**CS 330 Final Project Reflection**

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

A cup of tea with lemons

Description automatically generated with medium confidence

I chose to re-produce my morning breakfast set because I really enjoy drinking tea in the morning. I also thought that by re-producing this image, I would be able to challenge in utilizing multiple forms of objects. I used cylinder and for the round part of the tea cup and plane for the top part to cover it. I also used the shape of spheroid in order to create the round shape of the orange (I had to make it to orange in the actual project instead of lemons). I also used nice textures for both tea and the table.

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

The camera has control of the 3D architecture. I frequently employed GLFW\_KEY as well as some mouse controls in order to operate the camera movement architecture. They primary key controls being used for this project are S, Q, A, W, E and D. These keys are in charge of operate visionary movement and shifts in the project. Additionally GLFW\_KEYS allows you to operate the body shift to move closer and further (that is, backwards and forwards in another way), sideways such as left and right and up and down.

1. **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’ve also added some customized functions inside my application. The first thing comes to mind are vertices and indices. I used two of the vertice that is pointing to the exact direction to represent the texture of its head for this trapezoids that imitate the head part. When comparing the code of the project, the points of the two are identical except the fact that they each borrow different types of textures in range. The second customized function I have implemented is switchProjection, which acts a role to convert the scene from 2D to the 3D world. I set this value in bool so that you can have the option to choose between the 2D / 3D. I also equipped the project with glm ::: translation as well as having glm ::: rotation on side, this was to move the location from side to side such as left to right based on the location x-y-z ranges. You’d have to use glm ::: translation in order to accomplish such movements in the application.