

Name : Zekaj
Name: Richani

Vorname : Butrind
Vorname: Oliver

Assignment 2

1a)

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 its 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.

Scenarios	Challenges
1	<ul style="list-style-type: none"> ▪ Organizational: Some employees may be resilient about using the Assistant. ▪ Quality: The Assistant might not be able to properly track the progress of projects and provides incorrect data, John won't be able to access effectively whether projects are still on track or not. ▪ Usability: The Interface might be too complex and not enough easy-to-use. John and other employees will encounter difficulties to understand and use the Assistant. ▪ Security: The credentials might not be sufficiently secure which increases the risk of unauthorized access to sensitive data on important projects that John manages, or employees might receive fraudulent requests or notifications appearing to come from John or the system.
2	<ul style="list-style-type: none"> ▪ Security: Confidential client information may be accessible to users who don't have the necessary access rights. ▪ Quality: The information provided by the Assistant about the client may be incorrect, irrelevant, or outdated. ▪ Maintenance: The Assistant might experience latency or be under maintenance which could prevent Markus from executing his queries efficiently. ▪ Usability: Data might be stored in a disorganized and inefficient manner which could waste Markus' time and prevent him from accessing it quickly and easily.
3	<ul style="list-style-type: none"> ▪ Quality: The Assistant has to provide relevant and accurate information, especially as a form of AI chat bot ▪ Usability: Interface should be easy-to-use and intuitive by users like who aren't particularly comfortable with the latest technology, as well as new employees like Nelly who are not familiar with the Assistant itself. ▪ Maintenance: The Assistant needs to be regularly well updated so that new employees get responses to their queries that are not outdated ▪ Security: It needs to be accessible only by employees that have received their personal company credentials

	<ul style="list-style-type: none"> ▪ Functionality: All the main functionalities need to be available by any legitimate employee, but with different right access depending on their hierarchical position ▪ Organizational: The Assistant should complement, not replace, regular employee interactions. It shouldn't be used for all tasks to ensure team cohesion and help new employees become independent and valuable team members.
4	<ul style="list-style-type: none"> ▪ Security: When logging in, Raj should only have access to IT Support related documents. ▪ Usability: Queries to the Assistant should be very simple and fast to make ▪ Quality: The responses of the Assistant should be very accurate and provided quickly ▪ Maintenance: The documents available to the AI should be up to date as often as possible. Employee as Raj should be able to report inaccuracies so that they're fixed quickly. ▪ Privacy: The Assistant should make clear what information is sensible or not, to prevent the IT Support group from disclosing classified information.
5	<ul style="list-style-type: none"> ▪ Functionality: The Assistant needs to be able to record meetings automatically without manually asking it to. Nelly should not be required to ask in advance one of her colleagues to turn on the recording during a meeting she might miss. ▪ Functionality: The Assistant should be able to transcript voices in the meeting room as text, charts or other documents that were shown during the meeting. Nelly should have as much as possible information about the content of the meeting. ▪ Usability: Recordings should be available as the original format or summarized by the Assistant. Users should have the choice of what format they want to use. ▪ Privacy: Employees need to be aware that the meeting is recorded and that only work-related topics should be discussed during the meeting to avoid recording of personal information. Nelly shouldn't be able to know

	<p>information about personal matters of colleagues that attended the meeting.</p> <ul style="list-style-type: none"> ▪ Security: Recordings of meetings should only be accessible to users who were meant to attend them. The Assistant needs to know who is expected to attend which meeting. Nelly needs to be able to access contents only about the meetings she was expected to attend. ▪ Maintenance: To avoid saturation of storage space, old meeting recordings should be discarded after some time. Nelly is very unlikely to ask about a meeting that occurred a long time ago.
--	---

1b) User stories :

▪ Scenario 1

- **As John, a project manager,** I want to use the Innovative Pro Assistant to track the progress of each project, **so that** I can ensure all tasks are following the objectives and avoid potential delays.
- **As John, a project manager,** I want to use the Innovative Pro Assistant to notify team members of upcoming meetings or any changes to previous ones, **so that** each member is informed and will be able to adjust his schedules accordingly.

▪ Scenario 2

- **As Markus, a client relation specialist,** I want to send queries to the server to retrieve specific client information such as previous interactions and purchase history, **so that** I will be well-prepared for the meeting.
- **As Markus, a client relation specialist,** I need the Innovative Pro Assistant to verify if I have the rights to access personal information about the client, **so that** data security is not compromised, and sensitive and important information is not leaked.

- **As Markus, an employee preparing an important meeting,** I need the Innovative Pro Assistant to confirm my meeting room reservation without issues, ensuring that a notification is sent to all participants and that the room is unavailable on that specific date, so that there is no conflict with other employees and the room is available and ready the day I scheduled with the client.

- **Scenario 3**

- **As a new employee,** I want to be able to access easily and efficiently all specific forms I need for my tasks, **so that** I can finish my administrative tasks without having to always ask my teammates.
- **As Nelly, a new employee,** I need to have an intuitive and friendly experience with the Assistant, including a tutorial guide when I log in for the first time, **so that** I better understand the functionalities provided and it will facilitate my integration within the company.
- **As Nelly, who has no knowledge of technology,** I need to be sure that I can log in securely using my company credentials, receiving a two-factor authentication prompt to verify my identity **so that** I can perform my personal queries and ensure that my data will be protected.

- **Scenario 4**

- **As an IT Support employee,** I need to access specification documents and manuals quickly **so that** I don't make the client wait in line.
- **As Raj,** I need access to both historical and current information, **so that** I will even be able to effectively answer client's unexpected queries.

▪ **Scenario 5:**

- **As Nelly, an employee working in a team,** I need to be sure that meetings are recorded and transcribed by the Innovative Pro Assistant **so that** I can access a recording of the meeting or ask the Assistant for a summary of the content in case I'm not able to attend it.

2a) UML Information flow

Description:

The User has to log in to access the program (**Application**). The User's credentials are verified through a secure process involving the **Server** and the **company Database**, where those credentials are stored. The User can then query the program with the available features. The program then interacts with the **Server** by sending requests depending on the feature used. The **Server** will respond with the appropriate information after having it retrieved from the **Database**.

2b) UML Use Case Diagram

Use cases	Description
Login with credentials	Users receive the credentials directly from the company to log in to the Assistant and don't need to create an account.
View Tutorial	Users have the choice to access a tutorial the first time they log in to better understand the features offered by the Innovative Pro Assistant.
2FA	The 2FA might be invoked during the login phase (i.e., Login After Password Change, Login After a Long Period of Inactivity, Login from another device, ...) and always ensure security.
Modify password	Users can change the password provided by the company if they wish.
Calendar	Users can directly interact with a calendar without having to go through the Assistant Chat
Set Meeting Date	To set a meeting date, the user must go through the calendar. He can send a notification to warn participants that he set the meeting date.

Reserve Meeting Room	To reserve a meeting room the user must first choose a meeting date and can also send a notification to warn participants that he reserves a meeting room.
Chat Assistant	<p>For most queries, the user must go through the Assistant chat:</p> <ul style="list-style-type: none"> ▪ Retrieving General information : To access a specific type of general information, the user must go through the Chat and send his request. ▪ Retrieve Confidential Information : To access confidential information or documentation the procedure is the same as for retrieving general information but the access rights are checked before to ensure that the user can access the documentation. ▪ Send Notifications: To send a notification, the user must do so through the chat or from the calendar. He can choose the type of notification he wants to send. Either Notify by Email, or Notifications App-In. ▪ Tracking Progression: To access the tracking of a particular project, the user must go through the chat. Only users with access rights can access to it (i.e., project managers) ▪ Summarizing Document or specific information: To get the summary of a document, the user must send their query through the chat. ▪ Accessing Meeting Content: To access the content of a meeting that they were unable to attend, the user must go through the chat and send their request specifying the date, hour and subject of the meeting and an Administrator will check the access rights of the user.
Check access rights	This indicates that whenever a user tries to access confidential information, his access rights must always be checked first by an Administrator.