For this task I aimed to make sure I used some of my current work knowledge and applied it to the code.

The project is done in UE 5.3.2. Using the Third Person Example base as a starting point.

The base Pawn code (SkateCore) is where most of the physics and logic is run.

I created the Player controller and derived it into a BP inside the editor for ease of manipulation and to assign the controls.

UI is really basic and done in BP as it wasn't my focus in the task.

Animations I used the included resources link to use in the project, although it's not perfect, it should get the work done for this purpose.

For some of the Art/Models provided, more specifically the **City Street Props**.
The textures included are way too heavy, I did resize them to lower the overall file size.

Now for the code itself.

I left most of the logic running inside a created function acting as a Fixed Update logic.

Some of the logic to make the basic skateboard physics is actually based on a car logic that I worked on. However I also found some flaws in that logic (more specific in the re-orientating part) that I had to adjust for the task.
Parts that I reapplied were the Suspension and Steering with some minor adjustments.

I then created the Jumping, Impulse and AirSteering logic to accommodate the needs of this task.

For my personal assessment: I believe I did an average job.
I did want to add some extra features like a grind rail and tricks, but I also focused on keeping the project within the time constraints.

Related to time allotted for the task: (Time based on GMT-3)

I received the mail around ~3:00PM on 09/05/2025 and started the production after the day work around ~6:00PM

Spent the first early hours setting up the UE project and Git settings.

After that I worked on the basic SkateCore components and physics until 4:00AM of 09/06/2025.

I spend around 8~9 hours working, with breaks in between, on Adjusting the physics and the jumping. (8:00AM ~ 8:00PM)

And on the last day, I worked on the Scoring System and map until 2:30 PM.

Leaving the rest of the time on Packaging and final Git commits.

Final considerations:

I’m really glad I had the opportunity to participate in this interview!

At the same time I was challenged, I also found flaws in my old code that I will need to address later in the near future.

Thank you for this chance and for reading this report!