Journal

Checkpoint Respawn System

One of the issues I encountered with the checkpoint system was that when I wanted the player to respawn, I would teleport the player to the checkpoint. But for some reason the player wouldn’t teleport. He would kind of move in the direction, but he definitely wouldn't “teleport” onto the location of the checkpoint.

Weird thing was I was able to teleport an empty game object without any issues.  
I tried googling about moving game objects in unity and stumbled upon a post mentioning that the character controller an built-in component in unity, doesn’t like getting moved through code.

So I disabled the character controller component prior to teleporting the player, then proceeded with the teleport, subsequently enabling the character controller again.

Camera Movement

For the camera where we can keep multiple objects inside the camera, I had an issue where the camera would sort of “jitter” like it would lag behind the objects if the objects moved away from the camera.

After fiddling for a while I found out the problem was that the camera would update its position after the objects, meaning the camera wouldn’t have the most recent location of the objects. But that would only be the case sometimes, hence the jitter.  
I fixed it by putting the code for moving the camera in an LateUpdate() in unity, which always runs after Update() meaning the objects would have had their position set before the camera made its movement.

Shooting

For the shooting package, I had an issue where the gun the player is controlling would change rotate around its own axis while also rotating around the players axis, this caused an issue where the player wouldn’t hold the gun straight, but rather the gun would be angled a bit to the side.

The reason for this was that the point the gun was rotating towards was the mouse position, and the mouse position want on the same plane as the gun, so the mouse position would be “in front of” the gun. Meaning the gun would rotate towards the mouse on another axis.

I fixed it by adding a rigidbody to it and freezing its rotation on 2 of its axis.

Patrol Platform

For patrolling platform, I had an issue where when the platforms would go from A to B, when they started moving again after reach point B they would teleport back to point A and move towards point B.

I fixed it by reversing A and B. If A was (0, 0, 0) and B was (1,1,1), after the platform moved to from A to B, I would sit A to (1, 1, 1) and B to (0, 0, 0) meaning the platform would still move from A to B, but of course the direction would now be reversed.