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CSS 385
Project - Simple Game

In this simple Pong project, several key aspects of game development within the Unity engine were learned. The initial setup involved creating fundamental GameObjects, such as sprites for the visual representation of paddles, the ball, and boundaries. The crucial role of Collider 2D components for defining interaction boundaries and Rigidbody 2D components for enabling physics-based movement and collisions became apparent. The distinction and appropriate application of static and kinematic Rigidbody 2D types were also understood.

Scripting in C# was required to implement game logic. This involved writing code for player input, basic AI control, ball movement, and scoring. Fundamental programming concepts and Unity's API were utilized. Debugging was a significant part of the process. Issues encountered included incorrect ball bouncing, the ball passing through objects, and the AI targeting the wrong GameObject. Troubleshooting involved inspecting component settings, reviewing script logic, and using the Console output.

The project took about 3 hours to complete, longer than initially estimated. The most challenging aspects were identifying and resolving unexpected behavior related to physics and script logic. This involved a process of adjustment, testing, and iterative refinement to achieve the desired outcome. I now have a foundational understanding of core Unity concepts and the debugging workflow. Compared to the previous projects I did for this class, this one was the easiest because of how much time I spent on the previous ones. There components and scripting of this project were relatively easier to understand and implement.