

Sprint Report

Sprint Duration: Thursday, January 30, 2025 – Tuesday, February 4, 2025

Project: RogueBison – AI and Trap Mechanics

Sprint Goal: Begin implementation of enemy trap deployment upon returning to contested areas.

Sprint Summary:

This sprint focused on initiating the trap deployment logic for enemy AI. The goal was to allow enemies to recognize previous battle zones and strategically place traps upon their return.

Tasks Completed:

- **Trap Deployment (R-2.3) (Initial Setup)**
 - Began integrating logic for enemies to detect previously contested areas.
 - Explored different data structures to store enemy memory of past battles.
 - Researched procedural trap placement strategies to ensure variability.

Challenges Encountered:

- **Missing Enemy-Trap Configuration:** The game currently lacks a defined interaction between enemies and traps, leading to unexpected behavior.
- **Pathfinding Adjustments Needed:** Ensuring enemies return to the correct locations required refining their navigation logic.

Key Learnings:

- **Spatial Awareness for AI is Critical:** Enemies need a clear way to “remember” previous locations dynamically rather than relying on static values.
- **Debugging AI Requires Incremental Testing:** Small changes in enemy behavior can drastically alter gameplay balance, emphasizing the need for step-by-step validation.

Next Steps:

- Complete the trap placement mechanism and ensure enemies properly recognize past battle zones.
- Begin outlining behavior changes for adaptive hiding strategies.