A JavaScript consists of JavaScript statements that are placed within the <script>... </script> HTML tags in a web page.

You can place the <script> tag containing your JavaScript anywhere within you web page but it is preferred way to keep it within the <head> tags.

The <script> tag alert the browser program to begin interpreting all the text between these tags as a script. So simple syntax of your JavaScript will be as follows

|  |
| --- |
| <script ...>  JavaScript code  </script> |

The script tag takes two important attributes:

* **language:** This attribute specifies what scripting language you are using. Typically, its value will be *javascript*. Although recent versions of HTML (and XHTML, its successor) have phased out the use of this attribute.
* **type:** This attribute is what is now recommended to indicate the scripting language in use and its value should be set to *"text/javascript"*.

So your JavaScript segment will look like:

|  |
| --- |
| <script language="javascript" type="text/javascript">  JavaScript code  </script> |

Your First JavaScript Script:

Let us write our class example to print out "Hello World".

|  |
| --- |
| <html>  <body>  <script language="javascript" type="text/javascript">  <!--  document.write("Hello World!")  //-->  </script>  </body>  </html> |

We added an optional HTML comment that surrounds our Javascript code. This is to save our code from a browser that does not support Javascript. The comment ends with a "//-->". Here "//" signifies a comment in Javascript, so we add that to prevent a browser from reading the end of the HTML comment in as a piece of Javascript code.

Next, we call a function *document.write* which writes a string into our HTML document. This function can be used to write text, HTML, or both. So above code will display following result:

|  |
| --- |
| Hello World! |

## **External scripts**

Usually, most JavaScript code is put into an external file, which is attached to HTML, like this:

|  |
| --- |
| <script src="/path/to/script.js"></script> |

The /path/to/script.js is a relative path. If you have a specific location including the full URL that is the absolute path. Relative paths are relative to your current location on the site.

File /path/to/script.js contains JavaScript code, which will execute immediately after browser recieves the file.

This is very handy, because the same file may be used on many pages. If the web-server is configured correctly, the browser will cache the file and will not download it every time.

Here is how it looks like:

|  |  |
| --- | --- |
| 01 | <html> |
| 02 | <head> | |

|  |  |  |
| --- | --- | --- |
| 03 | <script src="/files/tutorial/browser/script/rabbits.js"></script> | |
| 04 | </head> |

|  |  |
| --- | --- |
| 05 |  |
| 06 | <body> | |

|  |  |  |
| --- | --- | --- |
| 07 | <input type="button" onclick="count\_rabbits()" value="Count rabbits!"/> | |
| 08 | </body> |

|  |  |
| --- | --- |
| 09 |  |
| 10 | </html> | |

[Open the code in new window](http://javascript.info/files/tutorial/browser/script/rabbits_ext.html)

Here is the contents of /files/tutorial/browser/script/rabbits.js:

|  |  |
| --- | --- |
| 1 | function count\_rabbits() { |
| 2 | for(var i=1; i<=3; i++) { | |

|  |  |
| --- | --- |
| 3 | // operator + concatenates strings |
| 4 | alert("Rabbit "+i+" out of the hat!") | |

|  |  |  |
| --- | --- | --- |
| 5 | } | |
| 6 | } |