Hands On: Adding Actions to the Web Page with JavaScript

In this lesson, you will get a little flavor of the JavaScript programming language. Let's begin!

JavaScript started in **1996**. It is a scripting language that browsers can execute while a web page is being loaded or displayed in the browser.

Even its developer, ***Brendan Eich***, couldn't have predicted it would become the de-facto assembly of the web.

Today there is virtually no web page that works without a JavaScript code snippet.

In *this section*, you will understand the importance of this programming language without learning the nitty-gritty features.

To get acquainted with JavaScript, in the upcoming exercise you will add a click action to `<h1>` elements so that clicking them toggles the background and text colors.

EXERCISE 1-7: Programming the `onClick` action with JavaScript

To carry out this task, follow these steps:

Step 1:

In the code editor, delete the `h1:hover` definition from **style.css**.

Add a new definition, as highlighted in the following code, to the CSS file, which represents the style of a clicked `<h1>` element:

```css
style.css

body {
  font-family: Verdana, Arial, sans-serif;
}
h1 {
  color: white;
  background-color: navy;
}
h1.clicked {
  color: navy;
  background-color: lightgray;
}
h2 {
  color: green;
  margin-left: 40px;
  border-bottom: 4px dotted black;
}
```

Step 2:

In the **index.html** file, add the following JavaScript code snippet enclosed within the `<script>` tags right after the last `<h2>` element, just before the closing `</body>` tag:

index.html

```
<script>
  function handleClick(node) {
    var value = node.getAttribute('class') || '';
    value = value === '' ? 'clicked' : '';
    node.setAttribute('class', value);
  }
</script>
```

Step 3:

Add the `onclick="handleClick(this)"` attribute to each `<h1>` element. After these changes, the **index.html** file should look like this:

index.html

```
<!DOCTYPE html>
<html>
<head>
  <title>Table of Contents</title>
  <link href="style.css" rel="stylesheet" />
</head>
<body>
  <h1 onclick="handleClick(this)">
    Introduction
  </h1>
  <h2>Whom this book is for?</h2>
  <h2>Errata</h2>
  <h1 onclick="handleClick(this)">
    Chapter 1
  </h1>
  <h2>What you will learn in this chapter</h2>
  <h2>Summary</h2>
  <h1 onclick="handleClick(this)">
    Chapter 2
  </h1>
  <h2>Recap</h2>
  <h2>Conclusion</h2>

  <script>
    function handleClick(node) {
      var value = node.getAttribute('class') || '';
      value = value === '' ? 'clicked' : '';
      node.setAttribute('class', value);
    }
```

```
    </script>
  </body>
</html>
```

LIVE coding widget

Use our live coding widget below to write your code. As always, we encourage you to type out the code to get better practice.

To get the code up and running simply click the `Run` button below, and see the output in action, both in the output tab and the host link provided below.

If you make any changes to your code, the live-server will detect these. Just press run as there is no need to restart the server!

```
<!-- Hi, I am a comment in HTML. -->
<!-- Add your code here -->
```

Step 4:

Display the page, and then click several times on any of the first-level headings. You'll experience that both the text and background colors change.

This is also demonstrated in the non-live-server output tab below:

Output
JavaScript
HTML
CSS (SCSS)

Introduction

Chapter 1

Chapter 2

In the *next lesson*, we'll understand the workings of the above exercise.

See you there! :)