CS 3451 Fall 2013 Project 11-12 - Image Manipulation Tanner Smith and Ryan Ashcraft

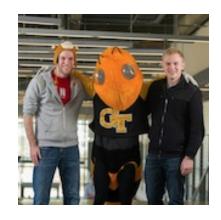
Project Description

The project was to gain familiarity the curves and mapping a texture to a curve.

Implemented Features

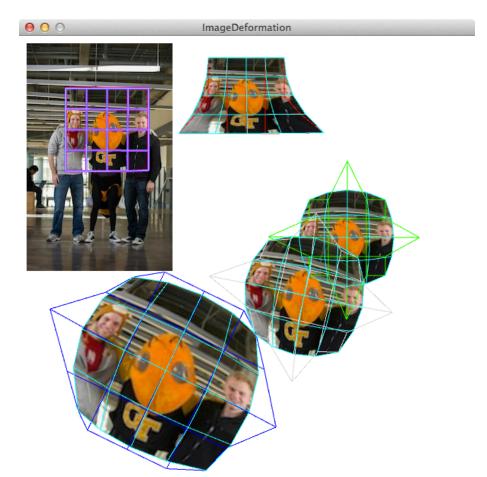
Project works as expected.

Brief code snippet showing the logic for performing a refine on the points.



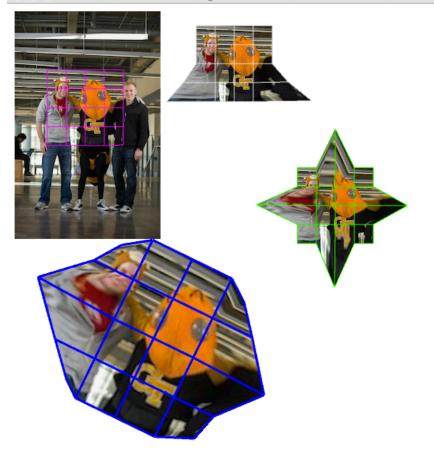
```
Point[][] horizontals = new Point[samplingRate]
[grid.lines];
   for (int row = 0; row < grid.lines; row++) {</pre>
      for (int s = 0; s < samplingRate; s++) {</pre>
        Point[] pts = grid.points[row];
        float t = s * (1f / (samplingRate - 1));
        Point point = bezierPoint(pts, t);
        horizontals[s][row] = point;
     }
   }
   Point[][] verticals = new Point[samplingRate]
[samplingRate];
   for (int col = 0; col < samplingRate; col++) {</pre>
      for (int s = 0; s < samplingRate; s++) {
        Point[] pts = horizontals[col];
        float t = s * (1f / (samplingRate - 1));
        Point point = bezierPoint(pts, t);
        verticals[s][col] = point;
      }
   }
   this.lines = verticals.length;
   points = verticals;
```

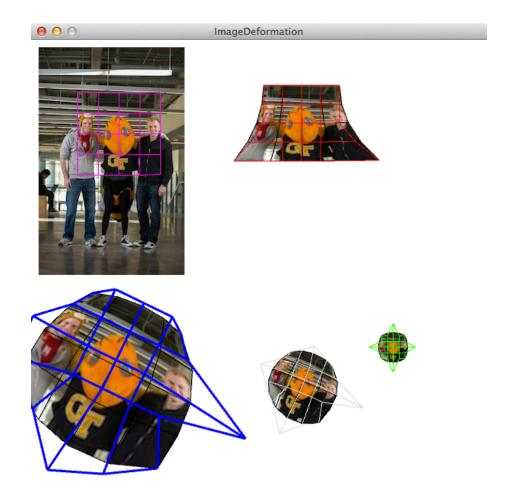
Screenshots





ImageDeformation





Unimplemented Features

None.

Extra Credit

Created a recursive n-point method for creating a bezier point.