

# FINAL PROJECT

CS 450 Fall 2020

Shelbi Wakamatsu

[wakamats@oregonstate.edu](mailto:wakamats@oregonstate.edu)

## Final Project Video Link (Click Here)

\*I misspoke a couple times in the video. I said project 6 instead of my final project and said depth buffering instead of depth cue

## Proposal:

For my project I would like to do a spooky themed scene. I enjoyed the camping scene example that was shown in the lecture and therefore am hoping to do something along those lines. I want to do an outdoor scene with lots of trees surrounding a cemetery.

In the lighting project I added a large moon in the sky as one of my light sources, but I didn't get a chance to add a texture to it to make it look more like the moon's surface so that is something I would like to accomplish in my final project. If I could figure out how I would love to add some spooky clouds in the sky as well.

In the graveyard I would like to have a Ouija board sitting on the ground and animate the planchette piece to move around the board. I'd imagine I could use texture wrapping to get the board image in the scene and hopefully light that up as well as if it is glowing from the magic of its use. I might add a few candles next to the board as well.

Finished Project:





## Differences:

I didn't manage to get some of the extra things done, like the clouds in the sky, or making the Ouija board glow. I also decided to skip the candles because I wasn't sure how to go about making the flames' small light sources. I did add a flashlight instead to add some lighting and visibility in the front of the scene

I added the flashlight right in front of the `gluLookAt` position so that it gives the perspective that you are holding a flashlight and that helps add more lighting so you can see the front of the tombstones as the moon is behind the scene it doesn't light the front of the tombstones well.

I did manage to play with the fog settings for the depth cue so that things that were further back looked like they were disappearing into the fog/darkness.

## What I learned:

I learned a bit about the OpenGL fog settings and how to use that to show depth. I also have gained a better understanding of adding textures and lighting to objects as I used both of those to make my scene look more 3D. I learned to use `GL_MODULET` to light the objects that had textures added to them as well.