The system I ended up making for this task has two main sets of features implemented.

First are the movement related features. I really wanted to emulate what other skate games do with momentum, having it almost constant and allowing players to slow it down or increase it. To not modify the already implemented Character Movement Component I made another actor component that sort of “adapts” the player inputs to a series of vector inputs that better describe the movement of a skateboard.

The component is always feeding the character movement with a vector that moves the character forward. When a player speeds or slows down, it just adjusts the vector length to give more or less momentum. When a player turns, it rotates the forward vector a little to the desired direction in each trigger of the “turn” input.

The one feature left is the score, and it's a simple one. It works with some hand placed triggers around the map with a default score variable with value 30 (this can be changed in each instance of the trigger, for example: the trigger above the water font gives 100 points instead). There is a small collider below the player character, near the skateboard mesh, when this collider overlaps the triggers on the map it registers the new added points in the character’s player state and the score value in the player HUD is changed via a Multicast Delegate, then an actor component of the player controller that listens to this change and updates the UI. I didn’t want to spend much time with code logic in this one because I considered the movement logic more important for the user experience.

In total it took me 15 hours of work (not counting breaks) to complete this task. I spent 2 hours preparing for the task (reading the document, searching for assets and game references, project setup), 5 hours implementing animations, importing assets and designing the level, 2 hours implementing the UI elements of the game and 6 hours coding the necessary logic.

As for my performance, I think I did well. The animations could be improved with some adjustments and the score system could be a bit more complex and not require that a designer has to hand place a lot of triggers around the map. Despite this I did I could in the time frame given to deliver an appealing product.