

Week #7 Live Lecture Chat Window

November 15, 2023

14:40:19 I had a quick question about orthographic view - is that to simulate parallel light?

Yes. Using perspective for the from-the-light-position pass would simulate a point light.

15:22:06 Is casting a ray out through the mouse cursor to see if I'm hovering over an object I'm rendering something we can do?

Sounds like you are trying to “pick” the object, right? You can do it this way, but you have to write the code to intersect the mouse-cursor ray with all of your transformed geometry.

Here is perhaps an easier way that takes advantage of the hardware rasterization. When you decide you want to be in picking mode, render your different geometry objects in wild un-lit colors into the back framebuffer (so the user doesn't see them). Then upload from the back framebuffer (glReadPixels) the pixel under the mouse cursor and see which wild color it is. That will tell you what, if anything, you are hovering over.

Would that do what you are wanting to do?