Adam Atienza

28 May 2025

CSS 385

Project - Hero - Object Creation/Deletion and Time

In this extension of the Hero Object Creation and Deletion project, I gained deeper experience in managing multiple interacting game objects between enemy, waypoints, and player. The implementation WaypointController script to manage waypoint health, visibility, and respawning showcased how to create reusable components with distinct behaviors. Modifying the EnemyController to navigate these waypoints based on different modes demonstrated how to implement basic AI and state management.

The project, encompassing both the initial shooter and these new features, took approximately 6 - 8 hours to complete. This extended duration reflects the increased complexity of managing multiple scripts and ensuring their seamless interaction. The most challenging aspects of this phase was the GameManager to effectively communicate with and control the newly implemented WaypointController and the enhanced EnemyController. Ensuring the correct instantiation, tracking, and manipulation of waypoints, while simultaneously managing enemy spawning and movement modes, required careful planning and debugging. This highlighted the importance of understanding world-to-viewport coordinate conversions and the use of Mathf.Clamp to constrain object positions within the game view.

Lastly, it was difficult managing the flow of information between the GameManager and the individual controllers, especially when switching enemy movement modes and updating the UI accordingly, demanded a clear understanding of how different scripts can access and modify each other's states. The debugging process often involved tracing the execution flow across multiple scripts to pinpoint where data was not being passed or processed as expected.