Controls:

W/↑ ……………………………………………………………Pushing Functionality - Speed up
S/↓ ………………………………………………………………………. Brake / Backflip
AD/←→ ……………………………………………………………………………….Steer
SpaceBar……………………………………………………………………………………Jump

Objective:
Collect the 30 stars!

The development covered almost all areas of game development, including those I'm worst at, like level design. I split the programming between C++ for the core and Blueprints for the decoration. I took full advantage of Unreal's Character class, which includes many predefined features for this type of game.

The code that wasn't written during the evaluation is the MathUtils class and the CustomEditor module, which is my tool to make GameDesigners like me a bit more than other programmers 😁, everything else was written by me.

I downloaded the character and animations from Mixamo. I struggled a lot with root motion and solved it with a Blender plugin that adds the root bone. Then I tried to add the skateboard from Unreal and failed miserably. I had to backtrack.

I solved it by getting my hands dirty and modifying the animations and the character directly in Blender. I added the skateboard as part of the character's mesh and a new bone. Even though I had no experience with animations in Blender, I know the program quite well, so with a bit of creativity, I was able to give the character a new bone and took the opportunity to modify all the animations, as I only had to animate a single bone.

Regarding the map, I used the provided plugin that includes a park with many props and modified it to create a smaller map within the same one, using the content that was already there. I didn't have time to clean up unused assets, so I apologize for that; the intention was there, but the time wasn't.

The skateboard asset was the provided one, and the only thing I modeled myself is the collectable with the star. The font used was taken from Dafont.com.

The hours invested in each specific activity are detailed in the README.md of the GitHub repository, but the total time was approximately 27 hours.

Regarding my thought process during the interview, I initially felt afraid—it seemed like a lot to tackle in such a short time. However, as I progressed, I realized it was achievable. I was struck by the emphasis on knowledge in game design and aesthetics, which fortunately aligns well with my background. Being a programmer who frequently uses Blender, I believe, worked greatly in my favor.

Personal assessment:

Honestly, I feel like a better programmer than when I started this test. I now solve typical Unreal errors faster, and some don't even have time to appear, like "Why doesn't the UI show in the build but does in the editor?" I also had a good reason to learn animation in Blender (even though I'm not and don't want to be an animator) and gained some knowledge about animations in general.