**Final Project Design Decisions  
CS-330**

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**Justify development choices for your 3D scene**. **Think about why you chose your selected objects. Also consider how you were able to program for the required functionality.**

The scene I chose to create was my desk setup at home. It consists of my desk, a monitor, monitor stand, keyboard, and a little crochet ramen noodle bowl decoration. The desk is made from a box shape, and all the other objects sit on its surface. The monitor is comprised of two planes, and four boxes. There is one plane for the screen, one plane for the monitor backing, and 4 boxes to create the trim around the outside of the monitor. The monitor stand is made from a box and a cylinder. The keyboard is made from a box and a plane to more accurately recreate the shape and texture. The last object was my primary complex object throughout the milestones. It was made from a tapered cylinder as the bowl, a sphere to create the noodles in the bowl, and a torus as the outer lip of the bowl.

**Explain how a user can navigate your 3D scene**. **Explain how you set up to control the virtual camera for your 3D scene using different input devices.**

The inputs for the camera controls are using the keyboard and mouse. To move the camera left and right, you’ll use the A and D keys. To move the camera forward and backward, you’ll use W and S keys. To move the camera up and down, you’ll use the Q and E keys. You can also use P to toggle the perspective view, and O for the orthographic view. The mouse is used to control the orientation of the camera, and the mouse wheel controls the speed in which the camera moves around the scene.

**Explain the custom functions in your program that you are using to make your code more modular and organized**. **Ask yourself, what does the function you developed do and how is it reusable?**

I separated all my pieces into smaller chunks, making it easy to duplicate and modify, making it more reusable. The program also uses a function called SetupSceneLights and PrepareScene to make these easy to call without having to rewrite so many lines of code.