

### **Team Members and Contributions:**

Zac Taylor-

- Linking vertex and fragment shaders
- Lerp between values in Mandelbulb
- Help with the distance estimator function
- Mandelbulb fragment shader

Kelly Herstine

- Implement the rotation matrix for the Mandelbulb fragment shader
- Rotate the object in the scene
- Implement the distance estimator
- Mandelbulb fragment shader
- UML diagram

### **Repository link and stable commit branch**

Link:

<https://bitbucket.org/Kellers176/graphics2/src/012be3249b6339b578550c5040338bfe734c3c99/?at=Final-working>

Commit:

5c40e2d

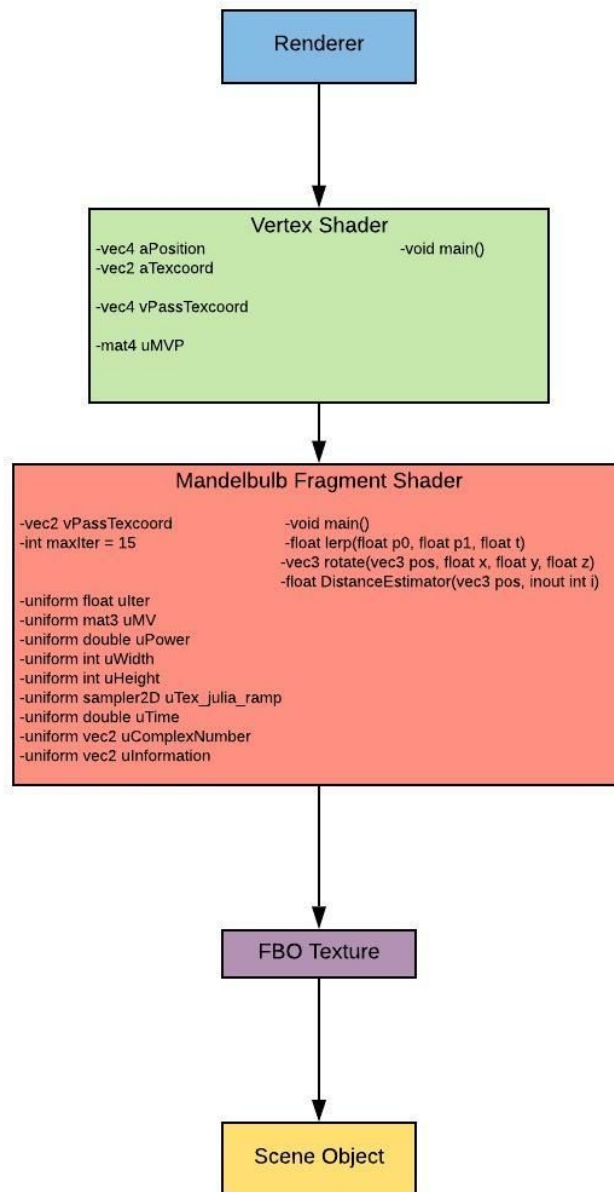
### **Brief description of project goals and outcomes.**

Our team wanted to create a 3d fractal (Mandelbulb) and get that working with our previous code.

### **Brief justification of how your project fits into one of the categories**

Our project fits into the category of the final project. We talked to Dan about the final project itself and he told us that it was good with what we were doing.

### **UML Diagram:**



### Where to find all of the pertinent code

All the code that you will need to see is in `drawMandleBulb_fs4x.glsl`. This is where the main part of the math is being done as well as processed. There will also be a change in the `a3_DemoState_idle-input.c` and `a3_DemoState_loading.c`.