

# Progress Report

## - Increment 1 -

Group #24

### 1) Team Members

Name	FSUID	GithubID
Chase Blancher	cgb22	cgb243
Logan Harmon	lmh22c	LifelessPumpkin
Greg ElDeiry	Gce22	GregElDeiry
Zach Sandifer	Zts22a	sandifer2
Laura Saravia	Ls20fa	laurasar
Giovani Espinal	Ge22	Gioespinal04

### 2) Project Title and Description

Vesania is a "toys-to-life" digital card game that bridges physical collectibles with virtual gameplay. Players own physical cards embedded with NFC chips which, when scanned via a mobile device, unlock unique characters and items within a web-based game. The application features a turn-based combat system in PvP matchmaking. Users manage their character and item collections on the web and use their mobile devices as the primary bridge for physical integration.

### 3) Accomplishments and overall project status during this increment

We have completed the project scaffolding, made issues and began work on the project. We have most of the basic functionalities for the project working: an admin page where you can create card definitions and physical card instances, basic pvp, and the card scanning functionality. The game design is being workshopped and the core gameplay loop has been determined. We are currently making example cards to playtest and design. We are aiming to make 3 "sets". Each set will have a different theme and a new player will choose 1 of these to begin with.

### 4) Challenges, changes in the plan and scope of the project and things that went wrong during this

Challenges: So far no real challenges, implementing firebase caused CI/CD pipeline to break which caused issues for a bit but we were able to fix that and we are ahead of schedule. Tailwind also wasn't working at first but that has been solved.

Scope: PvE and a tournament mode that were proposed in the proposal are great, but doing research on how challenging they are to implement we decided to reduce the scope to devote our full time on implementing and polishing the core PvP mechanic.

### 5) Team Member Contribution for this increment

#### Chase Blancher (cgb243)

- *Progress Report*: Wrote sections 1, 2, 4, 5, and 6; wrote the initial draft of the Proposal Doc
- *Source Code*: Implemented the admin dashboard and card minting functionality, including the ability to select quantity when minting physical card instances; implemented card API endpoints and ID conventions for cards and card instances; built NFC auto-scanning functionality and fixed Tailwind CSS integration; refactored the admin dashboard by breaking it into modular components; resolved compilation errors and general bug fixes

#### Logan Harmon (LifelessPumpkin)

- *Progress Report*: Contributed to video production. Wrote sections 3 and 7 of the progress report.
- *Video*: Co-produced the project video with Chase

- *Source Code:* Created project scaffolding and boilerplate. Implemented home page navigation routes and buttons; updated the Prisma schema to reflect the ER diagram and added dummy data; fixed Firebase session token persistence across sessions; resolved Firebase API key bug; managed Docker and environment variable configurations for deployment; handled OAuth key integration. Implemented CI/CD pipeline and deployment to home servers.

#### **Zach Sandifer (sandifer2)**

- *Source Code:* Integrated the game server into the main project, resolving merge conflicts with packages and configs; drafted the Redis infrastructure plan for server-side session/state management; contributed to the multiplayer prototype branch and merged it into the main codebase

#### **Greg ElDeiry (GregElDeiry)**

- *Source Code:* Worked with Zach to integrate the game server into the main project, resolving merge conflicts with packages and configs; drafted the Redis infrastructure plan for server-side session/state management; contributed to the multiplayer prototype branch and merged it into the main codebase

#### **Laura Saravia (laurasar)**

- *Source Code / Design:* Worked on frontend UI design and contributed to the Figma design system for the application

#### **Giovani Espinal (Gioespinal04)**

- *Source Code / Design:* Worked on frontend UI design and contributed to the Figma design system for the application

### **6) Plans for the next increment**

For increment 2 now that we have basic functionality and features set up, here are our goals.

1. Finish fleshing out features, like card collections, way to get cards online, and upgraded user page and social features like friends
2. Implement game mechanics into current multiplayer setup. Ensuring that cards collected by users will be usable in game with game mechanics implemented.
3. Create an implement card and character assets.

### **7) Stakeholder Communication**

Dear Stakeholders,

We are pleased to share that development of Vesania is officially underway.

To date, the team has successfully implemented core PvP functionality, enabling players to engage in live match interactions. We have also completed NFC card scanning integration, allowing physical cards to be scanned and securely logged into our database. In addition, we have built an administrative dashboard that supports minting new physical cards and creating or managing card definitions within the system.

Alongside technical development, we have continued refining core gameplay mechanics and have begun producing physical prototype cards for structured playtesting. These prototypes are helping us evaluate balance, pacing, and overall game flow.

Over the coming weeks, we plan to release a MVP focused on testing card interactions and validating core gameplay systems. This milestone will allow us to gather meaningful feedback and iterate rapidly.

A live deployment is currently available at: <https://vesania.spellcast.cloud>

We appreciate your continued support and look forward to sharing additional progress updates soon.

Sincerely,  
The Vesania Development Team

## **8) Link to video**

Increment 1 Demo:

<https://youtu.be/5JZHu4GkHq4>