

Lab 6_1 [20 points] Canvas Basics

Objectives

- Practice Drawing Lines on Canvas
- Practice Drawing Shapes on Canvas
- Practice Drawing with transforming the coordinate system

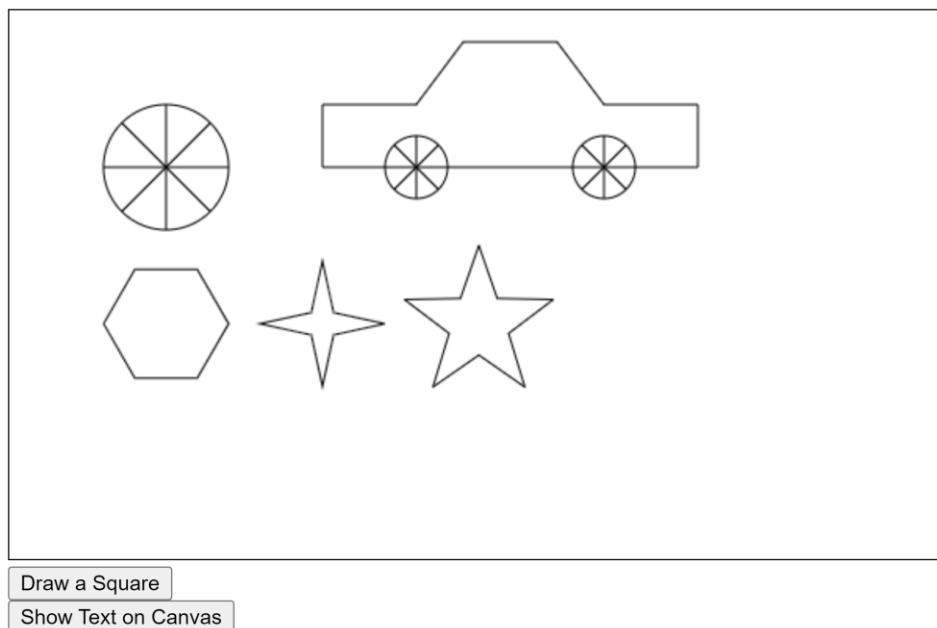
What to do

Please follow the steps:

1. [2 points] Create a html page with a Canvas and two buttons. The dimension of the Canvas is width: 600 and height: 350. One button is to draw a filled square. One button is to draw text on the Canvas. Please put the buttons in different line.
2. Create JavaScript and Draw the following shape on Canvas with each shape as a function. The exact dimension and position can be determined by the students as long as the shapes look appropriate.
 - a. [3 points] A wheel
 - b. [3 points] A simplified car with two wheels visible
 - c. [2 points] A hexagon
 - d. [2 points] A four-point star
 - e. [2 points] A pentagram

Call the functions to draw the shapes on Canvas

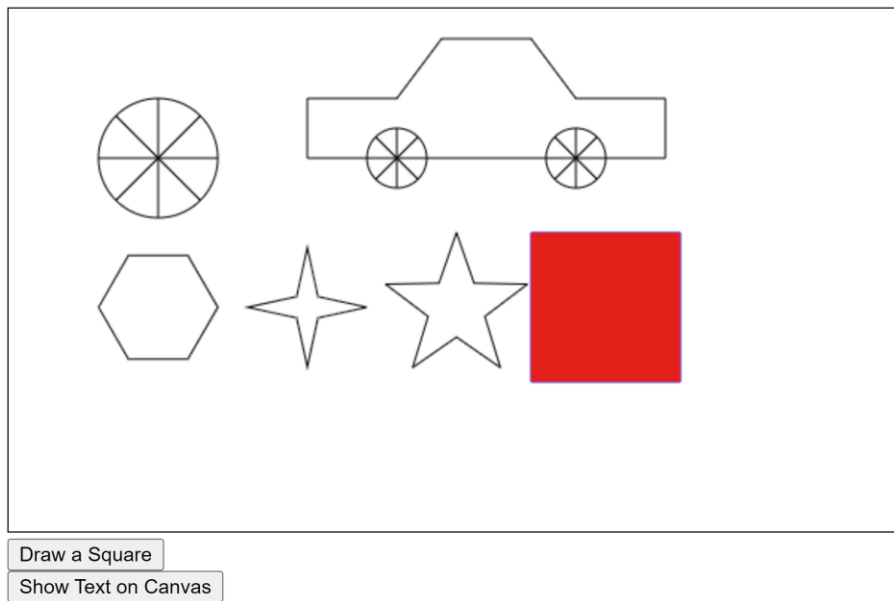
A snapshot of sample run is as follows:



3. [3 points] Complete the following task: When click the "Draw a Square" button, a

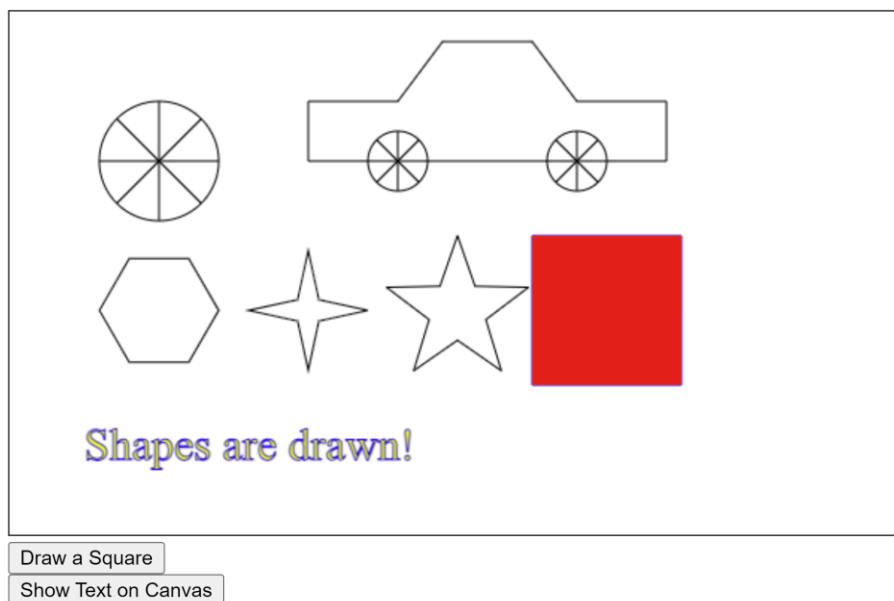
square with blue outline and red filling will be drawn.

A snapshot of sample run is as follows:



4. [3 points] Complete the following task: When click the "Show Text on Canvas" button, text with content of "Shapes are drawn!" with yellow filling and blue outline will be draw. The font size is 30px and the font family is serif.

A snapshot of sample run is as follows:



The shape and location should be similar to what is shown in the sample run but **NOT** required to be exactly the same. The method `rotate()` can be used to create the shapes.

Submission:

Zip the HTML and JavaScript files and submit to Brightspace.