# CS 330 Final Project

Connor Holohan

6/22/2025

**Design Decisions**

For this project I chose to create a 3d representation of the photo of a room. For the milestones in the project I focused on the dresser first. The dresser was designed utilizing a singular large box for the body. I textured it with a wood look seamless texture to give it the appearance of a real wood dresser. For the drawers I used a set of 6 boxes, set mostly inside the dresser body and shifted them forward just enough to extrude. I then changed the texture of the drawer bodies to be slightly darker than the dresser body itself. When I used the same texture as the body it became more difficult to see them. I think with proper lighting sourcing I could have avoided this problem, but I found it easier to just change the texture to something slightly different to give the viewer a clear picture of separation. On the dresser drawer handles I used six small spheres, and again set them slightly into the body of the drawers. I textured them with a brass texture to give a slightly shiny appearance.

The bed was made using a box, stretched and flatted along the floor. I textured the blanket covering it with a blue and white fabric design. I used two white boxes to display the pillows and moved them to the head of the bed, in line with the dresser. Given the height and location of the dresser I suppose it would more accurately represent a nightstand with drawers at this point. The floor of the room was made using a simple flattened cylinder expanded to roughly cover the center of the room, it was textured with a red carpet texture.

My other complex multipart object was the lamp on top of the dresser. I used a box for the base of the lamp. For the stem of the lamp I used a cone. For the lampshade at the top I used a cone. The base and stem of the lamp are black, with the shade being a flat white color. The lamp does not possess any lighting, as the scene is meant to be at night time.

The overall lighting scheme is that of a room at night. For this reason the actual object that could be a light source, the lamp, is left without a lighting scheme. I chose a slightly cold blue color directed from the left side of the scene. This was to emulate moonlight coming through a window at night, and illuminating a room. I attempted some darker variations but it became a little challenging to adequately light the room to make objects visible enough for the viewer. I used ambient and directed lighting to cause the desired effect.

For design choices more effort was spent on design choices and complexity for the dresser, as it was the focus of some of the milestones. The next most important thing was getting the lighting scheme set up correctly. I did encounter some significant issues attempting to figure out why my lighting sources were canceling each other out, I eventually discovered that I had made a small error and some objects were not correctly textured. The issue made it appear so that only areas where multiple light sources overlapped were illuminated. For the rest of the project I went with fairly simple objects and texture schemes. I felt that these adequately showed the viewer an image of a bedroom at night time.