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Project 5: An Image Manipulation "Toolbox"
[Video Link](#)

Description: 2 images of the same size are loaded as textures. These textures are applied to a quad. Using the `uBlend` variable, a `mix()` function handles how much of each image is applied. The `st` texture lookup locations are modified to create a fisheye, whirl, and mosaic effect, in addition to blending. In addition to the base functionality specified in the project outline, a brightness slider is added by mixing black with the RGB values, a contrast slider is added utilizing the luminance values shown in the notes, and a checkbox to make the image negative is added by taking `vec3(1) - rgb`. Another checkbox is added to apply the mosaic before or after the other effects.

For whirl and fisheye, where the texture lookups would be outside the range `[0, 1]`, the pixel is painted black.

Screen Shots:



Image 1



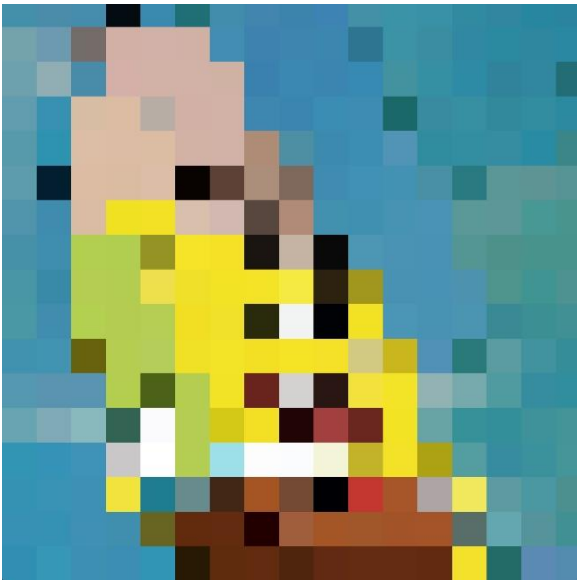
Image 2



Fisheye



Whirl



Mosaic



Blend



Pre-Mosaic, Blend, Fisheye, Swirl



Blend, Fisheye, Swirl, Post-Mosaic



Blend, Fisheye, Swirl, Post-Mosaic, Negative



High brightness



High contrast