

JavaScript M1-2 Notes

JavaScript is one of the most popular programming languages on earth and is used to add interactivity to webpages, process data, as well as create various applications (mobile apps, desktop apps, games, and more)

Learning the fundamentals of a language will enable you to create the program you desire, whether client-side or server-side

Let's start with adding JavaScript to a webpage.

JavaScript on the web lives inside the HTML document.

In HTML, JavaScript code must be inserted between `<script>` and `</script>` tags:

```
<script>
```

```
...
```

```
</script>
```

JavaScript can be placed in the HTML page's `<body>` and `<head>` sections.

In the example below, we placed it within the `<body>` tag.

Let's use JavaScript to print "Hello World" to the browser.

```
<html>
```

```
  <head> </head>
```

```
  <body>
```

```
    <script>
```

```
      document.write("Hello World!");
```

```
    </script>
```

```
  </body>
```

```
</html>
```

Try It Yourself

The `document.write()` function writes a string into our HTML document. This function can be used to write text, HTML, or both.

You can place any number of scripts in an HTML document.

Typically, the script tag is placed in the head of the HTML document:

```
<html>
```

```
  <head>
```

```
    <script>
```

```
    </script>
```

```
  </head>
```

```
  <body>
```

```
  </body>
```

```
</html>
```

There is also a `<noscript>` tag. Its content will be shown if the client's browser doesn't support JS scripts.

Alternatively, include the JavaScript in the `<body>` tag.

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

It's a good idea to place scripts at the bottom of the `<body>` element.

This can improve page load, because HTML display is not blocked by scripts loading.

The `<script>` tag can take two attributes, `language` and `type`, which specify the script's type:

```
<script language="javascript" type="text/javascript">
</script>
```

The `language` attribute is deprecated, and should not be used.

In the example below, we created an alert box inside the script tag, using the `alert()` function.

```
<html>
  <head>
    <title></title>
    <script type="text/javascript">
      alert("This is an alert box!");
    </script>
  </head>
  <body>
  </body>
</html>
```

Scripts can also be placed in external files.

External scripts are useful and practical when the same code is used in a number of different web pages.

JavaScript files have the file extension `.js`.

Below, we've created a new text file, and called it `demo.js`.