Name: Chih Hsuan Huang

ID: 934554197

Email: huanchih@oregonstate.edu

video link: https://media.oregonstate.edu/media/t/1_leherf8b
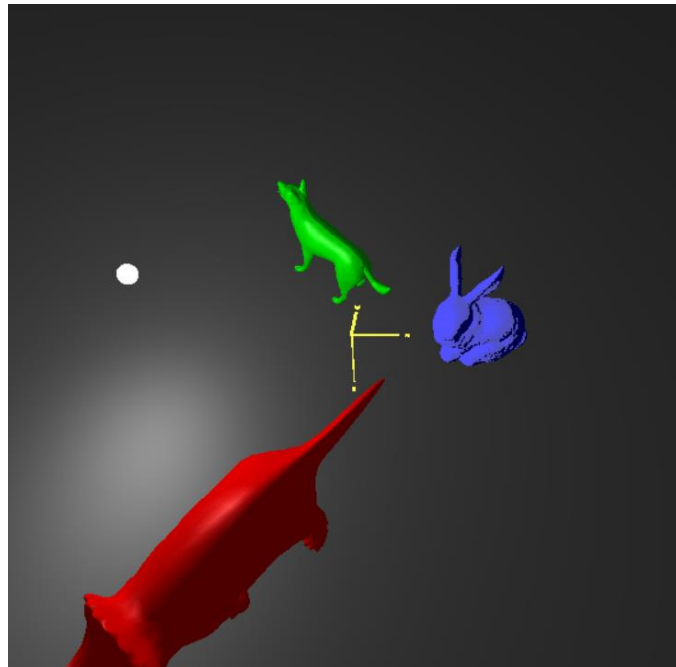
**CS 450/550 -- Fall Quarter 2024**

**Project #3**
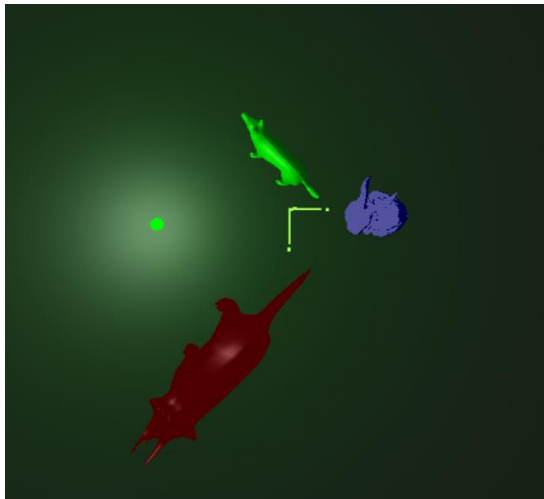
**Lighting**

Description:

I used three 3D objects from different OBJ files in the scene: Dog, Bunny, and Dino. I set different gloss levels for the objects. Among them, Dino, Dog uses a high-gloss material (GL_SHININESS = 50), while Bunny uses a matte material (GL_SHININESS = 0).

The light source follows a circular path over the scene, and its position is dynamically calculated using cosine and sine functions to simulate the movement of the light source. The light source can be switched between point light and spotlight by pressing the 'p' key to switch to point light and the 's' key to switch to spotlight.
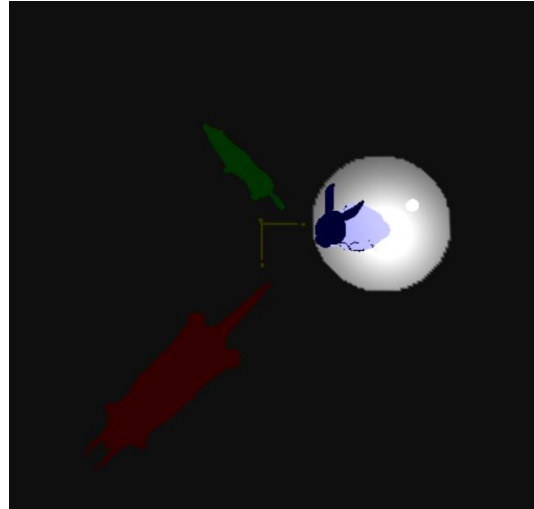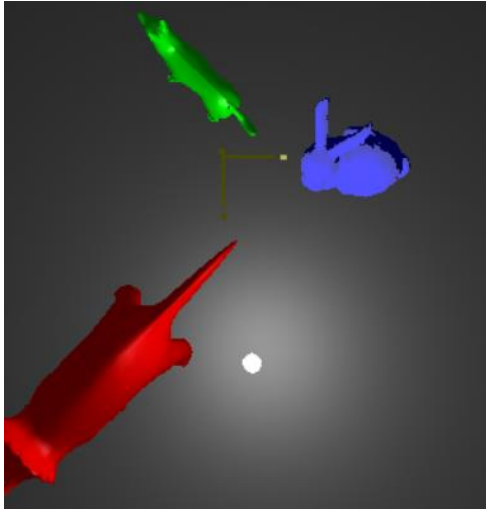


I Use the keyboard keys ('w', 'r', 'g', 'b', 'c', 'm') to switch the light source color, including white, red, green, blue, cyan, and magenta. When the color of the light source changes, the color of the sphere where the light source is located will also change simultaneously.



video link: https://media.oregonstate.edu/media/t/1_leherf8b