

Project plan

Allocated time: 6th Oct - 27th Nov (7 weeks)

Final deadline: 7th Dec 12:00

Project idea

- Weather app: Time, Temperature, Precipitation, Atmospheric pressure, Light, and Wind (strength and direction). Simulate the data, place it in a database, sort it, use current data for predictions of future data, and display the information as weather forecasts in a webpage.

Sprints

1. Planning and prototyping. (23rd Oct)
 - a. Class/UML diagram
 - b. Wireframe
 - c. Prototype with wireless communication between nodes
2. MVP - Minimum Viable Product (13th Nov)
 - a. Application is functional and uses correct data
 - b. Works as intended (no bugs)
 - c. The application fulfills the fundamental checks for the project
3. Polishing, and completing the deliverables (27th Nov)
 - a. Finishing all reports
 - b. Recording and editing the presentation
 - c. Hosting and running the application

Goals

- Grades A or B (covering the fundamental checks and some of the excellence checks)
- Have a web page for front-end with web server for rendering
- Use database (SQL) for persistence of data
- Use algorithms and statistics to sort and predict data
- Use encryption of data to improve security

Group meetings

- Tuesdays, 13:00-14:00 on Discord (digital)
 - Stand-up updates
 - Writing reports
- Thursdays, 12:15-14:00 on campus
 - Coding

Application

- Build project with Gradle
- Python to simulate data
- HTML, CSS and JavaScript for web page
- Java for web server, database, and data manipulation
- IntelliJ as IDE
- Persistent check-style: Same as Google, except 4 spaces per indent
- MQTT protocol for server