

Yazhuo Liu  
Lab 6

Partial code:

//pentagon.cpp

```
...
const GLchar *vertShader = "gl_Position = ftransform();";
const GLchar *fragShader = "glFragColor = vec4( 1,0,0,1 );";

// public
int installShaders(const GLchar *vertex, const GLchar *fragment)
{
    GLint  vertCompiled, fragCompiled; // status values
    GLint  linked;

    // Create a vertex shader object and a fragment shader object

    vertexShaderObject = glCreateShader(GL_VERTEX_SHADER);
    fragmentShaderObject = glCreateShader(GL_FRAGMENT_SHADER);

    // Load source code strings into shaders, compile and link

    glShaderSource(vertexShaderObject, 1, &vertShader, NULL);
    glShaderSource(fragmentShaderObject, 1, &fragShader, NULL);

    glCompileShader(vertexShaderObject);
    glGetShaderiv(vertexShaderObject, GL_COMPILE_STATUS, &vertCompiled);

    glCompileShader( fragmentShaderObject );
    glGetShaderiv( fragmentShaderObject, GL_COMPILE_STATUS, &fragCompiled);

    if (!vertCompiled || !fragCompiled)
        return 0;

    // Create a program object and attach the two compiled shaders

    programObject = glCreateProgram();
    glAttachShader( programObject, vertexShaderObject);
    glAttachShader( programObject, fragmentShaderObject);

    // Link the program object

    glLinkProgram(programObject);
    glGetProgramiv(programObject, GL_LINK_STATUS, &linked);

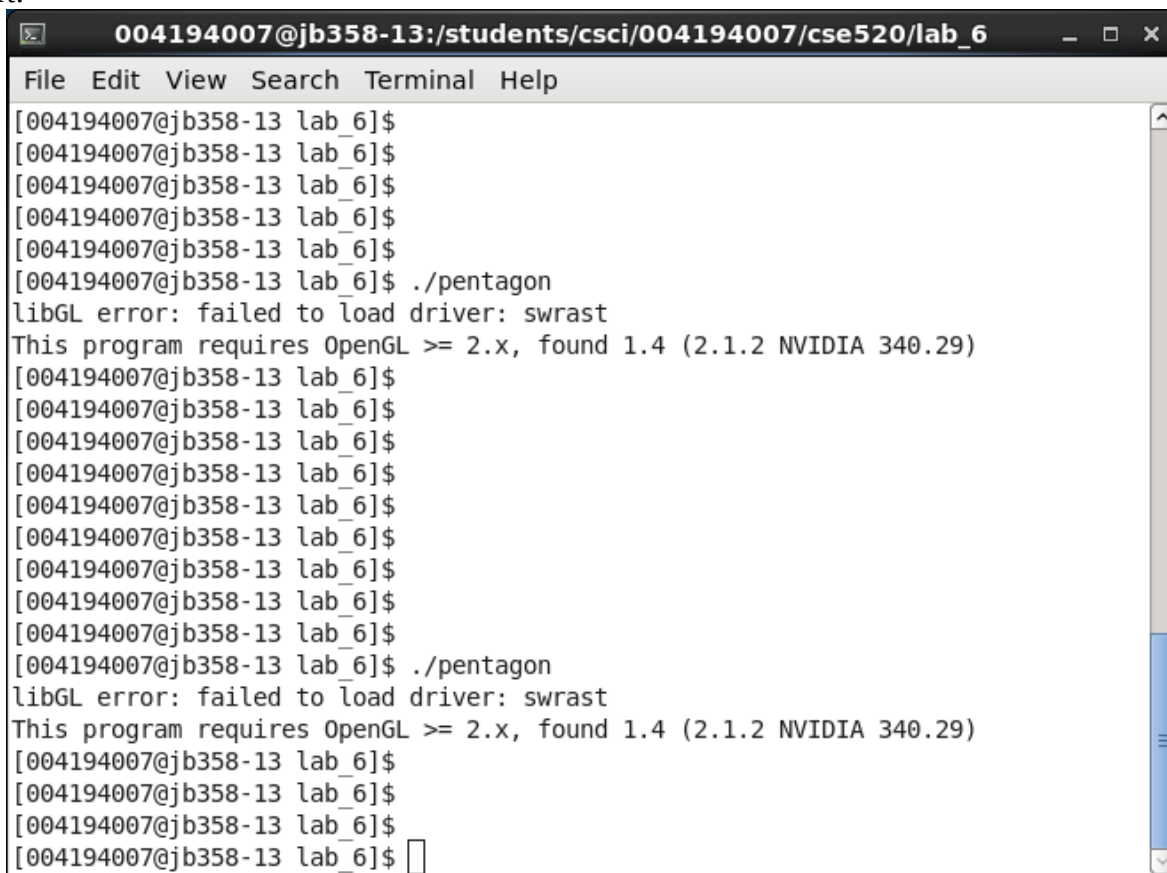
    if (!linked)
        return 0;
```

```
// Install program object as part of current state

glUseProgram(programObject);

return 1;
}
...
```

Report:

A terminal window titled "004194007@jb358-13:/students/csci/004194007/cse520/lab\_6" with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows a series of commands and error messages. The user enters several empty prompts, then runs "./pentagon". This results in a "libGL error: failed to load driver: swrast" and a message stating "This program requires OpenGL >= 2.x, found 1.4 (2.1.2 NVIDIA 340.29)". The user runs the command again, and the same error messages appear. The terminal ends with a prompt and a cursor.

```
004194007@jb358-13:/students/csci/004194007/cse520/lab_6
File Edit View Search Terminal Help
[004194007@jb358-13 lab_6]$
[004194007@jb358-13 lab_6]$
[004194007@jb358-13 lab_6]$
[004194007@jb358-13 lab_6]$
[004194007@jb358-13 lab_6]$
[004194007@jb358-13 lab_6]$ ./pentagon
libGL error: failed to load driver: swrast
This program requires OpenGL >= 2.x, found 1.4 (2.1.2 NVIDIA 340.29)
[004194007@jb358-13 lab_6]$
[004194007@jb358-13 lab_6]$
[004194007@jb358-13 lab_6]$
[004194007@jb358-13 lab_6]$
[004194007@jb358-13 lab_6]$
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[004194007@jb358-13 lab_6]$ ./pentagon
libGL error: failed to load driver: swrast
This program requires OpenGL >= 2.x, found 1.4 (2.1.2 NVIDIA 340.29)
[004194007@jb358-13 lab_6]$
[004194007@jb358-13 lab_6]$
[004194007@jb358-13 lab_6]$
[004194007@jb358-13 lab_6]$
```

By the time I finished coding, all the lab machines are showing this error when I try to run the program. I can't tell if there's any bug in my program, but I think it's correct. So I'm just going to give myself half of the score for now.