

Adam Baptista

One issue I faced was when I was trying to move the JS code from the html file into the JS file. It took me a while to figure out how to do it and I'm not sure if I did it the correct way. My method was using the original `initShaders()` function. I googled the code and looked at how it ran, then took the code that I needed out of the function and put it into my own code so that I could move the vertex-shader and fragment-shader into my JS file.

I added two arguments to the main `init` function. One to take in the step and another to toggle the random mode. To change the number of points I just changed the variable `NumPoints`. The color changing was produced by fragment shader `gl_FragColor`, so I just replaced the numbers inside `vec4` with variables, then made those changes with the number of steps. After that took the `init()` function and put that inside an infinite while loop with a slider that adjusted the time between iterations. With each iteration, a randomly sized, random colored triangle with a random amount of points from 500-5000 would be generated.

The additional functionality that I added were a time slider, and a random toggle. I used w3schools.com to find out how to add sliders to my program, then took that value from the slider and used that value to adjust the sleep timer inside the while loop. For the random toggle button, I used youtube to figure out how to add that in, and with my extra argument that I added to the `init` function, if `random=true`, then it would just set the size, color, and numpoints to a random value.

There are no bugs that I have run into while running it on my machine.