Assignment #3

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CS4187: Computer Vision for Interactivity

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1. Explanation to the interactive stamp

In the coding of the interactive stamp, I had a couple of challenges which emerged as a result of the task. These challenges included extracting the shape of the flower, making sure the stamp of the flower would be on top of the background, only allowing the stamp to work within the confines of the background, and making the stamp work without creating a trail of the shape. After addressing all of these issues, my program was able to run as shown in the example.

For extracting the shape, I decided to do something similar to the first assignment. I used simpleColorKeyExample in the example folder as a guide for how to extract the flower, changing some of the parameters for the red, green, and blue channel. I then saved the extracted image as "keyed", similar to the example. Additionally, instead of setting the color to be black, I made the image have an alpha dimension with the use of OF_IMAGE_COLOR_ALPHA, and then was able to adjust the transparency of the image to be transparent.

While working with the cut out shape, which I will refer to as the stamp, I ran into the issue of it appearing behind the background. After looking into some solutions, I figured that the

depth was the issue. In order to fix this problem, I used GL_ALWAYS to set the stamp's depth to always appear above the background's depth.

When trying to get the shape to stay "stamped", I ran into the issue that it would immediately disappear. This was due to the fact that the background was refreshing and the drawing of the stamp occurred within the same container. If the background refreshing was turned off, a trail of stamped images would occur. I was able to make the program stamp one stamp, however after the first one, it would not stamp anymore. In order to fix this, I created a ofFBO which acts as another framebuffer/renderer for the stamped image. This also ended up fixing the problem of the image stamping outside of the background when the allocation of space was made to be the same as the background image. After fixing this issue, the program ran as intended.