

Wolfie Essink

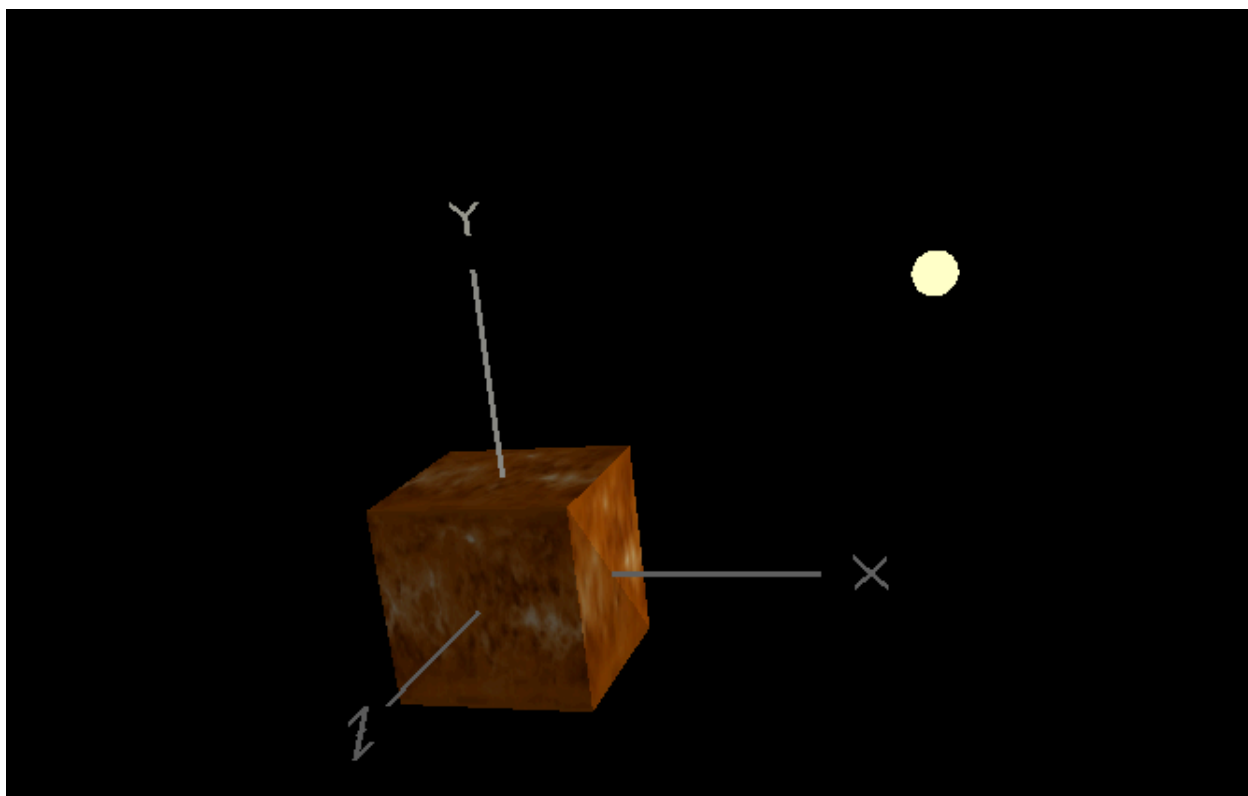
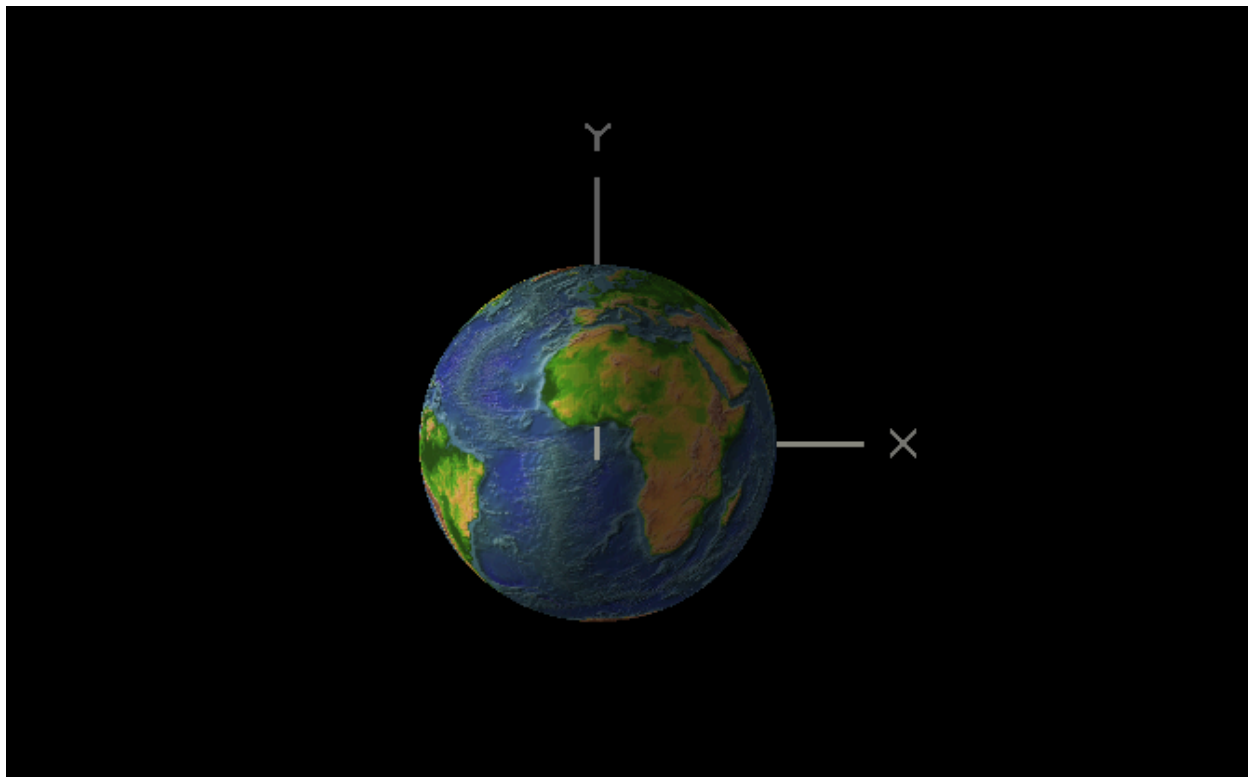
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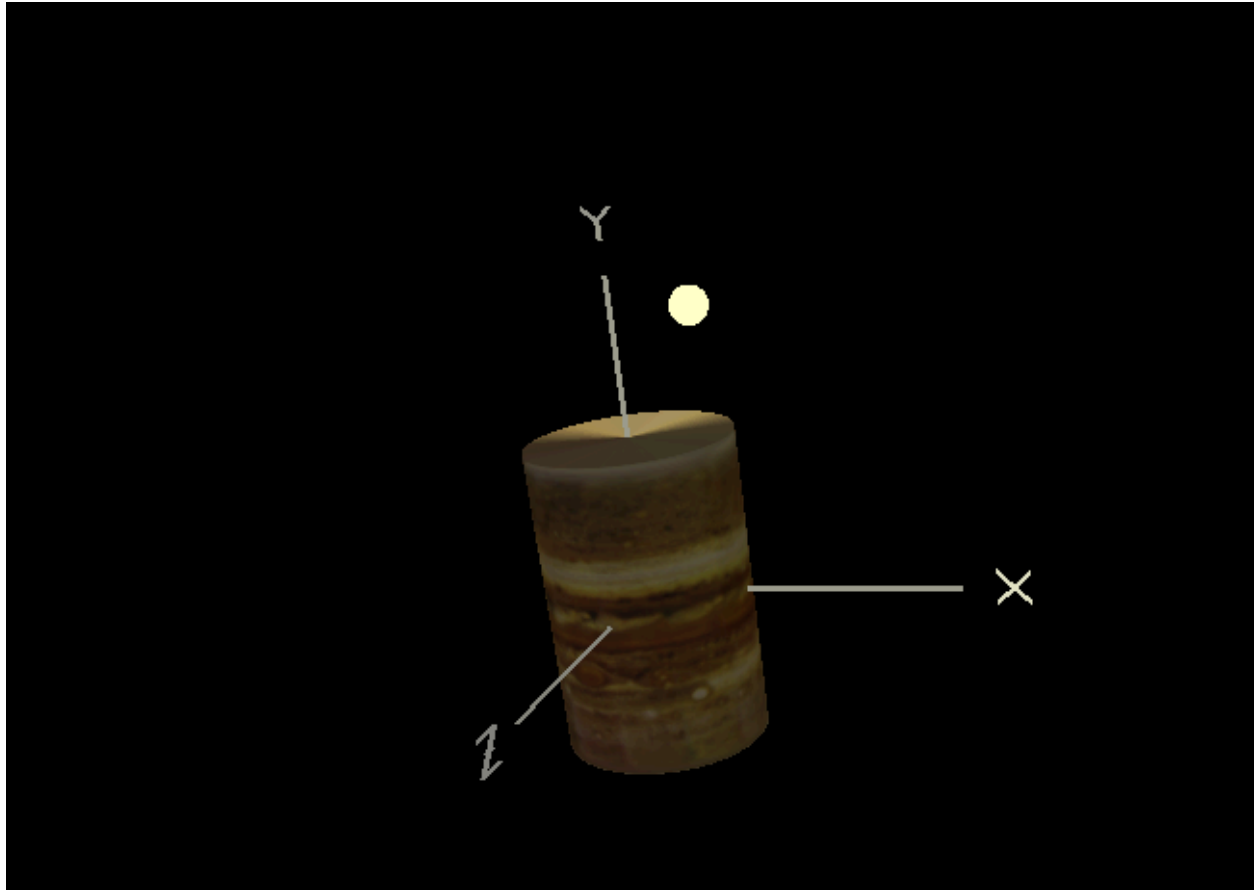
Project #5 - Texture mapping

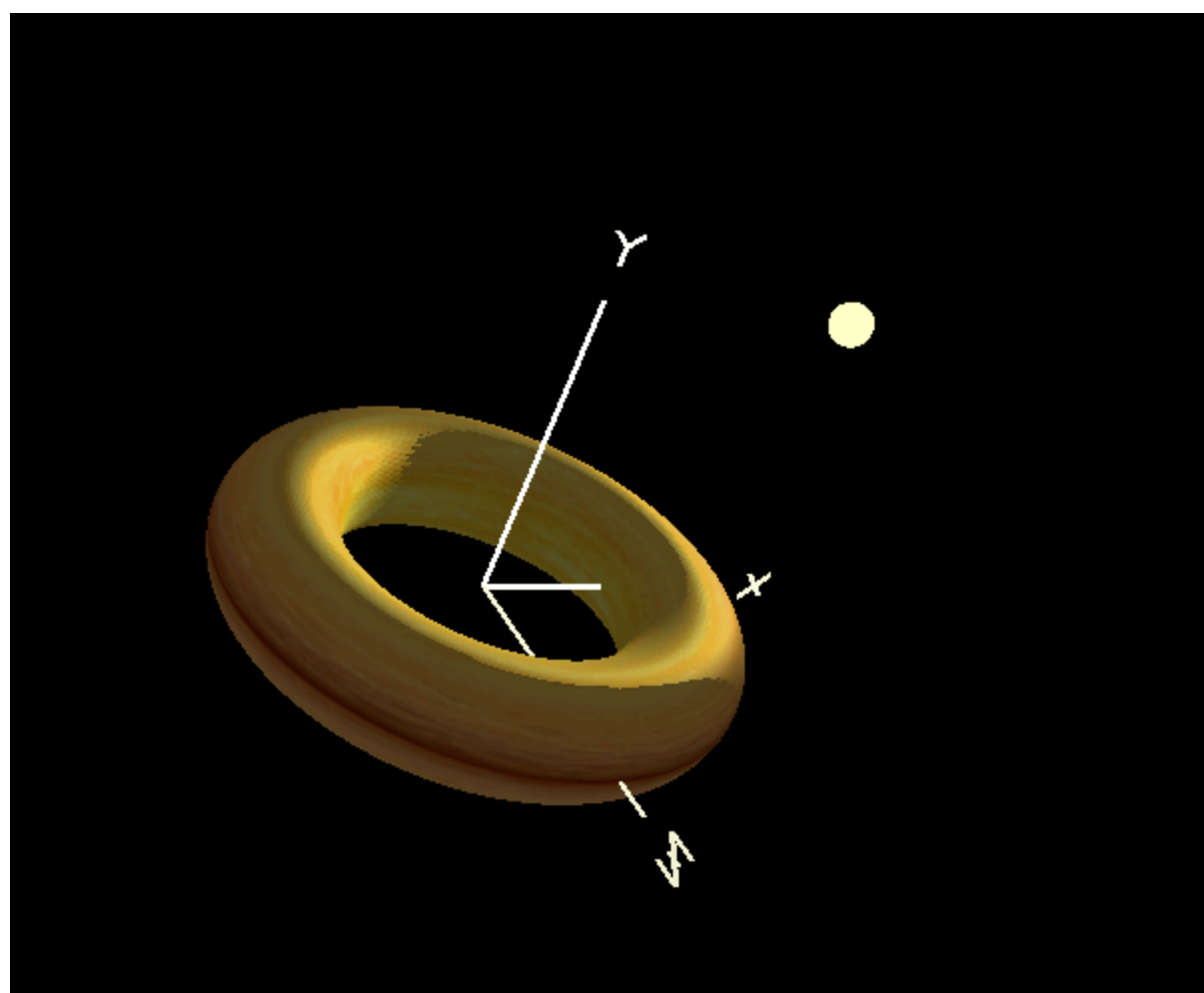
### **What I did:**

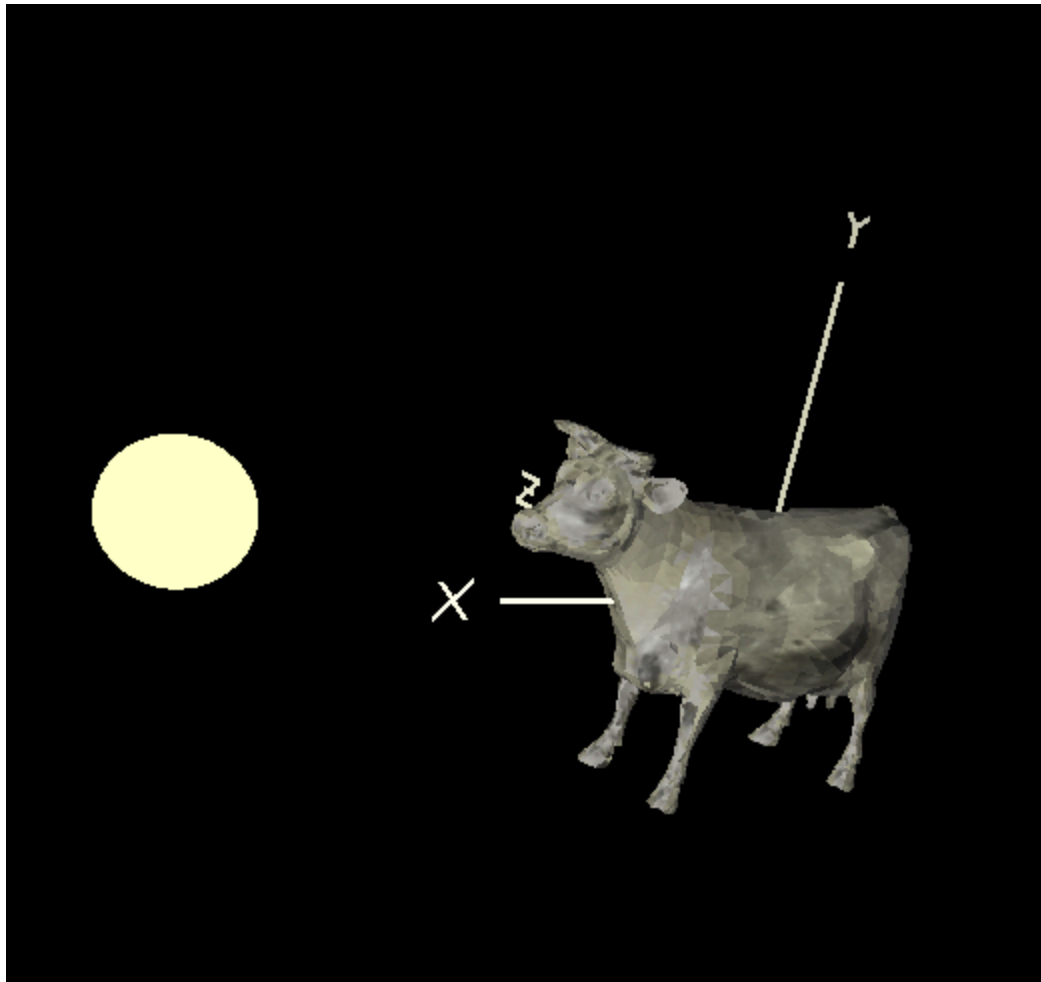
First, I uncommented any #includes I would need, added my obj file I was going to use to my project folder, and declared GLuint variables for all my objects with the other global variables. After that, I wrote the code to display the six objects in the scene, slightly translating and scaling them until I was happy with their size and position. Then I added keyboard shortcuts that allowed me to swap between these objects using keys 1 through 6, so I could choose which one was displayed at any given time. Next, I added the spinning point light to showcase my objects and textures using code from project three. Now I started to work on the actual textures by first downloading the six bmp files I planned on using, and adding the GLuint variables for all of them with my other global variables. I then started working on the texture map of the Earth for the sphere. Using the "Texturing Steps" doc, I got my texture mapping function to work in initGraphics for the sphere. I then decided to start working on the texture on and off keybinds before I went and implemented my other textures. I did this by putting `glEnable(GL_TEXTURE_2D)`, `glBindTexture(GL_TEXTURE_2D, "texture name")`, and `glTexEnvf(GL_TEXTURE_ENV, GL_TEXTURE_ENV_MODE, GL_MODULATE)` for each object in an if statement before drawing my objects in the display. This causes these functions to map the textures only if the textureEnabled variable equals true, which is when 't' has been pressed, and if 'f' has been pressed, textureEnabled equals false, and they won't be called, resulting in blank objects. After getting those keybinds to work, I finally added my other five texture mapping functions in initGraphics using the "Texturing Steps" doc and my working code for the Earth texture map, resulting in my final display.

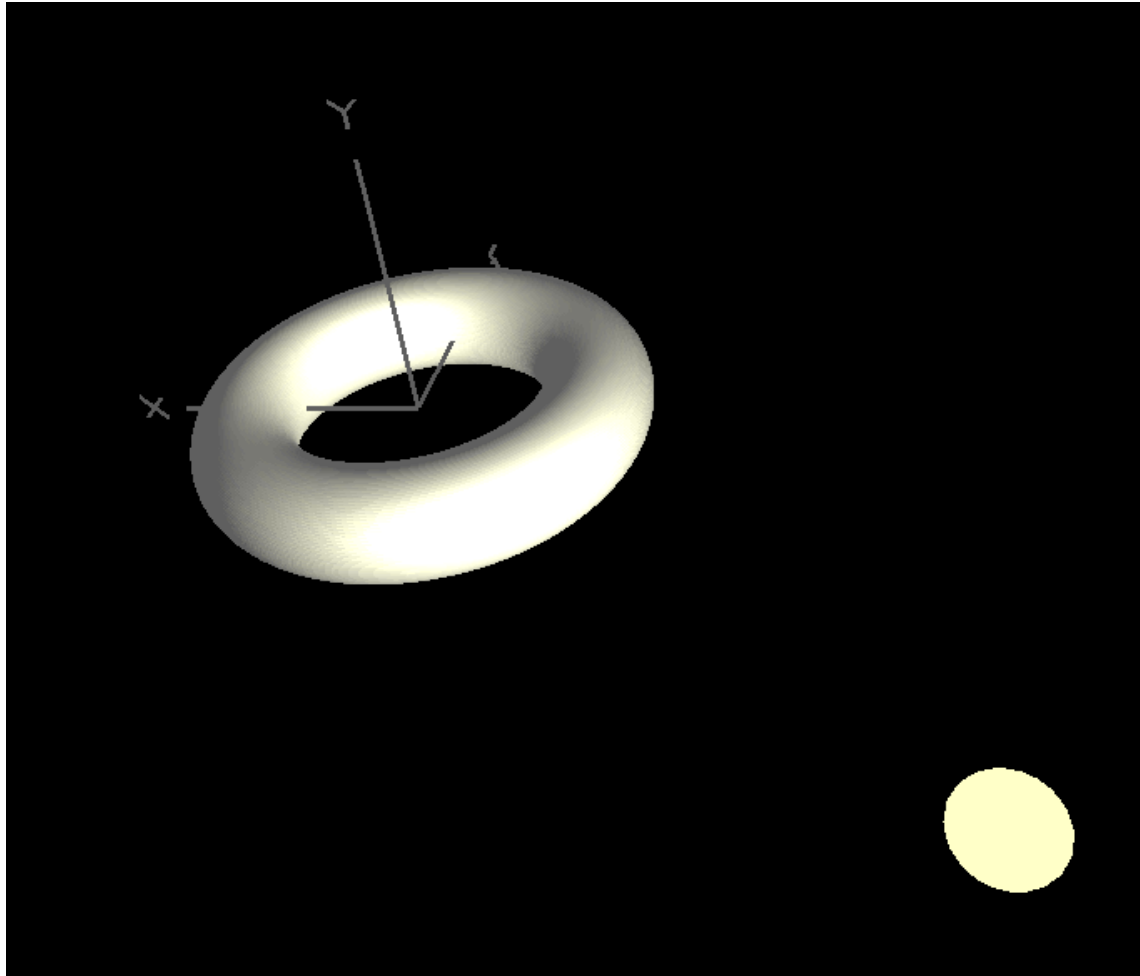
### **Screenshots:**











**Video:**

[https://media.oregonstate.edu/media/t/1\\_aqli925i](https://media.oregonstate.edu/media/t/1_aqli925i)