

Week 4 Sprint Report: Advanced Gameplay Mechanics Integration

4.1. Project Overview

4.1.1. Sprint Details

Sprint Number: 4

Duration: 26/02/2024 – 03/03/2024

4.1.2. Objective

Aimed at enriching the strategic dimensions of our game, this sprint introduced new gameplay mechanics, including AI structuring and sophisticated interaction logic for end turns, spell cards, attacks, and unit movements.

4.2. Achievements

4.2.1. Break down of what we completed:

- **Chang Le** - focused on AI strategy to create a foundation for engaging and dynamic opponent behaviour.
- **Weifan** - developed the attack logic, enabling strategic combat engagements on the grid.
- **Saranya Lakshmi** - led the successful implementation of the end-turn functionality and enhanced the spell card interaction. Integrated all the implemented changes to see if the game logic is working as expected
- **Luochen** - introduced a unit placing system, providing players with strategic options for positioning their units on the grid.
- **Sruthi** - refined the move logic to ensure fluid and intuitive unit navigation across the grid.

4.2.2. Key Achievements

- **Enhanced Strategic Gameplay:** The integration of these features has significantly broadened the tactical possibilities available to players, elevating the overall gameplay experience.

4.2.3. Carried Over Tasks

- Addressing the identified issues with move and attack logic, and the Wraithling Swarm spell card, will be carried over to the next sprint.

4.3. User Stories

End Turn events	EG1, EG2, EG3, T1, T2, T3, T4
Unit actions and GameState updates	P11-P27

4.4. Challenges and Next Steps

4.4.1. Challenges and Solutions

- **Move and Attack Logic:** Encountered a problem where units can unintentionally pass through enemy units, disrupting intended gameplay dynamics.
 - **Solution:** The team will undertake a detailed review and debugging process to correct the move and attack logic, preventing units from bypassing enemies.
- **Wraithling Swarm Spell Card:** Identified inconsistencies with the spell card's effects not aligning with expected outcomes, affecting game balance and strategy.
 - **Solution:** Will focus on revisiting the spell card's logic and effects, ensuring it performs as intended within the game's strategic framework.

4.4.2. Next Steps and Planning

- **Refinement and Testing:** Prioritize the resolution of identified issues through targeted debugging and extensive playtesting to ensure all new mechanics work harmoniously.
- **Enhanced AI Tactics:** Continue developing the AI's strategic capabilities for a more challenging and unpredictable gameplay experience.