Lab 3 - JavaScript DOM Coin Flipper

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Section: 021

Introduction:

- This lab acts as an exercise in using JavaScript, HTML, and CSS to create a dynamic webpage whose content changes depending on the input entered by the user. Specifically JavaScript is used to access and manipulate the DOM so that certain HTML elements can be displayed or hidden depending on the input entered by the user. In addition, the events are used to trigger JavaScript functions so that the webpage is responsive to users' interaction with HTML elements. Overall, these elements are combined in order to build on Lab 2's implementation of a coin flipper application that executes coin flips for a user defined number of coins and number of flips. The key difference with Lab 2 is that in Lab 3, input is collected via HTML elements and the output histogram is displayed with HTML elements as opposed to in the console.

Summary:

- One of my primary lessons from this lab was how to access and manipulate the DOM. I learned that you could access the properties of HTML elements in JavaScript by either referencing a unique ID, or an elements class, or even by referencing the elements type which would return and array of those elements. Of the many things that can be manipulated using the DOM, in this Lab I found the ability to change the inner HTML and the visibility of HTML elements to be the most useful. In addition, I learned how to use the *input* HTML element which allows users to enter their own input which using the DOM can then be accessed in JavaScript functions. Also, I learned that using Inline-Block as an HTML element's *display* option allowed for the remaining elements that appear in that row of elements to remain on the same line. Lastly, I learned that accessing a HTML element using the class of the element or its type results in an array of elements that you must comb through to find the element that you're searching for.

Suggestions:

1. It would have been nice to see a few more screenshots of what the Histogram should have looked like with different numbers of coins flipped. This is because I dynamically hid rows of the histogram according to the number of coins flipped and this resulted in my execution time to be displayed with a large gap between itself and the histogram in some situations, which made me doubt my implementation.
2. It would be nice if the instructions for the lab could be provided in a PDF so that students can check off requirements as they go.

What I enjoyed:

1. I appreciated the stub files provided because it allows me to focus and work on the concepts outlined in the learning objectives as opposed to taking more time working on the tedious details of creating all the required files.
2. I appreciated the rubric with longer descriptions as well, it helps remove ambiguity from my understand of how my submission will be graded.

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3. I enjoy all of the hyperlinks provided in the lab write up, there's great extra information provided that is useful for the lab and it makes navigating to required resources easier.