

Project Description: Developing a mobile application with Android

Overview:

This semester-long project aims to create a mobile application using Android. Students will form **groups of four** and have the freedom to choose any theme for their application, provided it meets the outlined requirements. The project will be evaluated based on the project sources, a report and an oral defense where each group presents their work.

Project Requirements:

1. Mobile application

- **Application Theme:** Students have the freedom to select a theme of their choice.
- **User-Friendly Interface:** The application must be intuitive and user-friendly.
- **Multi-User Capability:** Implement features allowing multiple users to interact.
- **Service or Product Proposal:** The application should either provide a service or showcase products.
- **Additional Technical Requirements:**
 - The application must run on an Android emulator (mandatory).
 - Bonus points for functionality on a real Android device.

2. Project report guidelines

Each group must submit a detailed report documenting their project. The report should include, but is not limited to, the following key sections:

- **Project Specification**
 - Description of the chosen application theme.
 - Target users and expected use cases.
 - Functional and non-functional requirements.
- **Conceptualization of the Application**
 - System architecture and main components.
 - UML diagrams (use case diagram, activity diagram, etc.).
 - Database schema (if applicable).
- **Implementation Details**
 - Technologies and tools used.
 - Key functionalities and how they were implemented.
 - Main challenges encountered.
- **Screenshots and User Interface**
 - Screenshots of the final application.

- Description of the main interfaces and user experience flow.
- Testing and Results
 - Test scenarios and how the application was validated.
 - Bugs encountered and how they were resolved.
- Conclusion and Future Improvements
 - Summary of the overall experience.
 - Potential enhancements or future developments for the application.

Important dates:

- Groups and project proposal submission deadline: **Sunday 16 March 23:59**
- Final project submission deadline (Code Sources + Report): **Tuesday 10 June 23:59**
- Oral defense date: **Wednesday 18/06/2025** and **Thursday 19/06/2025** (During the TD Sloat).

Evaluation criteria

Oral Defense Format: Each group will have 15 minutes, including 10 minutes for their presentation and 5 min of questions and discussion. The presentation should cover:

- Introduction to the application purpose and features.
- Main steps taken during development.
- Key activities and challenges faced.
- Live demonstration.

Projects will be evaluated based on creativity, technical complexity, user interface design, functionality, and the quality of the **code, presentation, and demonstration**.

Note: The project accounts for 60% of the total SY43 grade, with 40% allocated to the project source code and report, and 20% to the presentation.