JAVASCRIPT
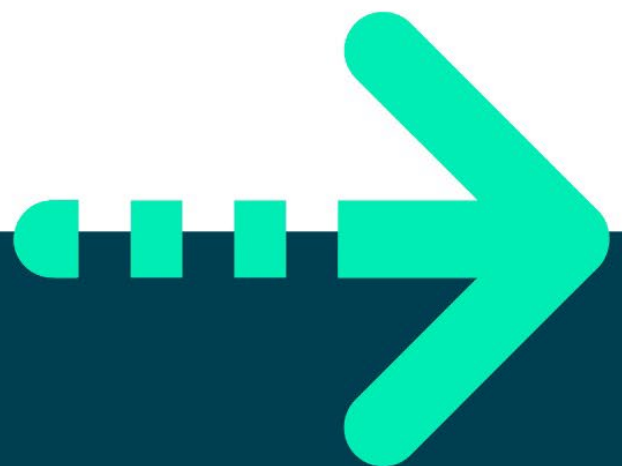
Introduction: What is JavaScript?

Objectives

In this exercise you embed JavaScript in HTML pages.

Reference material

This exercise is based on material from the **Introduction** chapter.

Overview

- In this exercise you will experiment with:
  - Writing a simple script for a page.
  - Referencing an external script file.

Estimated duration

The estimated duration for this lab is 20 minutes.

Completed solution

There is a completed solution for this lab.

Step by step instructions

1. Create a new website in Code, or open an existing website you've been working on.

   - To create a new website, simply create a new folder, right-click on it, and select **Open with Code**.

2. Create a new HTML page. Give it a sensible name (e.g., **js-labs.html**).

3. Embed and use the following JavaScript in the page:

```html
<!DOCTYPE html>
<html>
<head>
    <title></title>
<meta charset="utf-8" />
    <script type="text/javascript">
        alert('Hello World!');
    </script>
</head>
<body>
</body>
</html>
```

4. Press **Alt-B** to view this page in a browser.

5. Now delete the **type** attribute from the **<script>** element like:

```
<!DOCTYPE html>
<html>
<head>
    <title></title>
<meta charset="utf-8" />
    <script>
        alert('Hello World!');
    </script>
```

6. Press **Alt-B** to view this page in a browser.
   There should be no change to the output.

Other places where JavaScript may appear

7. We'll come across events in later chapters but just to give you a heads up, let's investigate a couple of these and see if you can interpret what events are.

8. Place the following code in the **<body>** section like:

```
</head>
<body onload="alert('Loading!')">
</body>
</html>
```

9. Run and test your code. Did you notice which alert statement ran first?

One more event code

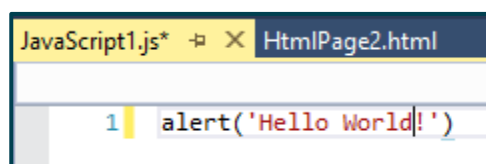10. Place a button on your page and type some code for when it is clicked:

```
<body onload="alert('Loading!')">

<button onclick="confirm('Are you sure?')">Delete</button>
</body>
```

11. Run and test your code. Did you notice which alert statement ran first?

External JavaScript

12. Add a file to your website, and call **it javascripts.js.**

13. Write the following simple code in the new JavaScript file

14. Create a new HTML page with a sensible name.

15. Set a reference in the page like:

```html
<!DOCTYPE html>
<html>
<head>
    <title></title>
    <meta charset="utf-8" />
    <script src="javascript.js"></script>
</head>
<body>

</body>
</html>
```

16. Run and test your code.

17. Put scripts in their own folder. It is good practice to place scripts, images and other resources in their own folder.

    Create a folder called **scripts.** Drag the JavaScript file which you created earlier to the scripts folder.

    Back in your last HTML page, adjust the reference to the JavaScript file like:

```html
<head>
    <title></title>
  <meta charset="utf-8" />
    <script src="scripts/JavaScript.js"></script>
</head>
```

18. Run and test your code.