

Programming Assignment 1 Report (COMP 5460) (Chinmay Nandkishor Mathakari :- 02007302)

Issues faced:

1. Initially, separating the JavaScript code from the HTML file proved to be a difficult task. I attempted to utilize the fshader21 and vshader21 in the Shaders folder, however, I encountered an error every time indicating that the vertex shader file could not be compiled. Despite my efforts to resolve the issue, I was unable to access the glsl file from JavaScript. Later, I discovered that it was possible to write the glsl code directly in JavaScript using quotes.
2. Furthermore, I faced difficulties accessing other JavaScript files in the HTML file. The issue was with the source path defined in the HTML file, but I resolved it by specifying the complete path in the source.
3. During the assignment, I encountered an error message stating that the Vshader could not be found. After spending some time investigating the issue, I discovered that it was caused by a faulty condition in the initialization shader file. Once I removed the condition, the program started functioning properly.

Lessons learned:

1. I gained knowledge of working with WebGL functions such as `clear()`, `clear-color()`, `getUniformLocation()`, `bindbuffer()`, etc.
2. I discovered the usage of the `setTimeout` function, which enables me to specify the duration for which each frame is displayed during the presentation.
3. I worked for the first time on WebGL. Learned a lot of functionality offered during this programming assignment I learned about WebGL Shaders, WebGL Libraries such as Three.js

Remaining bugs:

1. The code I've written for my homework assignment is performing optimally without any glitches. I've created a never-ending loop where in each cycle, the triangle will become smaller, the number of points will decrease by

- 500 in each iteration, and the color will also alter with each iteration.
2. I am working on improving the program by finding a way to run a function that is not within the init or render functions.

Extra functionalities implemented:

1. I have successfully altered the background color of the canvas and adjusted the pace at which it runs