

While creating a 3D Pokémon Center for this project, a lot of thought went in to how to design it properly and what could be done in the time allotted. This meant that not everything could be implemented in the time frame, so I had created the most important parts of it, which were the counter, machine, TV, and desk. Doing so still had enough of the original scene that someone should know what it was, so long as they knew Pokémon. Plane objects were used for the floor, wall, ceiling, countertop, desktop, and the screens. I chose to use planes for the objects of these because they did not need to be anything more than a flat surface to represent the 3D object. A cylinder object was used to create the machine. Using this object was the closest to what the machine looks like in the Pokémon games. Next, torus' were used for the Pokeball holders on the machine as they were the best option to duplicate them. Next, boxes were used for the desk legs, TV base and machine screen base. Using boxes allowed for the representation of the fact that they hold electrical wires and other components needed for them to operate. This is done with boxes compared to planes for objects as they have depth to them. After deciding on what objects to use, it was more of a trial and error to find the correct placement on the x, y, and z axis to get them where I wanted them and finding the correct colors to represent the real-world objects.

As for navigating the world, the initial code had already been created so the user could press W, A, S, or D to walk forward, backward, left or right. While this was a good start, it created problems when the camera was not level in the scene, causing users to go out of the scene. To correct this, I had implemented code so that the user could press Q or E to go up or down in the scene. Another change done to the camera to make it easier to navigate for the user was if the user wanted to increase or decrease the speed of the camera movement, they could scroll up or down to do so. All the changes that were made to the camera were for a mouse and keyboard input function.

By following a standard practice for coding and writing notes as to what code is for what object, the code can be copied and pasted then change the position value to duplicate the object in the scene. For instance, if I wanted to add the user's desk into my code, I could copy and paste the desk legs and desktop code and then change the position value to set it up on the other side of the counter. This was one of the things that I would have liked to get around to, but I had stumbled upon quite a few problems while implementing the textures and lights in the scene.