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Task Report

System

Movement. The player presses forward to push or backwards to slow down. The skate has an initial speed and a max speed, and only stops when fully decelerated or upon a closed angle collision with the wall. Open angled collisions will change the skate's direction instead.

Jumping. The player scores points by jumping over an obstacle (represented by colored cubes).

Process

My first goal was player movement: after contemplating the idea, I decided to leave momentum as a stretch goal, as I have yet to dive deep into Unreal's physics. A dedicated Skate Component was added to manage the input speed and collision redirections, and the latter took extra time due to how HitActor works.

For the obstacles, one capsule is cast upon jumping to detect targets ahead, then another one to check trajectory. Once that was done, the rest was building the level and polishing.

Performance

As an effort to clear my schedule for this test, I moved a lot of things to Monday and Tuesday, but this plan backfired as I wasn't counting on the test starting immediately. I could only work for 2 hours on the first day, and this unfortunately meant that I couldn't polish the final result as much as I would like to.

Also, a 1-year hiatus definitely slowed me down: the last commit (without build and PDF) was made just in time, but I didn't have much time to add assets, playtest more, and write this document.

Time

- Skate Movement: 2h
- Skate Collision Logic: 3h
- Obstacle Jump: 2h
- Scoring UI: 2h
- HUD: 1h
- Level Design: 1h
- Polishing & Bug Fixing: 2h

Knowing Issues

- Open collisions accelerate you to full speed.
- The game lacks a Reset or Exit functionality.