Cheat Sheet – DOM

What is the DOM?

The DOM is the abbreviation for Document Object Model. Put in simple words, it's what your HTML code gets translated to in the browser. It holds all your HTML elements and their properties.

JavaScript can natively interact with the DOM to query it, manipulate it or listen to events.

If you want to dive deeper into it, here's a great resource: https://developer.mozilla.org/en-US/docs/Web/API/Document_Object_Model/Introduction

Window Object

The Window Object (remember: The global scope) represents a window holding a DOM. In a tabbed browser, each tab counts as a window.

Your code by default runs in this scope and therefore you have access to all the window methods, properties and events. This includes the DOM, which represents your web page.

Learn more here: https://developer.mozilla.org/en-US/docs/Web/API/Window

Location Object

The location object is a property of both the Document Object and the Window Object (access it on the Window Object though). It represents the current location of the page and therefore allows you to retrieve information about host, URL etc.

Learn more here: https://www.google.de/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=js%20location%20object

Document Object

The Document Object (a property of the Window Object) represents the actual webpage.
Through this object, you're able to access the DOM via JavaScript. This means, that you can traverse through the DOM, query it, listen to events and so on.

You can think of this as a way to interact with your HTML code after it has been loaded in the browser.
Of course this is how all those fancy live-updating webpages are created: The DOM is manipulate through the Document Object.

Learn more here:
https://developer.mozilla.org/en/docs/Web/API/Document

DOM/ HTML Interaction

There are tons of ways to interact with the DOM via JavaScript.
Often times you'll need to select certain Nodes ("HTML Elements") and traverse through the DOM or set/ get some properties.

You'll find an extensive list of available methods and properties in this article: https://developer.mozilla.org/en/docs/Web/API/Document

Basically you may select Nodes either as properties of the Document Object like this:

```
var anElement = window.document.children[1] // select 2nd child element
```

Or you use a method to search for certain elements. For example for elements with a class name:

```
var important = document.getElementsByClassName('important');
```

Similar methods exist for finding by ID, Tag Name etc.

A very convenient way of querying, is to use the query methods:

```
console.log(document.querySelector('.class')); // first element
console.log(document.querySelectorAll('.class')); // all elements
```

System Dialogs

System Dialogs can also be controlled via JavaScript. Using them does not provide the best user experience though, there are better ways to open "popups" (modals) nowadays.

But still, the two important dialogs are alert() and confirm().
alert() simply offers a window which shows a messages and only offers an "Ok" button.

confirm() also shows a message but allows the user to choose between “Yes” and “No”. It will then return true or false, depending on the user’s choice.