

**Brock Barlow**  
**ID #1113**  
**Assessment ADGP 201 - Graphics**

### **Graphics Assessment Documentation for “Cameras and Projections”**

#### **Purpose:**

Introduce the steps needed to create our own camera class that uses inheritance.

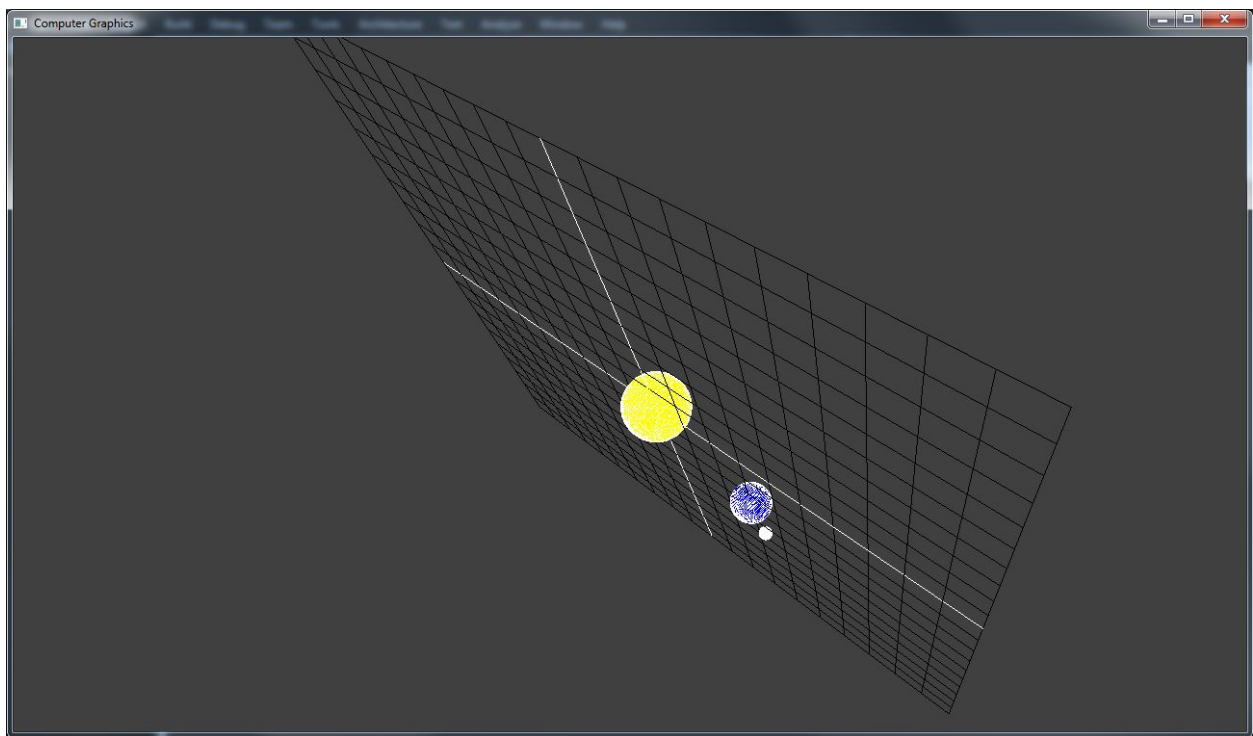
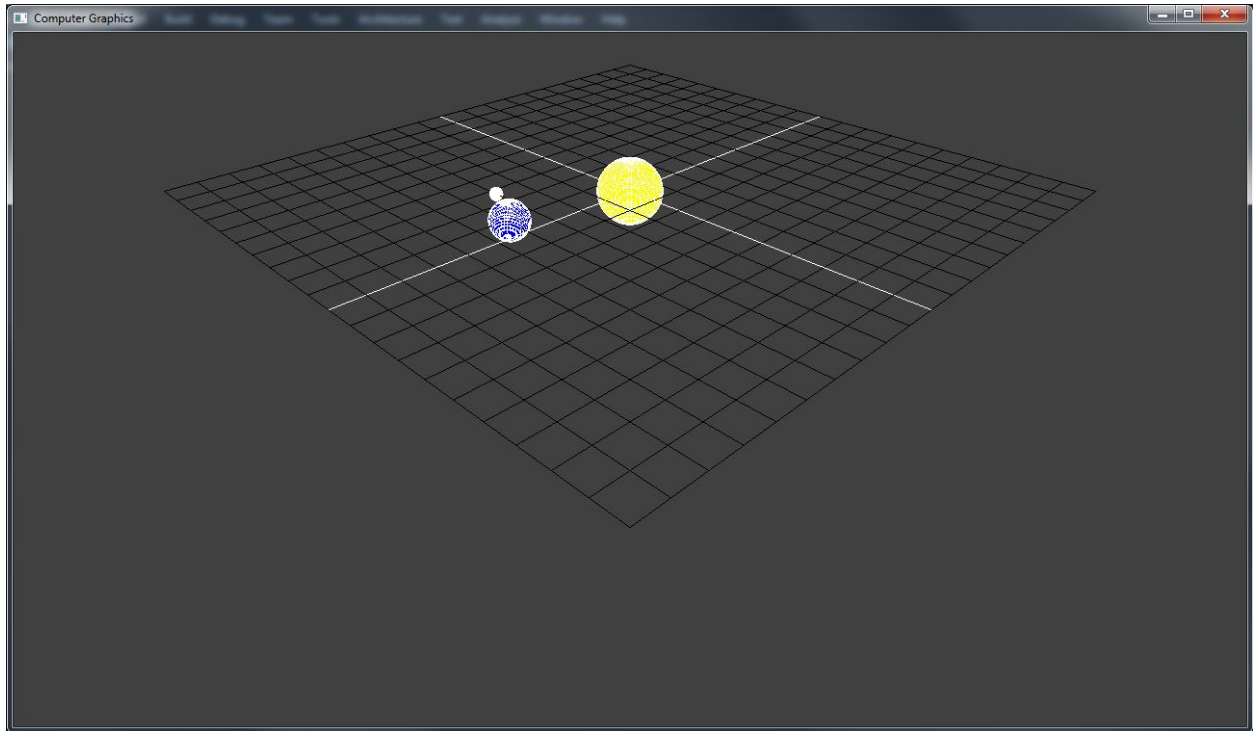
#### **Learning Outcomes:**

- 1) Camera Class (Method described in class).
- 2) Must use inheritance.
- 3) Documentation.

#### **Evidence:**

This project creates a moveable camera that users can use to move around render objects. There are two camera classes: Camera and FlyCamera. FlyCamera inherits the Camera class. The FlyCamera overrides the Camera classes update function. Within the update, the math to move the camera is performed.

The FlyCamera update function uses rotation matrix math to rotate the camera around rendered objects. When using the mouse to move, the function performs cos and sin calculations on the rotate variable, which equals the offset of x and y respectively. When using the w, a, s, and d keys to move the camera, the function moves the camera on the x and z axis by taking the cameras speed and multiplying it by delta time.



\*Pictures of moving the camera around a plane and spheres