Final Project UML overview

Vertex Displacement Pass

(vs) -> Bind a flat simple texture
- Output: Positon, Texcoord

(ps) -> Display sphere with a simple texture
+ Input: Position, Texture

{Functionality: *Displays texture*}

- Output: Texture on Sphere

Phong Pass

(vs) -> Bind a flat simple texture
- Output: Postion, Texcoord

(ps) -> Display shpere with previous pass texture and phong shading
+ Input: Postion, Texcoord

{Functionality: *Add Phong shading to shphere*}

- Output: Viewport Texture

Texture

(vs) -> Bind a flat simple texture
- Output: Postion, Texcoord

(ps) -> Display sphere with animated texture
+ Input: Postion, Texcoord

{Functionality: *Uses a texture that will change over time*}

- Output: Viewport Texture

Bright Pass

(vs) -> Bind texture from prev pass
+ Input: Sampler

- Output: Position, Texcoord

(ps) -> Hightlight and Darken selected Colors
+ Input: Position, Texcoord

{Functionality: *Highlight slective colors*}

- Output: Brightend Texture

Blur Pass

(vs) -> Bind texture from prev pass
+ Input: Sampler

- Output: Position, Texcoord

(ps) -> Mix Pixels together to create blur
+ Input: Position, Texcoord

{Functionality: *Blur adjacent pixels together*}

- Output: Sampler

Display Pass

(vs) -> Bind texture from prev pass
+ Input: Sampler

- Output:Position, Texcoord

(ps) -> Takes weighted avg of bright and blur outputs
+ Input: Position, Texcoord

{Functionality: *Mixes the bright pass and blur pass*}

- Output: Sampler

Final Display (PS)

(ps) -> Outputs textures on FSQ
+ Input: Position, Texcoord, sampler2D, triange_strips

{Functionality: *Displays final output on a fullsqreen quad*}

- Output: Display Final Output

Final Display (VS)

vs) -> Bind a final texture
+ Input: Cube, gl_Position

{Functionality: *Creates a square faces of a cube using the triangles*}

- Output: Cube with Geometry Shader