Project Calendar

Group: 2
NMECS: 102470, 102534, 102536, 102565, 102778

Tasks List

Module: Project beginning
Tasks:

Title	Description	Member(s)
Requirement and objectives meetings	Meetings with the supervisor to identify project requirements, its scope and boundaries.	All
Risk analysis	Identify possible risks associated with the project.	All
Cost and benefit analysis	Estimate the project cost and its benefits.	All
Start Management with Jira	Setup Atlassian Jira platform.	Leonardo Almeida
Create GitHub Organization	Setup Github organization.	Emanuel Marques
Plan Project Calendar	Identify project main building-blocks, assign members to each module and identify task by module.	All
Communication plan (project website)	Develop and host a website with all useful information about the project and the group.	All
Define Team Roles	Assign roles to each group member.	All
Schedule Weekly meetings	Schedule weekly meetings with the supervisor.	All

Module: Prepare Presentation of the lifecycle objectives and calendar
Description: Prepare the presentation for Milestone 1. The artifacts produced in this module must be a project presentation, project plan and communication plan (project website).
Member(s): All

Module: Define System Architecture
Description: Define the system components, their relationships, and the interactions between them. The system architecture should provide a high-level view of the software system and help understand the system's behavior, performance, and scalability.
Member(s): Pedro Rodrigues

Module: Requirement analysis
Tasks:

Title	Description	Member(s)
Requirements Gathering	Get a more detailed understanding of the requirements.	All
Talk to domain experts	Talk to ML teachers and "CAA" students in order to clarify product usage.	All
Categorize requirements	Identify which requirements are more critical.	All
Study analogous systems	Identify requirements based on existing systems available on the market (e.g. Kaggle).	All
Use cases	Describe functional requirements of the system and draw a Use Case Diagram.	Rafael Gonçalves
Personas	Define fictional characters representing the different types of users who might interact with the product.	Rafael Gonçalves
Scenarios	Write short narratives about how users might interact with the product, to understand their goals and motivations.	Rafael Gonçalves
User Stories	Write brief, concise and informal descriptions of the product functionalities, from the user's point of view.	Rafael Gonçalves

Module: Prepare presentation of the lifecycle architecture
Description: Prepare the presentation for Milestone 2. The artifacts produced in this module must be a presentation about the requirement analysis and the system architecture documentation.
Member(s): All

Module: Prototype
Tasks:

Title	Description	Member(s)
Develop Prototype	Develop a prototype that will allow to have a better vision about the representation, intended functionalities and user experience of the final product.	All
Test Developed Prototype	Test the prototype in order to get data about improvements that should be made.	All
Improve Prototype	Refine and enhance the prototype to better meet the intended goals and requirements and to fix the issues found during the test phase.	All

Module: Prepare Prototype Presentation
Description: Prepare the Prototype presentation for Milestone 3. The artifacts produced in this module must be a prototype that will be shown and analysed.
Member(s): All

Module: Development
Tasks:

Title	Description	Member(s)
Associate User Stories with tasks	Team Manager and Product Owner should work together, with the purpose of dividing workload and prioritizing backlog.	Leonardo Almeida Rafael Gonçalves
Define API Endpoints	Defining API endpoints refers to the process of identifying and documenting the various endpoints that will be available for client applications to interact with the backend.	All
Develop frontend	Developing the frontend of a software system involves designing and implementing the client-side components that interact with the end user.	Leonardo Almeida Pedro Rodrigues
Develop backend	Developing the backend of a software system involves designing and implementing the server-side components that will support the application.	Rafael Gonçalves Emanuel Marques
UA IDP integration	Get UA IDP documentation and develop the Authentication system that will allow end users to LogIn with UA IDP.	Diogo Magalhães

Module: Testing
Tasks:

Title	Description	Member(s)
Unit Tests	Make automated tests to verify the validity of individual software components.	All
Integration Tests	Make automated tests to verify the correct interaction and behaviour of multiple software components or units working together.	Diogo Magalhães
Usability tests	Usability tests are a type of user research that involves observing and analysing how users interact with a product or system.	All
Feedback Analysis	Feedback analysis involves collecting and analysing feedback from users or customers to gain insights and improve the quality of a product or service.	All
Test Review (QA)	The purpose of review tests is to ensure that the code or documentation meets the intended requirements and specifications, and to improve the quality and reliability of the software system.	Diogo Magalhães

Module: Write Documentation
Description: Write all the project documentation like the API documentation, etc.
Member(s): All

Module: Poster
Description: Design a poster to show and deliver in the last presentation.
Member(s): All

Module: Project video
Description: Make a video to show in the last presentation.
Member(s): All

Module: Write Technical Report
Description: Make a detailed description of every topic, methods, results, etc. that were implemented/tested/viewed during the development of the project.
Member(s): All

Module: Prepare Project Presentation
Description: Prepare a Presentation of the finalized project to show in Milestone 4 and at Students@DETI.
Member(s): All

Module: Students@DETI
Description: Participate in Students@DETI.
Member(s): All

Project Schedule

ID	TITLE	INCEPTION		ELABORATION		CONSTRUCTION										TRANSITION		
		W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17
1	Begining	█	█															
1.1	Requirement and objectives meetings	█	█															
1.2	Risk analysis	█	█															
1.3	Cost and benifit analysis	█	█															
1.4	Start Management with Jira		█															
1.5	Create GitHub Organization		█															
1.6	Plan Project Calendar		█															
1.7	Communication plan (project website)		█															
1.8	Define Team Roles	█	█															
1.9	Schedule Weekly meetings	█																
2	Prepare Presentation of the lifecycle objectives and calendar	█	█															
M	M1: presentation of the lifecycle objectives and calendar for the project		▣															
3	Define System Architecture			█														
4	Requirement analysis			█	█													
4.1	Requirements Gathering			█														
4.2	Talk to domain experts			█	█													
4.3	Categorize requirements			█														
4.4	Study analogous systems			█														
4.5	Use cases			█														
4.6	Personas			█														
4.7	Scenarios			█														
4.8	User Stories			█	█													
4.9	Prepare presentation of the lifecycle architecture			█	█													
M	M2: presentation of the lifecycle architecture; the milestone is achieved when the architecture has been validated.				▣													
5	Prototype					█	█	█	█									
5.1	Develop Prototype					█	█											
5.2	Test Developed Prototype							█	█									
5.3	Improve Prototype							█	█									
6	Prepare Prototype Presentation								█									
M	M3: prototype; mid-term presentation with supervisors; peer evaluation.								▣									
7	Development					█	█	█	█	█	█	█	█	█	█			
7.1	Associate User Stories with tasks									█								
7.2	Define API Endpoints									█								
7.3	Develop frontend									█	█	█	█	█	█			
7.4	Develop backend									█	█	█	█	█	█			
7.5	UA IDP integration									█	█							
8	Testing									█	█	█	█	█	█			
8.1	Unit Tests									█	█	█	█	█	█			
8.2	Integration Tests										█	█	█	█	█			
8.3	Usability tests											█	█	█	█			
8.4	Feedback Analysis											█	█	█	█			
8.5	Test Review (QA)									█	█	█	█	█	█			
9	Write Documentation			█	█	█	█	█	█	█	█	█	█	█	█	█		
10	Demo + Poster															█	█	
11	Project video															█		
12	Write Technical Report			█	█	█	█	█	█	█	█	█	█	█	█			
13	Prepare Project Presentation														█	█	█	
M	M4: project presentation; all functionality has been developed!																▣	
14	Students@DETI																	█

W1: 14/02 - 21/02   **W2**: 21/02 - 28/02   **W3**: 28/02 - 07/03   **W4**: 07/03 - 14/03   **W5**: 14/03 - 21/03   **W6**: 21/03 - 28/03
W7: 28/03 - 04/04   **W8**: 04/04 - 11/04   **W9**: 11/04 - 18/04   **W10**: 18/04 - 25/04   **W11**: 25/04 - 02/05   **W12**: 02/05- 09/05
W13: 09/05 - 16/05   **W14**: 16/05 - 23/05   **W15**: 23/05 - 30/05   **W16**: 30/05 - 06/06   **W17**: 06/06 - Students@DETI

Milestones

Milestone 1

Date	28/02/2023
Description	Project vision and key features. Presentation of the lifecycle objectives and calendar for the project. Examine the cost versus benefits of the project.

Milestone 2

Date	14/03/2023
Description	Examine the detailed system objectives and scope, the choice of architecture, and the resolution of the major risks. Better requirements understanding.

Milestone 3

Date	11/04/2023 or 12/04/2023
Description	Prototype. Mid-term presentation with supervisors. Peer evaluation.

Milestone 4

Date	06/06/2023
Description	Product and documentation finished. Technical report completed. Project presentation.

Deliverables

Delivery 1 (28/02/2023)
- Project presentation
- Project calendar
- Communication plan - Project website

Delivery 2 (14/03/2023)
- Requirement Analysis Presentation
- System Architecture Documentation

Delivery 3 (11/04/2023)
- Prototype
- Project Mid-Term Presentation

Delivery 4 (16/05/2023)
- Draft version of the Technical Report to the supervisor

Delivery 5 (23/05/2023)
- Technical Report
- Project Final Presentation

Delivery 6 (30/05/2023)
- Captivating Poster explaining the Project
- Demo (video) of the Final version of the Project

Delivery 7 (06/06/2023)
- Final Project