Final Project UML overview

Vertex Displacement Pass

(vs) -> Adds vertex displacement to a default sphere using a noise function

- Output: Positon, Normal, Texcoord

{Functionality: Vertex displacement handled by mouse input}

(ps) -> Display displaced sphere with a simple texture and phong shading

+ Input: Position, Texture

{Functionality: Adds a texture w/ phong

shading}

- Output: Texture on Sphere

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

Bloom Composite 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

Display/Background Pass

(vs) -> Sets up final display window

+ Input: Position, texcoord

- Output: Texcoord, Position

(ps) -> Mixing final displays together

+ Input: Position, Texcoord, Texture,

Render Texture

{Functionality: Mixes bloom pass and background textures together}

- Output: Final Display