

Lab - Canvas

Introduction

This lab will have you do some basic drawing with the HTML canvas API. Everything in this lab should be familiar based on our class demos.

Objective

Use the provided HTML base file to create a canvas drawing. There is an attached Lab-canvas.png image to show what your lab should look like. For graduate students, there is an attached Grad-Lab-canvas.mov to show the animation features you need to accomplish.

Requirements

- All HTML tags and page structure should be **HTML5** compliant
- Use the attached lab_canvas_template.html file. Rename to YourUsername_lab_canvas.html
- JavaScript drawing code should be embedded in html page where provided
- You should not have to edit the HTML file other than add JavaScript for drawing.
- Only use **one** canvas tag. All drawing goes on the same canvas, not layered canvases.
- **Do not use any libraries for this lab at all.** No jQuery, No EaselJS, No canvas library
- General Layout, shape position, shape colors, shape size should be very similar to the provided mockup. Very slight variation is ok.
- Canvas is 600px x 450px
- The canvas is drawn or the animation starts when the Draw Canvas button is pressed, not when the page loads.
- Canvas should have a linear gradient fill in the background (drawn in the canvas not css in the html) from white to black.
- The title text is 32px in sans-serif font
- The name and email text is 14px in sans-serif font
- Use your best judgment for line widths and styles to make the canvas look similar.
- I used a quadratic curve for the dotted line.
- School of Applied Technology logo is included but it is not the correct size. You will need to scale the file or use the drawing commands that let you scale the image as you draw it to the canvas.
- Colors used were:
 - Blue = #0000C8
 - Orange = #FFA500
 - Green = #00C800
 - Red = #C80000

Graduate Additional Requirements

If you are involved in **any section of 565** you need to complete the additional requirements listed here.

Animate the middle arc and the rectangle as shown in the Grad-Lab-canvas.mov.

README File

Not Required for this Lab

Due Date / Late Policy

This assignment is due **Saturday November 30, 2019 6:25 PM Chicago Time. No Extensions.**

We will try to discuss in class on the 3rd so they will not be accepted after class starts that night.

Submission Guidelines

You must **upload your submission, to the blackboard assignment** by the due date. The submission must be in the following format and structure. If you do not submit your assignment exactly as specified, you will receive an immediate 5% deduction.

Submission Format Specification:

YourUsername_lab_canvas.zip

Zip includes your HTML file and the Logo image together in the zip file and any other files you may want to submit.

Hint

<http://www.lostdecadegames.com/understanding-canvas-rotation/>