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Class: Computer Graphics 1

Assignment 4 Analysis:

For this assignment, I was tasked with implementing an orthographic projection of a 3D scene in WebGL. The main goal was to replace a simple cube with a more complex 3D model of a house, change its colors, and allow the camera to move interactively along user-defined paths. The camera movement could follow a line or circle in 3D space, and the view of the house would update as the camera moves along the path. Additionally, I had to animate the camera's movement and project the scene in real-time.

I faced various difficulties throughout the assignment. Namely, creating the house was troublesome. Although it ended up being something straightforward that I was overlooking, and was a one-line fix. After the house was created, I moved on to implementing the animations. Animating the circle was rather straightforward. It was not much more than finding the parametric equation of a 3d circle and computing it for the given input. The animation of a line on the house was a little more difficult. I'm not sure if I was overcomplicating things, but I ended up converting to spherical coordinates because it seemed that's what the eye variable preferred. I also ran into some problems that I couldn't find a fix for. For some reason, the line animation doesn't like it when the (x,y,z) coords are the same for the start or end. In this case, it will jump to the end of the animation. Not sure why.