

Software Project Progress and Documentation Meetings

Group: JARS with an E

Project: Napoelon's Adventures



Meeting Summary

Date: 11/02/25 – 12/02/25 **Meeting Type:** Online

Objective: The meetings served to evaluate progress, fine-tune sustainability integration in our game, improve login system + database functionality, and enhance task tracking on Trello. Additionally, we discussed the next implementations, like QR code scanning, game mechanics, and a formal location list. This combined discussion allows us to orient ourselves on both the foundational parts of the project and the technical advancements required for the next phase.

Discussion Points

1. Review of Project Progress and Technical Implementations

We began with a comprehensive review of our recent progress, particularly focusing on the login system, database setup, and front-end designs. Several key areas were discussed:

Login System:

- We have successfully implemented a user authentication system, ensuring that players can securely log in and access personalized game data.
- The login system is currently connected to our database, storing user credentials and maintaining session data.
- Future improvements will include integrating a password reset feature and multi-factor authentication for additional security.

Database Structure:

- The database has been structured to store user profiles, gameplay progress, sustainability scores, and interaction history.
- We discussed the importance of optimizing queries to prevent performance bottlenecks as more users engage with the game.
- Next steps involve testing database efficiency under simulated user loads to ensure smooth operation.

Landing Page and UI Design:

 A visually appealing and intuitive landing page has been developed, designed to introduce users to the game's objectives and sustainability themes.

- We are working on refining navigation elements to improve accessibility and ease of use.
- Additional UI enhancements will include tutorial pop-ups guiding new users through the game mechanics.

2. Refining Sustainability Integration and Game Mechanics

Building on our previous discussions, we refined the ways in which sustainability is integrated into the game experience. Key refinements include:

- Moving away from static location-based gameplay, instead incorporating problem-based challenges related to sustainability concerns like waste sorting and water pollution.
- Implementing extra points and rewards for eco-friendly behavior such as proper recycling within the game.
- Designing mini-games that focus on different sustainability aspects, ensuring an engaging and educational experience.
- Developing a Catch Trash game, where players sort waste into multiple bins based on type, reinforcing real-world waste management principles.

3. Refining Trello Board for Task Management

To improve task tracking and collaboration, we revisited our Trello board and made the following refinements:

- Adding detailed task descriptions to provide clarity on objectives and expected outcomes.
- Categorizing tasks by priority and development phase to better track milestones.
- Introducing peer assessment tracking to document contributions and ensure fair workload distribution.
- Encouraging team members to provide status updates and progress reports for better transparency.

These adjustments will help us maintain a clear and structured workflow as we move into the next phase of development.

4. Preparing for the Next Development Phase

With the initial foundation set, we outlined the upcoming development priorities:

- QR Code Integration: The next step involves ensuring smooth QR code scanning functionality within the game, enabling players to interact with in-game elements through QR-based triggers.
- Game Mechanics Refinement: We will continue fine-tuning player interactions and reward systems to enhance user engagement.

- Location List Creation: A structured location list will be developed to align with gameplay mechanics and ensure a seamless player experience.
- Performance Testing: We will begin stress testing the login system and database to ensure scalability and reliability.

Conclusion

These combined meetings contributed to further implementing technical advancement, further strengthening gameplay mechanisms on sustainability focus, and improving our organizational workflow. With the achievements of a secure login system and a well-structured database into UI improvements, we have set a strong basis for going further.

The next phase of this project will see a focus on the in-game interaction enhanced with QR code functionalities, refinement of game mechanisms, and completion of location-based elements. Continuous testing and improvements will be carried out to ensure that the project achieves both technical and educational objectives.

Next Steps

- 1. Complete QR code integration and test interactions within the game.
- 2. Finalize and refine core game mechanics, focusing on player engagement.
- 3. Develop and structure the location list for game implementation.
- 4. Conduct performance testing on the login system and database under simulated user loads.
- 5. Continue refining the Trello board to ensure all tasks are properly documented and tracked.

Action Items

- Each team member will refine their respective components and update progress in shared documents.
- A designated member will oversee the completion and implementation of the location list.
- QR code functionality will be tested, with results reviewed in the next meeting.
- Database optimization strategies will be discussed and implemented as needed.