Sprint Report

Sprint Duration: Tuesday, February 4, 2025 – Tuesday, February 11, 2025
Project: RogueBison – AI and Trap Mechanics
Sprint Goal: Finalize trap deployment logic and begin work on adaptive hiding strategies.

Sprint Summary:

This sprint aimed to refine trap deployment and introduce enemy behavior adjustments based on player movement. The focus was on improving AI decision-making and preparing for future behavior expansion.

Tasks Completed:

- **Trap Deployment (R-2.3) (Ongoing Refinement)**
    - Investigated and tested different methods for trap placement.
    - Debugged issues preventing enemies from interacting with placed traps.
    - Adjusted enemy navigation to revisit previous battle locations more reliably.
- **Adaptive Hiding Strategies (Research Phase)**
    - Outlined initial parameters for AI behavior changes.
    - Identified key player actions that should influence enemy hiding decisions.

Challenges Encountered:

- **AI State Management Complexity:** Making enemies react dynamically to the player without creating erratic movement required additional fine-tuning.
- **Trap Activation Bugs:** Traps were not properly triggering upon enemy interaction due to missing event bindings.

Key Learnings:

- **AI Behavior Should Be Modular:** Keeping AI decision-making logic flexible allows for easier refinements.
- **Player Behavior as an Input:** Instead of pre-defined patterns, using real-time player movement data can create more engaging AI responses.

Next Steps:

- Finalize trap placement and interaction mechanics.
- Begin coding enemy hiding behaviors based on player tracking data.
- Conduct initial playtests to assess AI responsiveness.