Day 3 Lab Assignments

1- Use Svg to draw simple face (use circles) and handle when mouse over on each part (eyes, mouse, and nose) its background color changes, and back to its original color on mouse over.

    a. Instead of drawing face, search for SVG image for human face or human body and redo the same assignment.

    b. When moving over any organ, show tooltip or a floating div with the organ name.

2- Use canvas, on a page on its load draw the given sad face on a canvas (Draw image), on mouse is down change the image to smiley face and scale its width, and on mouse is up it backs to sad face and normal scale.

3- When left click and drag, make the mouse draw on the canvas, and erase when right click and drag (Use Canvas).   => Bonus

4- Complete any missing assignments from previous days.

Bonus Assignments:

1- Make an analog clock using Canvas.

2- Follow the following tutorial, and create the explained game: https://www.w3schools.com/graphics/game_intro.asp .

3- Create some SVG drawings (Circle, rectangle, square...), in the left side of page as a toolbox, and beside them make a canvas and when drag a shape and drop it on the canvas, draw it in the canvas.

4- Make animated bar chart (bars or lines or pie chart) using canvas (changed values every interval).

5- Create an animated button (effects on background) using SVG.

6- Draw smiley face that converted to sad face when clicked (using drawings not images, in a Canvas).

Enrich your Skills (big bouns!):

1- Search for **D3.js library**, and make a demo on it.

2- Search for **SVG.js library**, and make a demo on it.

3- Search for **three.js Library**, and make a demo on it.

4- Follow the following examples for:
   - https://css-tricks.com/click-svg-to-focus/
   - https://codepen.io/miguelra/pen/NAjNYA
   - https://codepen.io/manabox/pen/BvmCE

5- Follow the following tutorials to make interactive SVG clickable maps:
   - http://www.creativebloq.com/netmag/create-responsive-svg-image-maps-51411831
   - https://www.jonathan-petitcolas.com/2013/07/18/create-clickable-svg-france-regions-map.html
   - JQuery library for SVG maps: https://jqvmap.com

6- Follow the following SVG examples, and redo them by yourself:
   - https://www.w3schools.com/graphics/tryit.asp?filename=trysvg_polygon3
   - https://www.w3schools.com/graphics/tryit.asp?filename=trysvg_path
   - https://www.w3schools.com/graphics/tryit.asp?filename=trysvg_text
   - https://www.w3schools.com/graphics/tryit.asp?filename=trysvg_text5
   - https://www.w3schools.com/graphics/tryit.asp?filename=trysvg_animatemotion
   - https://www.w3schools.com/graphics/tryit.asp?filename=trysvg_animatemotion2

7- Review the following Google Maps API tutorial, and apply a demo on it: https://www.w3schools.com/graphics/google_maps_intro.asp

8- Review the following Canvas demos, and redo it by yourself: http://corehtml5canvas.com/code-live

   https://developer.mozilla.org/en-US/docs/Games/Tutorials/2D_Breakout_game_pure_JavaScript

9- Review the following canvas demo, and redo it by yourself: https://www.w3schools.com/graphics/tryit.asp?filename=trycanvas_clock_start

https://developer.mozilla.org/en-US/docs/Games/Tutorials/2D_Breakout_game_pure_JavaScript

‹Thank›YOU ‹/Thank›