

## Final Proposal for 604

**Topics:** Picture warping interactively (The full point is 10. If the full point is 20, then every +1 change to +2)

### **Description:**

In this project, I want to make a project similar to drawing board in windows system. It can change the picture's shape follow this way:

Press F1 button it is the normal mode

1. Drag the four point of the four picture.
2. Drag the whole picture and you can translate the picture.
3. Drag the line of the picture, but just scale the picture.

Press F2 button it will become the detail mode

In this mode, you will get a magnifying glass to see the detail of the picture. That means some part of the picture will be magnified (but will not beyond the board of the Magnifying glass).

Of course, each picture could be reading and witting correctly.

### **Rubric for Grading:**

#### **I. Reading, Writing, and Display**

+1 Code correctly reads in and writes out the warped image if an second name is provided

+1 Code correctly displays the warped image as user want to be using mouse.

#### **II. Warping**

+1 Code correctly computes the warped image size and show it through screen

+1 Code correctly computes the aggregated matrix and makes use of the inverse map to locate the right color values for the warped image

+1 Correctly warp the image

+1 Correctly translate the image is 't' button is touched and can be moved directly if mouse click on the screen

+1 Correctly scale the map if 'l' is touched and scale it if any line is touched.

+1 The magnifying glass function should be achieve correctly if F2 is pressed.

#### **III. Clarity**

+1 Good code structure and commenting as outlined above.

+1 Documentation and README.

All these are done then receive 80% of the point

Extra:

Try to use fish eye magnified function to achieve the goal (20% of the point)