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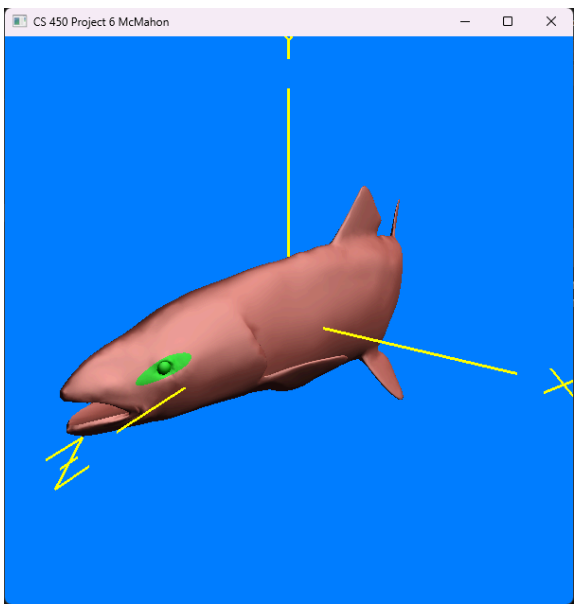
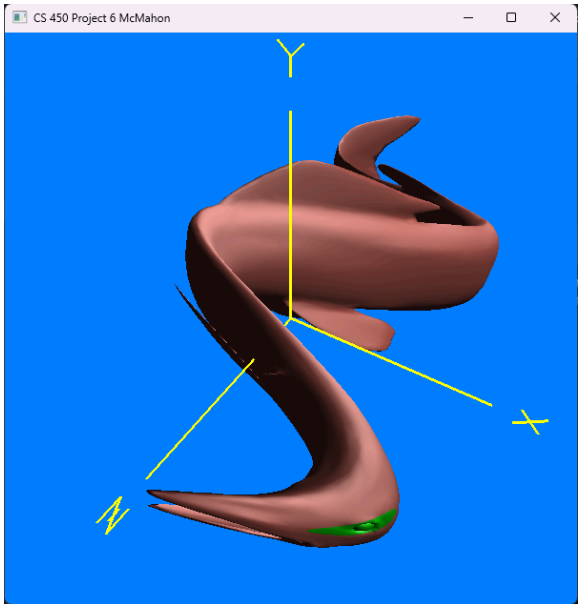
Project #6 | Shaders

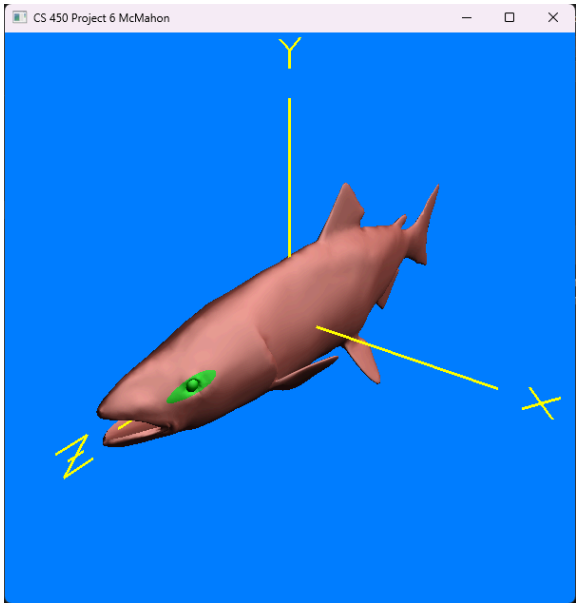
In this project, I used the salmon.vert and salmon.frag files to implement vertex and fragment shaders accordingly. Using the skeleton code, I implemented across the x axis the given equation and multiplied speed by time and frequency by the z coordinate over the length in the vertex shader file. For the fragment shader, I implemented vST.s - EYES and vST.t - EYET for the ds and dt values, then checked if they were within the eye circle by using R. I manually adjusted the EYES and EYET values until I got the appropriate locations for the eye color. These shaders provided the example images below.

I am convinced that the animation for the fragment shader is correct due to the fact that there is a salmon on my screen, it is colored ‘salmon,’ and there is a differently colored patch over its left eye. I am also convinced that the animation for the vertex shader is correct due to it making a wiggling motion that looks pretty realistic for what it is. I adjusted the values for frequency, amplitude, and speed which all have visible changes in the video and do what I think they would, meaning each thing is appropriately placed in the equation provided in the skeleton code.

Images and video link on second page →







Link to video:
https://youtu.be/Rq6WUrDJ3vE