**Final Project**

Tremaine Rayner

Southern New Hampshire University

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I chose to create a scene featuring a monitor, PS5, desk, and speaker, which appealed to me. The object I was most excited to create was the PS5 console due to its design being the best among gaming consoles on the market, in my opinion. The console was rendered using three box shapes for the body, two side panels, and a cylinder for the stand. While I used these shapes to make the console look as close to the real PS5 as possible, it was not perfect. I used white and black textures that matched the colors in the image I provided. I decided not to include the PlayStation logo, as I wasn't sure if this would cause any issues. Initially, I planned to create the PS5 controller and headset from the image I provided, but I had issues with the details, such as the color and button layout, so I decided to leave it out of the scene. Creating the monitor was time-consuming, as it required multiple shapes. I used three box shapes for the monitor and a cylinder for the stand. To display the screen, I set up a texture shader using the game Galaga. I also made sure to add a light above the scene to ensure the screen was well-lit and not in shadow. The desk was created using box shapes, and I applied a wood texture and shader material to ensure the details were visible in the light. Lastly, I created the white speaker using a cylinder for the base and a sphere for the top.

Users can easily navigate the scene using a keyboard and mouse. The Q and E keys can be used to move up and down, while the WASD keys can be used to move forward, backward, left, and right. To view the top and side perspectives of the scene, users can use the 2 and 3 keys, and the O and P keys can be used to switch between orthographic and perspective views. The mouse can be used to look around the scene to view different angles. I made sure to use modular and well-organized code for different objects. I separated the desk in my scene into different shapes using separate lines of code, which made it easier to recreate the scene. By using separate lines of code for each object, I was able to implement different textures and show the details of those textures through lighting. The monitor in my scene used different box shapes and multiple textures which would have looked less detailed without multiple textures. I organized my code with line comments that explain what the code does and detail each object in the scene. Proper spacing and comments make my code readable for myself and others who need to read or alter my code. The code is reusable, and I can use the same code I used for setting up the camera with keyboard and mouse inputs in other projects going forward.