

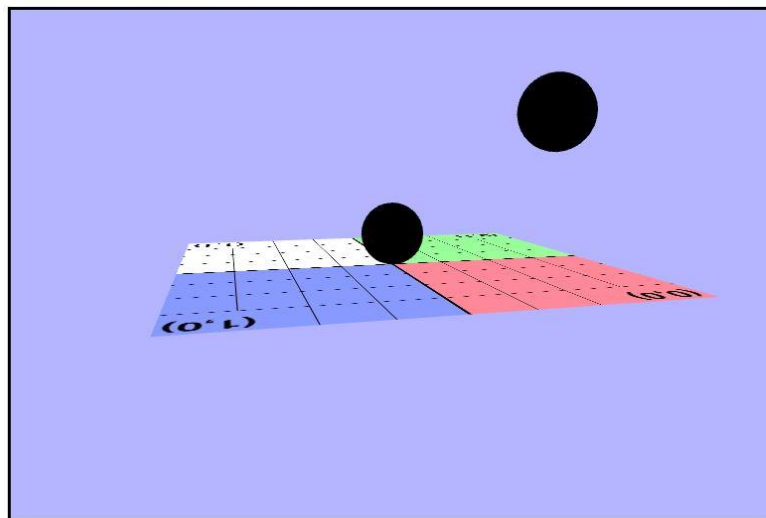
Texturing and Transparency

I would say one take away is how energy intensive graphics programming can be and how performance needs to be optimized for maximum performance. This was seen when comparing vertex graphics to textures. To create the pattern displayed on our plane with vertices there would need to be layers upon layers of vertices to create the image. Use of this many vertices to create a simple pattern is exhaustive on the gpu which can result in poor graphics and system performance? With textures mapping we create objects using matrices then apply the texture in the form of an image mask, which is drawn from a raw image file which saves system energy and conserves gpu resources.

Another takeaway for me was how the textures are applied to objects, first an object is created, then a source image is selected. After we select the source image we must specify where the image mask is to be applied to the object. The next step would then be to bind the image or images to the object as a texture. The third take away for me was how many images make up an object, for example the cow shown in class. The cow is created as a plain object then when all these pieces are applied to the cow it creates a complete 3d picture.

I would say that our first challenge was applying the texture to the plane that we created. Once we got the texture the next step was to create the spheres for our plane, what happened was there was only one black sphere that appeared in the center of the plane instead of three. Ulrich and I reviewed the code and messaged Jaden to see if he had any idea what was going on. While we waited for a response we found a for loop that created the missing spheres, however there was a fourth sphere randomly floating in the background that is only visible at a certain angle.

We then applied the textures to the spheres and noticed they looked kinda funny because the inside of the sphere was showing. We then enabled the depth testing and the inside of the sphere was no longer visible and everything looked as per the instructions with the exception of the extra sphere. I would say that having a partner to collaborate with is very helpful as well as the TA office hours and the course resources as well. We referenced Jaden who then referred us to the web gl guides and syntax instructions that are available via mozilla, which were very helpful.



osition() f...

ainter's ...

e textur...

e textur...

