

These past 2 weeks we have been going over raytracing. We are using the homework from the past couple of weeks to use this raytracing. For this we assume there is a screen filled with pixels. The size of the screen is 2 by 2, -1 to 1 for both x and y. We then divide the size of the screen so it is a bunch of pixels 256 by 256. We then use our location and send rays from it through each pixel. We then check if we hit anything on the other side of the screen. We then will have to see which one is the closest to the camera location then set the pixel color to that object. I didn't have a problem with part 1 of the homework until we reached the light portion. I had trouble figuring out the wording of the todo and when I used ChatGPT it gave me an entirely wrong version of what it was trying to say.

I messed up the formula a little bit so the light was not as bright as it was supposed to be. The light wasn't that big of a problem for me but once I got adding the shadow that was hard for a while. I had major trouble with it but I eventually figured it out. We then had the raytracer have actual colors and walls. We got rid of the way we were raytracing and had to basically start over. We put all the scene objects into an array then we had to iterate through the array to see what hits and what is the closest. We then had to alter all the raycasting and html functions to have a color vector. Once I added these walls and color I had a problem with the black dots on the sphere. Overall, the shadows were the hardest part of these assignments for me.

This two weeks my partner and I worked well. When I had a question I would ask and get help from him. When he had a question I would help him try and solve it. I did not go to office hours these 2 weeks, I didn't really have a need to.

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