For my project, I chose four objects that I had laying nearby in order to construct my scene. The objects I chose were: A coffee mug, a pair of chopsticks, a tissue box, and a flask. Initially, I had an N64 controller in place of the flask, but after spending a lot of time attempting to accurately portray what it should look like, I was never able to get something that I was happy with, so I changed it out for a flask instead. I was able to create a scene that shows off various aspects that the course set out to demonstrate. For example, the texture used on the coffee mug does a pretty good job of showing off the ambient lighting aspect, while the texture used on the tissue box really shows off the colored lighting being used. When placing the chopsticks in the scene, I wanted to use a pose that was more dynamic to look at than the other objects, as they are all using a basic pose, while the chopsticks are laid on top of one another which I think makes that object unique.

In order to navigate the scene, a user is able to use the WASD keys to move around the space, and Q and E keys to move up and down. The mouse scroll wheel allows the user to adjust the speed the camera moves around the space, and the mouse can be used to the angle the camera in whatever way the user sees fit. This allows the user to get various perspectives that they choose, giving them more input into the construction of the scene. I chose to focus on a keyboard for input as I believe it is the most common input device in our modern landscape. Almost everyone has easy access to a mouse and keyboard, and these tools are great for providing a user with options for navigating a 3D space with precision.

In order to create a efficient and modular program, I utilized the meshes provided in order to keep code clean and free from redundancy. This also applies to the Camera class, which is created in a header file with all functions defined outside of the main file, which allows the code in the main file to remain focused on creating the scene and lighting variables. These choices mean that if we were to make changes to the scene at a future date, we wouldn’t need to rewrite the camera or meshes from the ground up, as they are stored in a separate location and not dependent on the structure of the main file.