Daniela Falk - Unreal Programmer Task

In the beginning, I had some difficulty using C++ with Unreal, as in previous projects I used Blueprint. As I added new functionalities to the project, it became increasingly clear how to do things with C++ using the Unreal library. By the end of the project, I could already have an idea of how to replicate in code just by looking at a Blueprint.

Character *(about 2 hours)*
I started with the character because, from a Game Design perspective, for this project the character and movement are the main features of the game. I created the character class with the necessary attributes and methods (camera, meshes, jump, and movement). Besides the character mesh, I also added the skateboard mesh.

Movement *(about 3 hours)*
I implemented the movement in the character script (jump, smooth rotation, acceleration, and deceleration). I created the acceleration system using some properties like maximum speed and acceleration and deceleration rates.

Animation *(about 5 hours)*
I imported the assets and had to modify some to fit the project's needs. I created an animation class to set up the states and created a Blueprint from it to manage the animation flow.

Scoring *(about 1 hour)*
I created a class with collision and points properties, and a method to handle collision with another actor, checking if the other actor is a character and adding points to the created property. I also added a condition to only grant points if the player is jumping.

UI *(less than 1 hour)*
I added a simple widget with text only displaying the score property from the scoring system.

Map *(about 2 hours)*
I created a simple map, added some props using the modeling mode and City Park assets. I also scattered some scoring objects for the character to gain points by jumping over the props.

I think I could have done better, but now that I’ve finished the project, I can see better ways to develop each feature of the game. I had some difficulty creating the map and faced some unforeseen issues, such as build errors.