

Skateboard Simulator

The goal of the game is to complete the course and collect as much XP as possible by jumping over specific obstacles. A pickup placed above each obstacle indicates that it can be jumped over. The controls are simple: W, A, S, D to move and the mouse to rotate the camera.

Right from the start, I had issues with setting up Unreal Engine 5.6 and Visual Studio. It took me hours to find out that the VS toolchain that was installed on my pc is actually banned by Epic Games due to compiler issues (14.4x). I downgraded the toolchain to 14.38 and it went fine for a while. The error came back (MS3037 – code 6) due to some syntax errors. Eventually, I switched to Rider IDE and I've managed to resolve it all after some time.

My initial idea was to start with implementing player movement on a skate, and then gradually build up the rest. I got stuck with movement and after roughly 5, 6 hours of trying to find the ideal implementation, I didn't fully finish the movement and I moved to the animation part, which took me around 2 hours to implement. Meanwhile, I also refactored the player character and the controller a bit; I moved the input binding to the character (not sure what is the best approach, I searched for that and saw lot of different ways to do it). The easiest part was most certainly HUD, for which I've created delegates in player character, so the UI indicators can be updated (+2 hours).

Then, I started creating the level. I found some junkyard environment assets for that (smallest sized pack + compatible with UE5.6). It took me around 1.5-2 hours to finish it and build the initial version, thought the build was not efficient at all. And I did not manage to optimize the .exe, I've tried numerous things but none had any effect. The game feels like slow motion, even though it runs smoothly in the editor.

Regarding the XP system, I initially wanted to create some kind of trigger logic to check if the player is above the obstacle and if it actually jumped over, but the assets came with blueprint packed actors, so I couldn't really inject my own class for it and I improvised a bit. The colorful tire on the obstacles is here only for visual purpose and finding the targets easier (1hr).

I've also created the main menu, but for some reason switching between levels did not change game modes, so I left it out (1hr).

I was working on resolving issues longer than I've been coding, so the estimated time spent on this project is **~30hrs**.

Overall, I have to admit that my time management could have been better. I spent too much time stuck on a single task instead of moving on to other things. If I had done that, even if I didn't fully fix that one issue, I could have spent more time polishing the rest of the game. In the end, I'm glad that I've ended up with something.