Sprint Report 1: Starting the backend development of game.

1.1. Project Overview

1.1.1. Sprint Details

Sprint Number: 1

Duration: 05/02/2024 – 11/02/2024

1.1.2. Objectives

Our kick-off sprint aimed to set a strong foundation for our game's backend. We focused on crafting key classes that form the backbone of our game's logic, user interactions, and overall gameplay experience.

1.2. Achievements

1.2.1. Breakdown of what we completed:

- **Chang Le - CardManager:** Implemented comprehensive card management logic, including card shuffling and distribution, essential for the game's mechanics.
- **Weifan - Grid**: Designed and developed the game's grid system, laying the foundation for interactive gameplay and essential game mechanics.
- **Saranya Lakshmi - Player:** Engineered the player management system, handling player data, actions, scoring, and interactions within the game environment and integration of all changes from the sprint.
- **Luochen - GameLogic & AIPlayer:** Worked on AIPlayer class to list any specifics needed for the AIPlayer initialisations.
- **Sruthi - GameState, Initialise, & Report:** Established the GameState system to monitor game progress and player turns, set up the initial conditions for each game through the Initialise class.

1.2.2. Key Achievements

- **Integration Success**: Seamlessly integrated the initialisation phase of the game.
- **Performance Optimization**: Achieved a significant reduction in load times thanks to the optimized Grid and GameState classes.

1.2.3. Carried Over Tasks

None of the assigned tasks were carried over to the next sprint.

1.3. User Stories

Player	PP3, PP4
AIPlayer	PP3, PP4
CardManager	PP6-PP9
Grid	PP2
Initialise Event Integration	PP5, PP10

1.4. Challenges & Next Steps

1.4.1. Challenges & Solutions

We had to reiterate on the original classes we want to implement from the list we submitted, we had to combine few classes, as they had similar functions.

We also navigated a learning curve with new development patterns and technologies. Our approach was all hands-on deck - sharing knowledge, pair programming, and supporting each other through the learning process.

1.4.2. Next steps and Planning

Next Sprint Goals

- Implement logic for Card-click events.
- Curate the list of spell and card classes and their integration with the game.
- Kick off integration testing to ensure our components mesh well.

Improvement Plans

We're introducing peer code reviews to elevate our code quality and collaboration. Plus, we'll start performance benchmarking to keep our code running smoothly as we add new features.