**CS 330 Module 7 Final Project 3D Scene**

Although I was able to include four of the required shapes, I was not able to include the sphere that I intended to include. I replaced the red sphere with a red pyramid and I was not able to have two squares in the center. I was only able to have one red square in the center. The 3D shapes were placed on a white plane to contrast the colorful 3D objects that I have selected as the shapes for my OpenGL project. A photograph of the objects are displayed below against the white background. I chose to use my kids magnetic blocks to create this image because I hoped that shapes would be symmetrical.

A picture containing chart

Description automatically generated

Using the tutorials that were provided to us in this course and the LearnOpenGL website, I was able to code the 3D scene with the required functionality. In the final 3D Scene, I have a red cube in the center and on the left there is a yellow cube with a red pyramid on top of the yellow cube. On the right side I have a light orange (peach) colored cylinder. Two primitive cube shapes were used to make the two blocks, which are yellow and red. A primitive white plane was used to represent the background that the cubes and cylinder were placed on.

The LearnOpenGL website, the Youtube videos and all the other resources that were provided in this course were also essential in helping me understand how to develop the code for the assignments in this course. Both the mouse and keyboard can be employed by a user to move around the 3D scene. I used the mouse and GLFW Key to control the movement of the camera in the 3D scene. The camera’s movement was managed using mouse control. The mouse control is used to control the camera’s vision movement, while the key commands A, W, S, D, Q and E were used to move the camera’s body. The camera’s movement speed can be altered using the mouse scroll. W key advances the cursor. The S key reverses direction. The D key goes right while the A key moves to the left. The Q key’s insertion causes the E key to shift upward and downward.