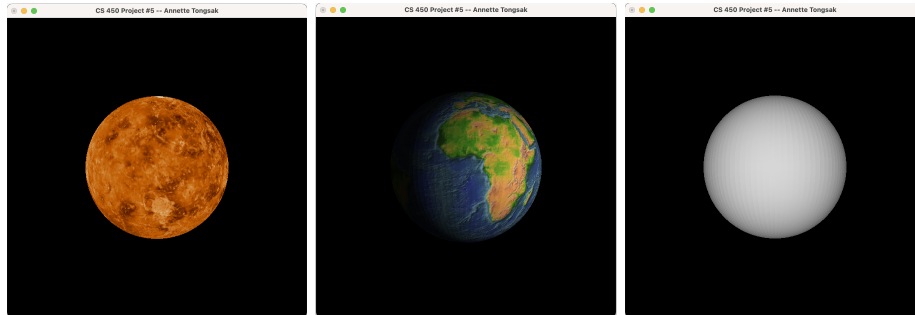


CS 450 Project #5
Texture Mapping
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[Video link](#)

To create this display, I worked in this order:

- 1) Initialized and created sphere and planet display lists in InitLists()
 - a) SphereDL involves calling the OSU sphere with 100 slices and 100 stacks
 - b) Each planet's DL involves accurately scaling SphereDL and binding their respective texture
- 2) Created global texture IDs
- 3) Implemented changing planet keyboard controls
- 4) Created texture objects by generating texture names and binding texture objects to texture data and texture properties in InitGraphics()
- 5) Implemented on/off lighting keyboard controls for GL_MODULATE
 - a) I enabled lighting and animated a point light moving around in a circle around each planet. Each planet's radius of rotation (initial translation on the x-axis) was adjusted to get the correct appearance of the planet being hit by a sun-like light source.
- 6) Implemented no texture keyboard toggle
 - a) This was done by disabling GL_TEXTURE_2D in Display() if 'r' was pressed