NM2207

Week 4

Session 04 Assignment

Overview of what we'll do today:

- CSS for "layout" design, using the DOM from JavaScript!
- Practice interacting with the DOM through JavaScript code
- Variable assignment

Before attempting the assignment, you are expected to have watched and coded along with the Lecture videos. While the Challenges due on Thursday in class, the assignments are due to be completed at the end of MONDAY each week and will be awarded points based on completion. Partially completed assignments will be given partial credit. If your submission is likely to be late, please inform your tutor, and you may lose points. Submitting the assignment one day late loses you half the points.

Part 1: What's in the box

- 1. There is already one slider called mySlider in colorSpec. Use it to change the border opacity of colorDisplay as you move the slider.
- 2. There is already a text field and a button in colorSpec. Use it to input a hex value that changes the color of colorDisplay when you click the button

Part 2: Add a new function

- 3. Define a function in your main.js file, and name it "hslString". Define it to take 3 arguments, and use the arguments in the function to construct the hsl string we use to style colors.
 - Have your function <u>return</u> the string you create. (Test the function by calling it and printing the string that the function returns out to the console).

Part 3: Add new controls

- 4. Add 3 sliders to the "colorSpec" panel, one for each of hue, saturation, and lightness (setting their minimum and maximum to cover the whole range of possible h,s, and I values appropriately). To do this, create variables for them and get them from the DOM using the id's you gave them in the html document.
- 5. Create a function that will update the background color of colorDisplay element when any of the sliders change with the hsl string you get from your function. Note: all the "onchange" event handlers should point to the same function, and you can access all of the slider values from this function.
- 6. Label each of the sliders using 'label' elements on the html page. Give these label elements a class and use the class name to set their font parameters in CSS to a size that looks nice on the webpage.
- 7. Add a new button to the colorSpec element and add a click event listener to it by using the addEventListener method (not the onclick event listener!) Use the steps here: https://www.w3schools.com/jsref/met element addeventlistener.asp