INTRO TO FRONTEND JS
CHEATSHEET

Intro to JavaScript: Modifying and creating HTML DOM elements with JavaScript

Browser Inspector

Tool to inspect underlying HTML/CSS of an HTML page as well as view the console. Works for Chrome and Firefox.

Windows/Linux
Ctrl + Shift + I

Mac
Command + Shift + I

Including JS

To include a JavaScript file on an HTML page, include with HTML script tags referencing the source location. Include after body content but within HTML tags.

```
<script type="text/javascript" src="/PATH/TO/
SCRIPT.js"></script>
```

Console Log

Print things to console to help debug. Access console on web page by opening inspector in a browser.

```
console.log("hello world");
```

Declaring Variables

Initialize a new variable. Use let for variables you may reassign. Constants should never be reassigned.

```
let x;
```

Declares the variable x without assigning.

```
let y = "hello";
```

Declares the variable y and assigns to a string.

```
const z = "world";
```

Declares the constant z and assigns to a string.

Declaring Functions

Functions can be declared with a name and accept parameters. Anonymous functions can also be declared as callbacks.

```
function add(x, y){
    return (x + y);
}
```

```
functionWithCallback(function() {
    return "anonymous";
});
```

An anonymous function declared as a callback for another function.

JavaScript Objects

Otherwise known as a JSON object, these objects have attributes with values that can be assigned.

```
let user = {
    name: "Aaron Sipser"
};
```

```
console.log(user.name);
```

Attributes of a JSON object can be accessed by dot notation.

```
console.log(user["name"]);
```

Attributes of a JSON object can be accessed with brackets.

Selecting DOM Elements

Select existing DOM elements on the HTML file the script is included in by element id.

```
let DOM = document.getElementById("elementId");
```

Select/Modify DOM Element Attributes

Select DOM element's attributes such as inner text and classes. Some of the following examples refer to a variable DOM which refers to a DOM element.

```js
document.getElementById("element Id").innerText;
```

Select element by id and select attribute in one line.

```js
DOM.innerText = "welcome home, boss";
```

This changes the text within the element's tags. Only accepts strings.

```js
DOM.innerHTML = "<p>welcome home, boss</p>";
```

This changes the HTML between the element's tags. Will accept and parse HTML tags.

```js
DOM.className = "class-one class-two";
```

Sets and overwrites the class of the element to classes: "class-one" and "class-two".

```js
DOM.id = "element-id";
```

Sets the id of the element to "element-id".

```js
DOM.setAttribute("id", "element-id");
```

Sets the id of the element to "element-id".

Event Listeners

Add event listeners to HTML DOM elements.

```js
DOM.addEventListener("click", function() {
    console.log("clicked!");
});
```

Here DOM is a variable that refers to a DOM element and an anonymous function is triggered when the element is clicked.

Create DOM Element

Create a new DOM element with JavaScript. Don't forget to add the element to the page.

```js
let DOM = document.createElement("div");
```

Creates a new <div></div> element.

Add DOM Element to Page

Created DOM elements must be explicitly added to a page.

```js
let parent = document.getElementById("parent");
let DOM = document.createElement("div");

parent.appendChild(DOM);
```

Selects the element with the id "parent". Creates a new <div></div> element and adds it to the parent element.

Tips

Different DOM elements have different attributes. It's highly recommended that you look up the attributes of the element you are trying to access.

For example, input tags have value attributes and not innerText.