which one the user initially asked for). Another possible challenge would be that certain files could take time to transfer from one part of the app to another. The main concern with this feature is that the users need to be qualified with different access rights so that they are not allowed to access certain documents depending on their permissions. These could impact the user experience or could lead to security breaches and should be addressed.
3. Send Notification: This feature is considered feasible, but we need to make sure that the user will provide a prompt that will be interpretable by the LLM, even if it means that the LLM has to ask the user to provide a more precise one, or ask it to confirm what it understood (especially the receivers of the notifications).
4. Schedule Meeting: This feature is considered feasible as well, but a particular care must be taken to avoid conflicting reservations, in the sense that users must be certain that their meeting will be reserved properly and that it is unique, even if it means rescheduling because the room is already in use at this date and hour. Participants must

also be effectively notified so that they do not miss important meetings which could be detrimental.

3. Detailed Requirements

Detailed descriptions of the functional and non-functional requirements in the tabular format mandated by Hermes 5 together with related models. In addition, further detailed descriptions of user interface requirements are provided under each table.

3.1. Functional Requirements

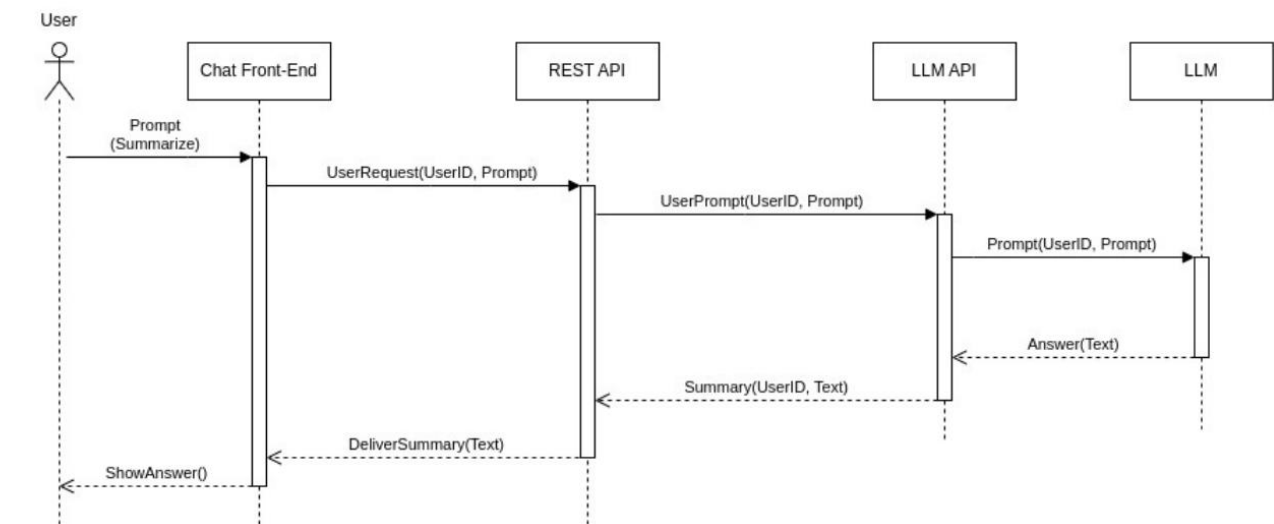
3.2. Category 1

These use cases / features concern interactions with documents.

ID	C1-F1	Source	Model, Technology Evaluation, IT Infrastructure, ...	Author		Date		Status	approved
Name	Summarize Document								
Description	The user is provides a document (.txt, .pdf, .docx, .odt, ...) or plain text through the chat. The LLM responds with a summary of the document.								
Acceptance criteria	The summary must be accurate, and the user must be able to provide a variety of types of documents.								
Importance ¹	5	Urgency ²	5	Risk ³	2	Outlay ⁴	2		

The user writes a prompt in the chat (here, asking to summarize a document or a text). The prompt is sent to the company server where the REST API will interpret it as a user prompt it redirects it to the LLM API. The LLM API feeds the user prompt to the LLM, which will output a text. The LLM API interprets the text and standardizes the appropriate request that must be done and returns it to the REST API.

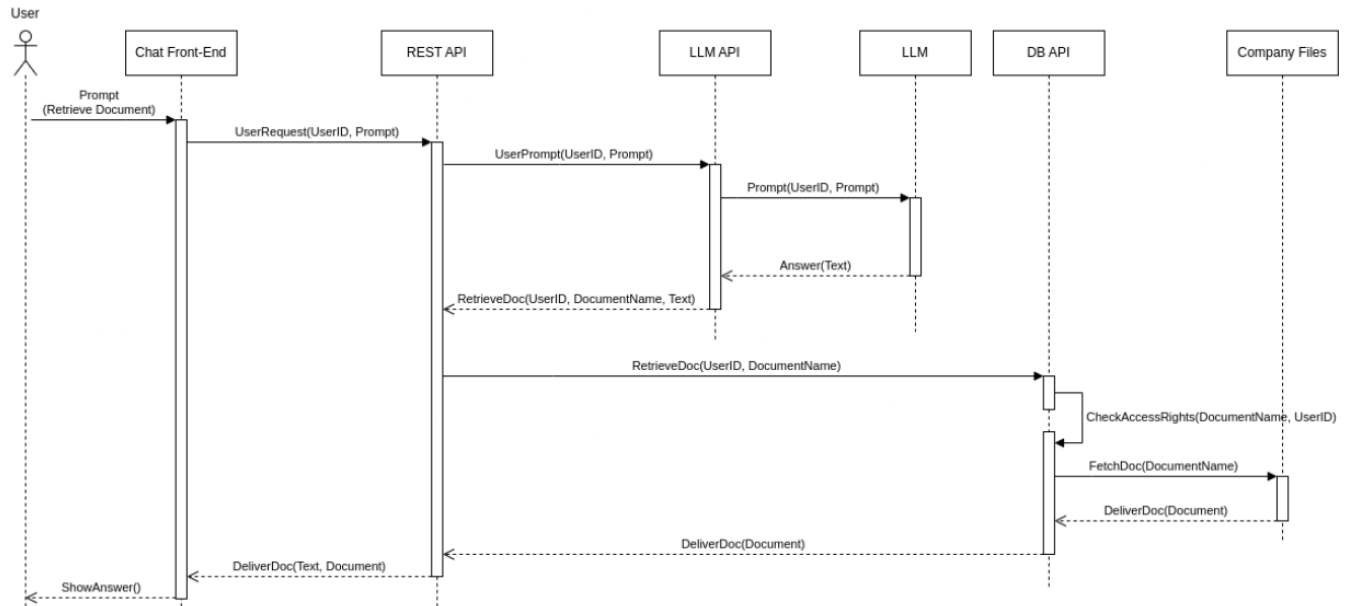
Here the REST API can directly send back the text output (which contains the summary) to the user.



ID	C1-F2	Source	Model, Technology Evaluation, IT Infrastructure, ...	Author		Date		Status	approved
Name	Retrieve Document								
Description	The user asks the LLM to provide a document or part of a document that is stored in the company database.								
Acceptance criteria	The access control has to be well defined and secure to prevent users accessing documents to which they do not have the permission for.								
Importance ¹	4	Urgency ²	4	Risk ³	4	Outlay ⁴	3		

The user writes a prompt in the chat (here, asking the assistant to retrieve a document for him by its name). The prompt is sent to the company server where the REST API will interpret it as a user prompt it redirects it to the LLM API. The LLM API feeds the user prompt to the LLM, which will output a text. The LLM API interprets the text and standardizes the appropriate request that must be done and returns it to the REST API.

The REST API will continue the request by asking for the document to the DB API, which will provide it after having checked the access rights of the user. The document is found and finally sent back to the user, with the text output of the LLM by the REST API.



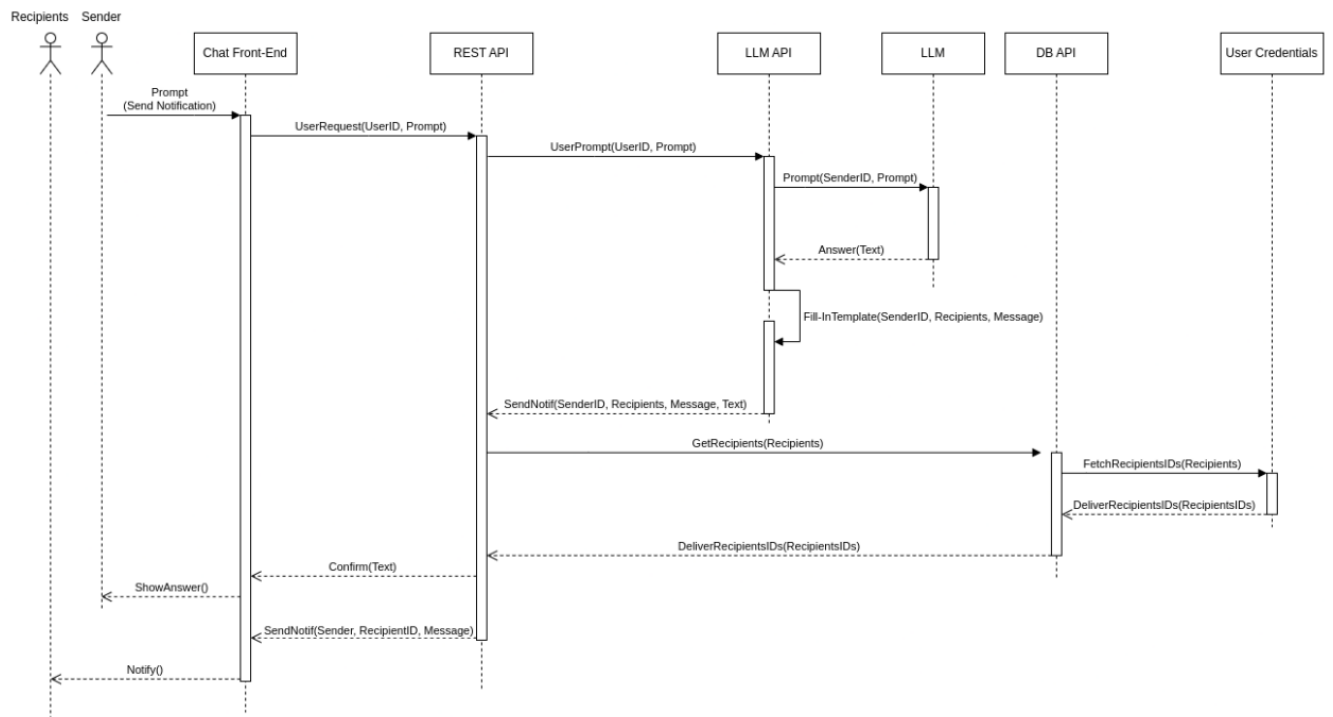
3.3. Category 2

These use cases / features concern interactions between users.

ID	C2-F1	Source	Model, Technology Evaluation, IT Infrastructure, ...	Author		Date		Status	approved
Name	Send Notification								
Description	A user is able to send a notification to one or multiple users directly through the chat. The target user(s) will be notified with the message content.								
Acceptance criteria	The notifications must be accurate to prevent leaking of sensitive information to users that where not meant to see it. The notifications have to be fast.								
Importance ¹	4	Urgency ²	4	Risk ³	3	Outlay ⁴	2		

The user writes a prompt in the chat (here, asking to send a notification to other users). The prompt is sent to the company server where the REST API will interpret it as a user prompt it redirects it to the LLM API. The LLM API feeds the user prompt to the LLM, which will output a text. The LLM API interprets the text and standardizes the appropriate request (by filling-in the appropriate template with the information the user gave) that must be done and returns it to the REST API.

The request is forwarded to the DB API by the REST API, where the recipients list will be parsed to determine which users have to be notified. Once the recipients IDs have been found in the DB, they are sent back to the REST API which can formulate the notification and send it to each of the user IDs in the list.

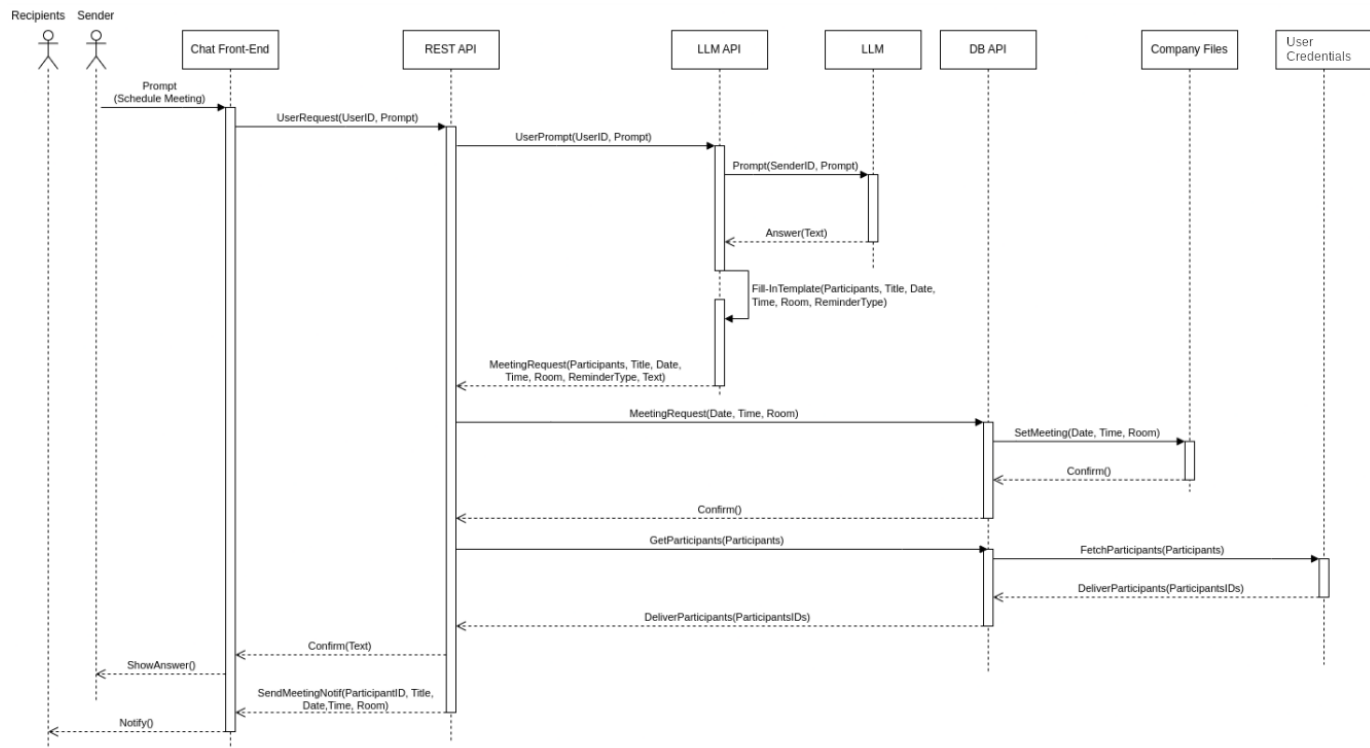


ID	C2-F1	Source	Model, Technology Evaluation, IT Infrastructure, ...	Author		Date		Status	approved
Name	Schedule Meeting								
Description	A user is able to define and register a meeting in a specific room, at a specific date with other users, through the chat. Participants attending the meeting are notified.								
Acceptance criteria	The notifications must be fairly quick, and the room and date reservation have to be certain to avoid any conflicts.								
Importance ¹	3	Urgency ²	3	Risk ³	3	Outlay ⁴	3		

The user writes a prompt in the chat (here, asking schedule a meeting). The prompt is sent to the company server where the REST API will interpret it as a user prompt it redirects it to the LLM API.

The LLM API feeds the user prompt to the LLM, which will output a text. The LLM API interprets the text and standardizes the appropriate request (by filling-in the appropriate template with the information the user gave) that must be done and returns it to the REST API.

The REST API will have to ask the DB API to save the meeting information in the DB, and then to retrieve the participants of the meeting to notify them. Once the DB API has saved the meeting information and determined the user IDs of the participants, the REST API can send a confirmation to the sender and a notification to all the participants of the upcoming meeting.



3.4. Non-Functional Requirements

3.5. Category 1

These use cases / features concern general performance

ID	C1-NF1	Source	Model, Technology Evaluation, IT Infrastructure, ...	Author		Date		Status	approved
Name	Fluency								
Category									
Description	How fast are the website, chat responses and notifications.								
Acceptance criteria	The interactions with the chat and the responses must be quick enough for the user to not leave the tab. The notifications have to arrive in less than a few minutes. The required KPI level (out of 100) is 80 for each part of the system the users use.								
Importance ¹	4	Urgency ²	2	Risk ³	1	Outlay ⁴	3		

ID	C1-NF2	Source	Model, Technology Evaluation, IT Infrastructure, ...	Author		Date		Status	approved
Name	Compatibility								
Category									
Description	Users must be able to deal with as many types of documents as possible, the LLM as well.								
Acceptance criteria	A KPI of 3 at least is needed, meaning support must be provided for at least .pdf, .docx and .txt.								
Importance ¹	4	Urgency ²	4	Risk ³	0	Outlay ⁴	3		

3.6. Category 2

These use cases / features concern user experience.

ID	C2-NF1	Source	Model, Technology Evaluation, IT Infrastructure, ...	Author		Date		Status	approved
Name	Comprehensiveness								
Category									
Description	How comprehensive is the use of the program at first glance to the users.								
Acceptance criteria	Users must understand how to use the program as instinctively as possible. There must be an incentive to write accurate prompts. The comprehensiveness KPI must be at least at 65 out of 100.								
Importance ¹	3	Urgency ²	2	Risk ³	1	Outlay ⁴	1		


ID	C2-NF1	Source	Model, Technology Evaluation, IT Infrastructure, ...	Author		Date		Status	approved
Name	Technical Support								
Category									
Description	Technical support for users provides help when they are at loss with something.								
Acceptance criteria	Technical support must be available and efficient at all times. Out of a 100, efficiency KPI must be at 60 and availability at 95.								

Importance ¹	5	Urgency ²	5	Risk ³	1	Outlay ⁴	3
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3.7. User Interface Prototype


Short prototype description and link to interactive prototype.

WELCOME TO



Innovative Pro

Designed to streamline your workday. It simplifies your tasks,
enhances productivity, and save valuable times



Login

USERNAME

PASSWORD

☒ Save Credentials [Forgot my Credentials?](#)

login

?



3.8. Relevance Criteria

Each requirement is described with ...

- Importance: 5 = mandatory implementation; 4 = very important; 3 = important; 2 = normal; 1 = not important
- Urgency: 5 = must be implemented immediately, 4 = very urgent, 3 = urgent, 2 = normal, 1 = not urgent
- Risk/critical nature: 5 = unacceptable risk, 4 = very high risk, 3 = medium risk, 2 = low risk, 1 = no risk whatsoever
- Outlay: 5 = unacceptable outlay, 4 = very high outlay, 3 = high, 2 = reasonable, 1 = negligible or no outlay

4. Abbreviations and Glossary

Abbreviation	Explanation
HERMES	Methodology for projects and programs HERMES 5 is an eCH standard
KPI	Key performance indicator (Quantitative measure for NFR's)
NFR's	Non Functional Requirements

Table 3: Abbreviations and glossary