First Meeting - The Project Plan

Course: PA1484

Meeting Protocol Date: 2025-09-30

Time: approximately 10:00-12:00

Place: Blekinge Tekniska Högskola (campus)

Participants:

- Hampus Ek
- Kaiser Ahmad Samim
- Max Bacharach
- My Lundblad
- Robert Schrewelius

§1 Opening of the meeting

The participants greeted each other and together declared the meeting open.

§2 Approval of the agenda

The proposed agenda brought up, reviewed and approved.

§3 Approval of previous notes

As this was the first official project meeting, no previous notes existed.

§4 Election of chairperson for the meeting

Max Bacharach was elected as chairperson for the meeting.

§5 Election of secretary for the meeting

Max was elected as secretary for the meeting.

§6 Refined requirements

The group discussed and agreed upon the following refined requirements for the project:

- 1. The ESP32 must fetch weather data from **SMHI's API**.
- 2. The system must display:
 - a. Current day forecast
 - b. Seven-day forecast
 - c. Simple line graph showing the last 30 days of weather development
- The system must support touchscreen navigation including the function to swipe between screens.
- 4. Users must be able to select:
 - a. City
 - b. Weather parameter (e.g., temperature, precipitation, wind)
 - c. Forecast options
- 5. The code must follow best practices:
 - a. Modular structure (functions in .hpp files, minimal logic in main.cpp)
 - b. Use of templates where possible for reusability
 - c. Flexible design to avoid hardcoding solutions
- 6. API requests must be limited:
 - a. Auto-refresh every 5 minutes
 - b. Refresh on start-up
 - c. Optional manual refresh button if time allows
- 7. Include configuration system for user settings (city, parameters).

§7 Risk management

The group identified and agreed upon the following risks and mitigation strategies:

- **Risk 1:** Hardcoded code increases workload in the long run.
 - o **Solution:** Keep code modular and flexible from the start.
- **Risk 2:** Bugs missed during development.
 - o **Solution:** Perform small, incremental tests frequently before adding new features.
- **Risk 3:** ESP32 overload due to too many API calls.
 - o Solution: Limit auto-refresh to 5-minute intervals and keep data handling lightweight.
- **Risk 4:** Health issues or absence of group members.

- Solution: If a member experiences health problems and <u>communicates</u> this to the group in advance, the workload will be temporarily redistributed among the remaining members. The affected member will rejoin at full capacity once able. This ensures project continuity while respecting personal well-being.
- If a member <u>does not communicate</u> their health-related unexpected absence, they will receive a strike. After two strikes, the issue will be brought up by a supervisor. Escalation may involve reassignment of tasks, adjustment of grading, or, in severe cases, removal from the project team depending on what the supervisor deems fit.
- o If a member fails to attend scheduled meetings or work sessions without any communication, this results in immediate escalation after **one** strike as such behavior is unacceptable and undermines trust in the group and deliverables. Escalation may involve reassignment of tasks, adjustment of grading, or, in severe cases, removal from the project team depending on what the supervisor deems fit.

Rationale:

- o Health issues are unavoidable but manageable with communication.
- o Unannounced absences are preventable and damage teamwork.
- Clear rules and a strike-based escalation system ensure fairness, accountability, and project stability.

§8 Work breakdown structure and roles

The group assigned the following roles and responsibilities:

- Chairman Max Bacharach Keeps the group on track with deadlines and otherwise, ensures focus on deliverables, and works with the secretary on documentation.
- Secretary My Lundblad Records formal meeting notes and project decisions. Ensures that they reach all members of the group. Assists the chairman with administrative tasks such as keeping track of deadlines, agendas and documentation requirements.
- ESP Handler & Code Tester Kaiser Ahmad Samim Responsible for ESP32 hardware availability in labs, performs stress testing of the code, and reports results.
- Code Managers & GitHub Managers Hampus Ek and Robert Schrewelius Maintain code quality and consistency. Ensure the GitHub project is updated. Each validates the other's pull/merge actions.
- Coders All members Implement functionality according to requirements, in collaboration with managers and tester.

Note!

All members are responsible and will participate, but the roles are assigned in order to ensure that at least one person has the final responsibility to make sure that specific sections run smoothly.

§9 Memo – Communication with customer

The group noted the following instructions received during the kickoff:

- The system must show today's forecast, 7-day outlook, and a 30-day line graph.
- Code must remain flexible and modular.
- Auto-refresh should be limited to once every 5 minutes.
- A manual refresh button is desirable if time permits.
- Users should be able to navigate via touchscreen gestures.
- System configurations must be included (city, weather parameters).
- The client may request changes along the way; flexibility is crucial.

§10 Contribution statement

- Max Bacharach Led the meeting, contributed to requirements refinement, and role assignments. Took the meeting notes and documented decisions.
- My Lundblad Edited and structured the meeting notes.
- Kaiser Ahmad Samim Contributed to discussion on risk management and hardware responsibilities.
- **Hampus** Ek Proposed modular coding practices and GitHub management strategy.
- Robert Schrewelius Supported refined requirements and GitHub management strategy.

§11 Closing of the meeting

The group declared the meeting closed.

Signatures Chairperson: _____ Max Bacharach Secretary: ____ My Lundblad Reviewer: Hampus Ek

Reviewer:	Kaiser Ahmad Samim
Reviewer:	Robert Schrewelius