When we look at this project I had to made decisions like what was in the scene, lighting, and textures. When we look at what was in the scene we had a cylinder, a pen, a goldfish snack bag, and a box of popcorn. I chose the box of popcorn as it was a single shape that was easy to render as it was a box. This help set the size of the scene as it was the tallest object. It also help me learn where to place the object and learn correct sizing as it was just one shape in the middle of the scene. Next we have the cylinder which was also a single object. Chose this as it had an added difficulty of making the size look normal compared to the other objects. It is also something I consisted of an important shape as its rounded with two flat sides and when you add texture you have to do it the correct way or it could look wrong. We then made the goldfish container which added a layer of complexity as you have to use the box and the prism shapes to make it. We had to make sure you line up both shapes as they don’t overlap each other. We also had to make sure both shapes were the correct size to look like the object. Finally, we have the pen this was the hardest object to render. This was due to it also being to shapes a cylinder and a cone. Then we added another challenge by laying it down at an angle. So we had to line them up by using rotation to make it look real and line up the edges.

We added a couple of different ways to navigate the scene. One of the things we added was scroll wheel support on the mouse. This input allows you to speed or slow down how fast you move in the scene. The scene already had w, a, s, and d controls and these moved up, down, left, and right the was the primary way of moving through the scene. Next, we had to add the ability to zoom. We accomplished this by using Q to zoom in and E to zoom out. This allows it see the details of the objects by zooming in or more objects by zooming out. Finally we added two different views you can switch to called perspective view and orthographic view. We mapped the perspective view to the P key on the keyboard this view shows the objects in 3D like you were looking at the objects in person. While the orthographic view is supposed to like a 2D view with the ground removed.

Some of the custom functions we had added are textures and the controls, and lighting.

With the textures we had to add the files to folders then tell the program how to map to that folder. This can be helpful if you need to import or export data as programs cannot do that on their own. While we rendered the texture we had to set the scale and this would be helpful in programs like AutoCAD and others as when designing things you need to show what the material is. Lighting was another custom function learning how to do this would be helpful in an program that involves video games. The video game industry has some of the most custom lighting setups from multiple lights being used or lights that move with you. Which is why I added both to the project. Finally we have the inputs these functions benefit everything we do. Every program using an input of some kind weather that’s an interaction, a variable or a line of command. As these functions are used on a toon of places they were essential to learn.