

Project Development Report

Game Title: *EcoCards*

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Project Status

The *EcoCards* project is currently still in the pre-development phase, with the team focused on formulating a detailed and comprehensive game design. With the completion of the initial concept paper, the project is transitioning from broad conceptual planning to more refined elements of gameplay and design.

Progress

The project has successfully moved beyond the conceptual stage. With the core idea and educational framework outlined, the team is now working on developing specific gameplay elements, including the deck-building mechanics and the primary gameplay loop.

The next immediate objective is to conduct technical research and begin the early implementation of core technologies, particularly focusing on AR features, multiplayer syncing, and TCG mechanics.

Risks and Issues

Several challenges have been identified that may impact the pace and scope of development:

- **3D Asset Development:** Currently, the team lacks a skilled 3D artist. To mitigate this, the team plans to utilize free or open-source third-party 3D assets during the prototype phase.
- **Academic Load:** Team members are concurrently handling multiple academic projects across three subjects:
 - Thesis 1 (designated as the highest priority)
 - Mobile-Based Application Development
 - Game Technologies

This division of focus presents time management challenges, which the team is actively addressing through role allocation and prioritization.

Budget

There are **no** budgetary concerns at this stage. Spending has been minimal, and the team has been relying on free tools and assets wherever possible. Future funding requirements will be reassessed once the project enters the prototyping phase.

Schedule

The project is currently in Week 2 of a 4-week development window. Given the limited timeframe and competing academic responsibilities, the team is maintaining a flexible but structured timeline, with emphasis on achieving the most critical gameplay functions first.

Key Milestones

- **Completion of Concept Paper:** Provided a clear and unified vision for the project.
- **Team Focus Strategy:** Team members have been allocated to individual subject areas/projects to improve focus and productivity.
- **Planning Pathway:** With the game's vision clarified, a development roadmap has been established to guide short-term efforts toward prototyping.

Recommendations

The team recommends starting active development as soon as possible. This includes setting up the Unity project, testing AR card scanning using Vuforia, and implementing basic gameplay loops. Early development will help identify unforeseen technical challenges and allow time for iteration before final evaluations.

Stakeholder Engagement

Stakeholder considerations are currently tied to the game's alignment with the UN Sustainable Development Goals (UNSDGs). Finalization of which SDGs will be represented in the initial deck is pending and will be completed alongside the refinement of the deck-building system.