**Week 10 Research Assignment**

**Prompts chosen:** “List and explain the JavaScript methods that enable us to select elements from the DOM.” And “What is your favorite thing you learned this week?”

There are multiple JavaScript methods we can use to select elements in the DOM which include: finding elements by their ID, by their tag name, by their class name, by CSS Selectors and by HTML object collections.

Finding an element by its ID is the easiest method to use. An example is: with the id=”example” let element = document.getElementById(“example”). If the element is found, then the method will return the element(s) as an object. If it is not found, then the element will contain null.

Finding elements by Tag Name refers to the HTML tags (<tag >, </tag>). For example, if you have multiple <p> elements that you want to identify this would be the way to do it: document.getElementByTagName(“p”).

Finding elements by their Class Name is great if you have identified multiple elements as being part of a particular class (class=”example”). To do so you would use: document.getElementsByClassName(“example”).

Finding elements by CSS Selectors such as id, class names, types, attributes, values of attributes etc. To do this you would use the querySelectorAll(). An example of returning a list of all <h1> elements that below to the class=”example” would be: const x = document.querySelectorAll(“h1.example”);

Lastly, finding elements by HTML Object Collections. In this example from W3 Schools, the form element is found with id=”frm1” and all element values are displayed: const x = document.forms[“frm1”];

Let text = “ “;

For (let i=0; I < x.length; i++) {

Text +=x.elements[i].value + “<br>”;

}

Document.getElementById(“demo).innerHTML = text;

My favorite thing that I learned this week was starting to see the integration between HTML and JavaScript. These last few weeks we have been learning about HTML, CSS and Bootstrap, so it has been interesting to see them interact with JavaScript this week and see how they work together. I can’t wait to keep learning and figuring out how to combine all my learning into one project!

**References**

*JavaScript HTML dom elements*. JavaScript DOM Elements. (n.d.). Retrieved December 13, 2022, from <https://www.w3schools.com/js/js_htmldom_elements.asp>