

# Tutorial 3

For this tutorial we'll look at some basic JavaScript. Take a look at the JavaScript code in the link below for basic examples of:

- `getElementsByTagName`, `getElementById`, `querySelector`
- `parentNode`, `childNodes`, `children`, `firstChild`, `lastChild`
- `getAttribute`, `setAttribute`, `classList`
- `createElement`, `createTextNode`, `appendChild`
- changing style properties,
- load and click event handlers

<https://github.com/uwi-info2180/info2180-tutorial3>

Download (or clone the above repository with Git) to your own computer and open the `index.html` file in your web browser. Experiment with the page by commenting (and uncommenting) some of the code in the `app.js` file so you can see the different outputs or the effect it has on the page.

**NOTE:** The Console will be helpful when experimenting with the code at the link above in your browser.

## Discussion Questions

- JavaScript primarily runs on the client-side in your web browser. Can you also use it on the server-side? If so, what allows for this?
- What are the different ways of adding JavaScript to your web pages?
- What are the 3 ways of defining a variable in JavaScript?
- What is the Console and how is helpful in JavaScript development?

- Why would you want to use **console.log()** instead of **alert()** during development?
- In what instances could you get the value of **NaN**?
- What is the Document Object Model (DOM)?
- What are some functions you know of that allow you to find elements or manipulate elements in the DOM?
- What is the difference between **children** property and **childNodes** property? **Ans.** `childNodes` contain all nodes, including text nodes (Note: Any whitespace between elements will also create a text node) and comment nodes, while `children` only contains element nodes.
- What are different JavaScript events that you know of?
- What are 3 ways of attaching an event?