CS-330 Final Project Reflection

**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.

The objects I selected for my project were meant to be simplistic while also being able to generate some items with multiple objects as necessary or the project requirements. A lot of the base of the programming came building upon the example source code and transitioning the source code to fit into my project and meet the needs of the items I initially selected. I chose to use multiple objects on the metal cup and honey jar to show the use of multiple objects and left the others as basic objects with texture applied to show what the objects are meant to represent. Creating this scene by far, is the hardest thing I have done so far in my Computer Science program. I had already mostly developed the metal cup and then used 3 cylinders to build the other complex object, the honey jar to show the honey above and below with the label in the middle.

**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 user will be able to navigate the 3D scene by using the WASD keys for the forward, backward, and side to side controls. The Q and E keys lets the user navigate up and down the screen and the scroll allows the user to adjust the camera speed. With mouse movement, the user is also able to move the camera angle without moving the position of the camera, allowing the user to view the scene all the way around.

**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?

One of the functions I used to make the code more modular and organized is the loadTexture function. This reduced the amount of code needed to load textures onto my objects. I also ensured that I named the VBO and VAOs to correspond to the objects they were used for. This made it so that I could easily keep track of what object I was working on at any one time.