

Dear Blue Gravity Studios, this is a detailed description of the game mechanics within the project I was tasked with during the 48-hour interview period as well as my own personal assessment of performance during those two days.

I'll start off with the controls of the game and the mechanics:

You can use w,a,s,d keys to control the character's movement and 'Space' bar to jump. Other than that, you can use the 'R' key to restart the level and 'esc' key to exit the game.

As far as mechanics go, there is a scoring system implemented in the game that tracks how many obstacles the player has jumped over which are represented as wooden pallets that are continuously spawned throughout the level at random locations.

Now I'll talk about what I've focused on the most during the 48-hour period that was given to me to complete this task:

What I've focused on the most is the movement and the physics of the skateboard, making it as lifelike and realistic as possible which included making the

skateboard accelerate and decelerate in terms of how it's moving and making it react dynamically to the ground underneath it which included making the skateboard's movement slower while going uphill and faster while going downhill, this also included the skateboard gradually sliding downhill if no movement input was given. I've also made the angle of the skateboard adapt to the shape of the landscape. This took a lot of fine-tuning hours which took up most of my time as it was the most important thing to get done right. The few remaining hours that I had left were invested into designing the level and making sure the UI is functional as those were also crucial for the prototype, that left me with some small amount of time to touch up on the aesthetics of the project, so I've decided to thematically turn the level into a makeshift shipping container-construction site after which I started fine tuning the player animations but there was little time left so I had to stop midway and package the project, this left me with a movement animation that is noticeably clunky which you will notice while playing but I felt it was secondary to making sure the actual physics of the skateboard were functional.

My closing thoughts about the project is that it was definitely an interesting and a challenging experience altogether since I haven't done much physics-based programming, and I was more used to making games from the first-person perspective, but the challenges were minimal and I've found useful resources through UE forums and tutorials so it was definitely a learning experience aswell.