

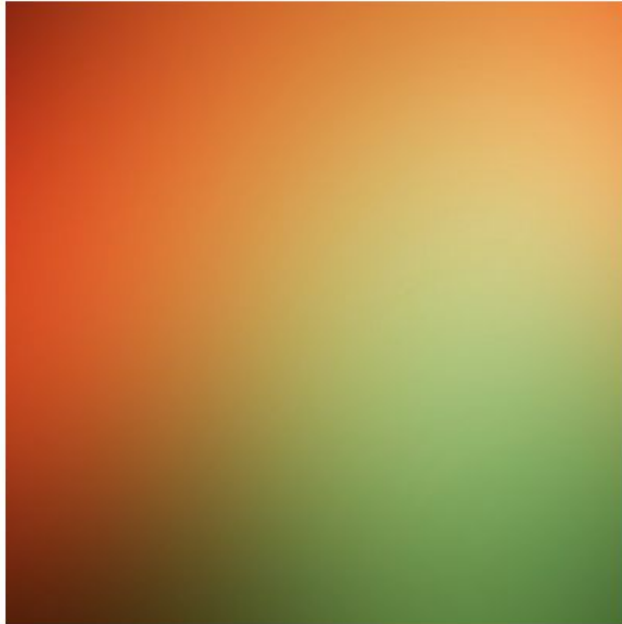
Multi-Texturing (Part 1)

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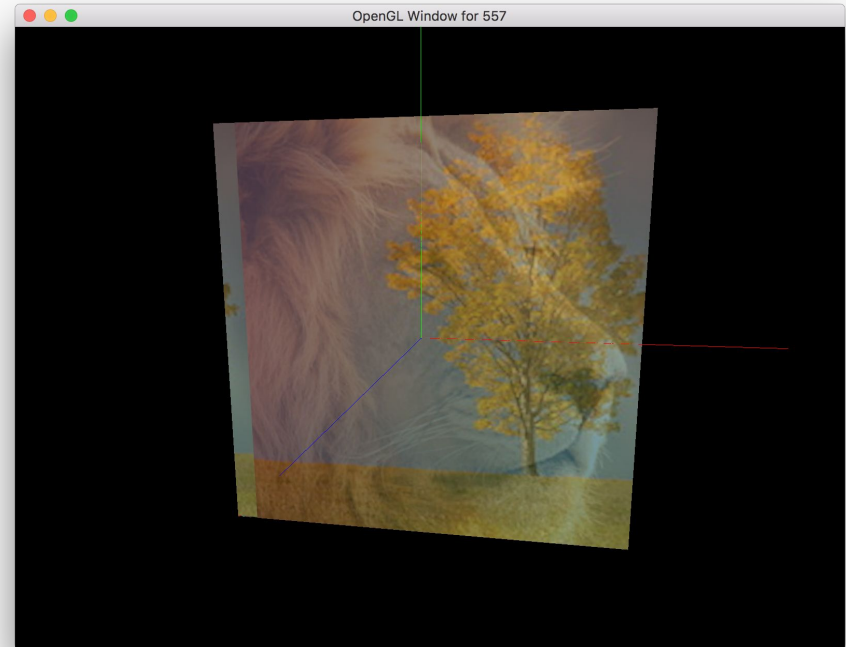
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Chosen Images



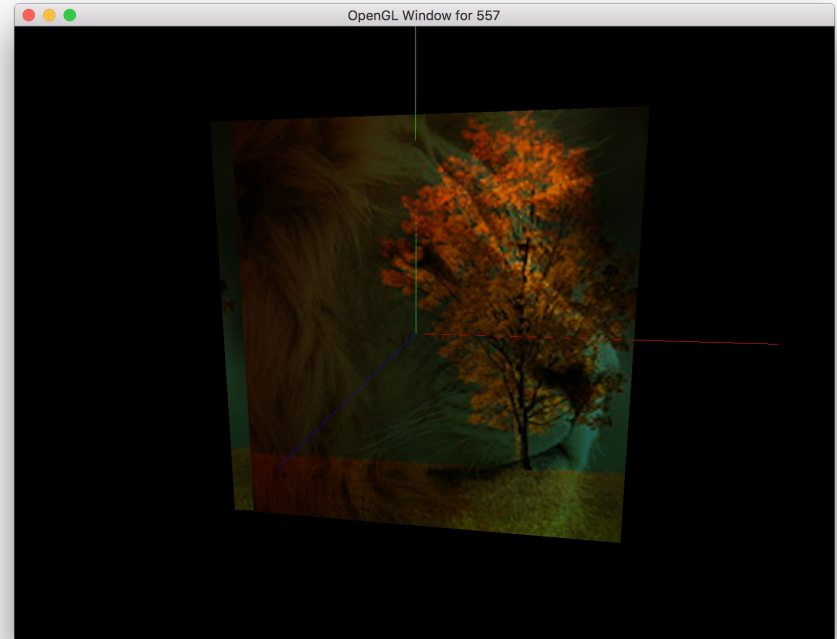
Blending Technique (Scale and Add)

- Scale pixel values from all 3 textures and add together
 - $0.3 * \text{tex1} + 0.3 * \text{tex2} + 0.3 * \text{tex3}$
- Simple blending technique
- Get even filling of all images



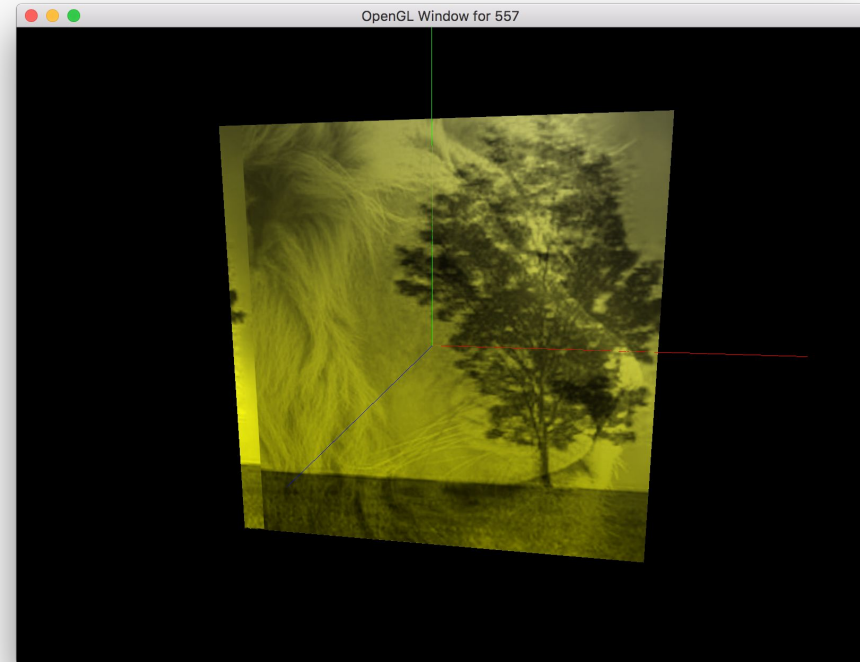
Blending Technique (Multiply)

- Take pixel value from each texture and multiply together
 - $\text{tex1} * \text{tex2} * \text{tex3}$
- Simple blending technique
- Darker blending than addition
- Some more vivid colors



Blending Technique (specific channels)

- Take pixel value from each texture and add together, multiply with scaled background color
 - $0.3 * \text{pass_Color} * (\text{tex1.r} + \text{tex2.g} + \text{tex3.b})$
- Background color very apparent
- Actual image/texture colors not very apparent
- Grayscale with background color



Challenges

- Main challenge was getting a C++ texture object set up to accept and pass three textures at once
 - Started by using existing classes from course git repo, and used a multi texture plus a single texture, but didn't have a way to properly blend them
 - Even with this solution, had crashes due to moving code into methods
 - Created a new class that extends GLTextureBase that takes in 3 textures