Pre-class Discussion of VR Systems:

12:00:49 From Rangarajan, Vaishnavi: We hang out in hubs using VR headset
12:01:50 From Eslinger, Jakob W: I just picked up an oculus gen 1 for cheap
12:02:15 From Neiger, Kevin Daniel: I own a Vive, but I just got an Oculus Quest sent to me for my capstone project. I look forward to checking out the Quest
12:03:30 From Tremper, Brayden Justin: beat saber is cool
12:03:30 From Eslinger, Jakob W: superhot is great
12:03:46 From Markwell, Cameron Douglas: it's the most innovative shooter I've played in years
12:03:55 From Noetzel, Gregory Gerard: beatsaber is how I get my covid cardio
12:03:55 From Tremper, Brayden Justin: population one just came out too and its pretty cool
12:04:03 From Withington, Brandon: No Man's Sky has a really awesome VR mode
12:06:53 From Luong, Kenny Khoi Minh: i heard phasmophobia was not too great for VR atm

12:09:11 From Zavalza, Michael Aaron: I thought that the normals were all assigned at each vertex and doing per face was essentially just giving the same normal to each vertex of a face, is this wrong?

That's correct. Each call to glVertex3f() uses the most recently-set glNormal3f().

12:19:54 From Pannapat (Apple) Chanpaisaeng: which lecture note was the transparency?

The noteset called OpenGL Transparency: http://cs.oregonstate.edu/~mjb/cs550/PDFs/Transparency.1pp.pdf

12:26:35 From Markwell, Cameron Douglas: so, that's per-fragment?

Per-vertex lighting computes the lighting at each vertex and interpolates the colored intensities across the polygon. Per-fragment lighting interpolates the normals across the polygon and then computes the lighting at each fragment.

12:33:41 From Xiang, Jingyu: Should we consider shadows in project4?

No, shadows are much more complicated. We will go over them later. What you are doing now is called shading.

13:05:44 From Mitchell-Nelson, Luke Andrew: @CS450 Fall 2020 Discord Here:
13:09:02 From Sierra Freihoefer: are the slides for this available?

Yes. Wait a couple hours then look in the table for the Live Lectures.

13:31:10 From Mahmoud, Ibrahim: is that [temporal aliasing, a Wednesday topic] when a car wheel speeds up so it looks like its spinning the other way

Yes. It was always obvious in old westerns when the stagecoach spokes started rotating backwards.

13:37:23 From James, April: I was wondering about the spheres showing where the light sources are. You mentioned that we should draw them with lighting turned off, but they are illuminated even when you turn that light source off, how are they being illuminated?

Disable lighting, set the glColor3f() to the color of the light, then draw a sphere.

13:55:39 From Leathem, Selma: Can I confirm that need to define vertex colors in pattern.vert and pass that to pattern.frag?

You can do something like this:

In the vertex shader:
out vec3 vColor;

... vColor = gl_Color.rgb;

In the fragment shader:
in vec3 vColor;

... gl_FragColor = vec4(vColor, 1.);