This week we talked about shadows. Two main approaches to simulating shadows in the pipeline, Volume-based and Image-based. In volume-based there is a stencil shadow volume. Volume-based shadow is polygon-based they have the shadow polygons away from the light source. The Image-based shadow approach is also called shadow mapping. This approach is pixel-based instead of polygons. It measures the depth of the pixels. Like raycasting, we measure the distance between the geometry and the light. In raycasting, we go from the geometry to the light but with shadow mapping, we go from the light to the geometry to calculate the shadows.

This week I felt the homework was easy. I had a little bit of trouble with the lightSpaceNDC vector. I didn't understand the directions and I had to multiply the world position by the lightVPmatrix. Once I realized this it was smooth sailing for me. The other hardest part for me was the condition at the end for the actual shadow. It wasn't that bad but I just had a little trouble finding out what the other value should been. It didn't take me long to figure out that it should be the shadowColor z value that we calculated earlier..

I did not attend office hours or talk to the professor this week. I also did not seek help from my partner this week.

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