

CS 457/557 Live Lecture Chat Window

January 8, 2024

12:39:43 Were there any others [graphics APIs] than OpenGL and Vulkan?

12:42:23 From Alex Hollinghead to Everyone:

There's DirectX (Windows) and Metal (Mac), but those are outside of Khronos Group

Good answer.

13:18:02 Is there anything else you recommend we review if we did not take cs450?

The set of notes from 450/550 will always be there: <http://cs.oregonstate.edu/~mjb/cs550>

13:19:19 Will we be covering anything with shaders utilizing custom framebuffers in this course?

We will need some floating point framebuffers for certain algorithms.

13:21:18 Just curious, would there be guest lectures this quarter?

I'm working on it, but it is harder to do. Shader-writing is a much more specific skillset.

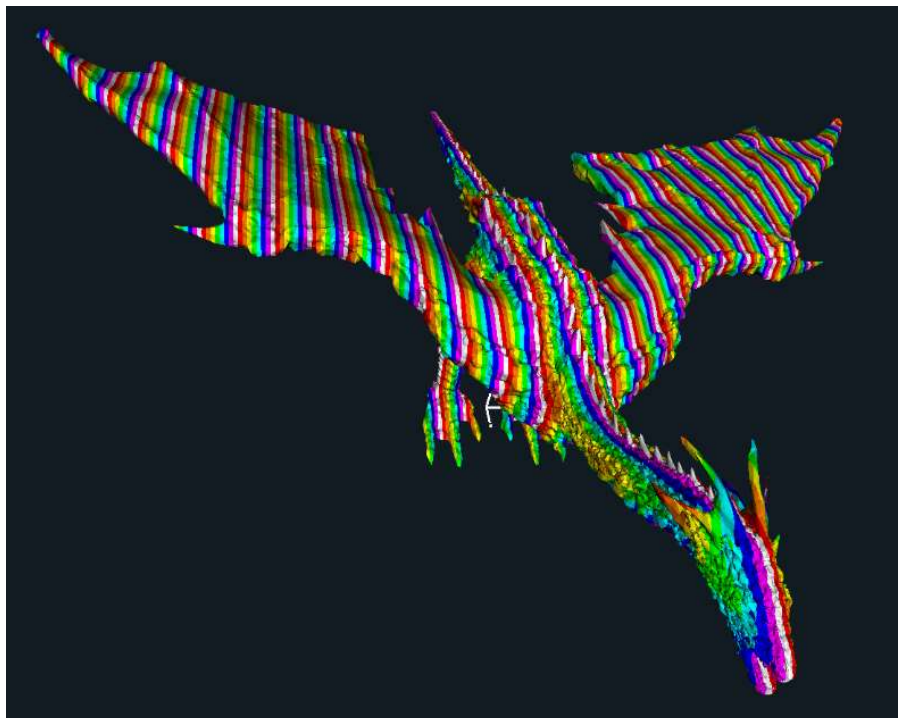
Discussion on how to get the GLUT and GLEW libraries on Linux:

```
sudo apt-get install libglut-dev  
sudo apt-get install libglew-dev
```

13:40:34 If you had a different obj file instead of the sphere, how would that affect the pattern area where the new shader is?

It depends on how the person modeling the object in the OBJ file defined whatever quantities were being used to draw the pattern. For example, the dragon on the right has stripes. My shader that did that (same as for the dragons at the top of the Class Resources Page) was looking at the X coordinate to figure out where the stripes should be. That's a good way to do it because the Cartesian coordinates are available consistent with the triangles that were drawn. That is, the act of drawing the dragon sets the x, y, and z coordinates.

In the dragon below, the shader was looking at the s and t texture coordinates to draw the stripes. It looks like the person doing the



modeling did the end of the wings separately from the rest of the body as there is a sharp change in the direction of the (s,t) coordinates there.

