Sam Pickell

March 28, 2020

COMP 5460

<div align="center">Programming Assignment 3 Report</div>

I was able to mostly finish assignment 3. This took a considerable amount of time, considering we could only use the HTML Canvas and JavaScript. All the required shapes can be made, and shapes can be moved and resized. Clicking on any of the shape buttons generates a new shape, so shapes can be reset or changed in this way. The problem comes with rotation, since the Canvas rotate function rotates the whole canvas about the origin (top left corner of the canvas). I tried changing the point of rotation to be the center of the shape, but all it did was change the location that the canvas would rotate around, rather than rotate the shape. As it stands now, rotation is still buggy - it will rotate around the origin of the canvas (top left corner), but it leaves behind images and doesn't properly clear them. Rotation seems to work with things built-in to canvas like "fillRect", but since shapes like "triangle" and "polygon" are built drawing lines and aren't themselves objects, they can't be properly rotated. But, other than rotation, everything else is working. Things don't work properly after rotation is used (the canvas breaks), so please consider testing rotation after everything else has been tested.