# Module Seven -

**Project – 3D Scene**

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In my 3D scene design, I decided to recreate the design on my table with a few simple objects placed on top of the table. I decided to choose objects that are simple and capable to be recreating in a 3D world. The main shape that I was able to use in my scene was the use of a rectangular prism and cube. Most of the designs were replicated to be able to form different shapes and designs. The box in the center of the table was the main object that was used to render the rest of the objects. The controller looking object was designed with the use of different shapes combined to form the bottom shape. The table that I render had the base tabletop that was scaled to be larger and expanded out. The legs for the table were used from the table as well but changed the scaling and rotated to the specific ends of the table. I wanted to have a plane in my scene since it is an important factor to any 3D scene. Instead of having a simple plane flooring in my scene, I added the texture of it to seem and look like a carpet. As much as I wanted to be able to recreate a complicated design, I did have a little trouble trying to do 3D shapes like larger cylinders. Since most of the tutorials we had didn’t have much on rendering shapes and in the video tutorials showed with pre-coded cylinder header files. Even after this course, I want to keep practicing and learn how to add more to my 3D scene.

Within my 3D scene, I was happy with how my camera was set with the easy-to-use controls. I used the basic WASD to have the user able to maneuver the flying camera. The movement speed is set for the default speed but can be easily changed if need to. Users can also use their mouse to move the camera and look around. With the use of the scroll wheel, users can use a zoom in features that goes forward or backwards. A feature that I added was the use of the keys Q and E to move the camera upward or downward. This feature is useful to be able to move the camera up and down without moving the mouse to look towards the direction to maneuver. The camera was placed over the table and looking down onto the table. Users would be able to move around and inspect all the objects that are rendered.

I wanted to keep my coding simple and easy to look over for any user who would want to understand how the 3D scene was built. An important design that all coding should utilize, and use is writing out comments and annotations to understand the reason behind each section of the coding. I also wanted to use proper names for each variable and sections to help me understand what each variable are used within the coding. By keeping each section of coding, I can be able to expand or make any necessary changes if I need to in the future. Being able to keep yourself organized is one of the best way to keep your code modular and easy to modify if need to.