

Javascript

Introduction

What is Javascript

JavaScript was initially created to “make web pages alive”.

The programs in this language are called scripts. They can be written right in a web page’s HTML and run automatically as the page loads.

There are at least three great things about JavaScript:

- Full integration with HTML/CSS.
- Simple things are done simply.
- Supported by all major browsers and enabled by default.

What can in-browser JavaScript do?

For instance, in-browser JavaScript is able to:

- Add new HTML to the page, change the existing content, modify styles.
- React to user actions, run on mouse clicks, pointer movements, key presses.
- Send requests over the network to remote servers, download and upload files (so-called AJAX and COMET technologies).
- Get and set cookies, ask questions to the visitor, show messages.
- Remember the data on the client-side (“local storage”).

First Javascript code

JavaScript programs can be inserted almost anywhere into an HTML document using the `<script>` tag.

```
<!DOCTYPE HTML>
<html>

<body>

  <p>Before the script...</p>

  <script>
    alert( 'Hello, world!' );
  </script>

  <p>...After the script.</p>

</body>

</html>
```

Javascript Events

- JavaScript's interaction with HTML is handled through events that occur when the user or the browser manipulates a page.
- When the page loads, it is called an event. When the user clicks a button, that click too is an event. Other examples include events like pressing any key, closing a window, resizing a window, etc.
- Developers can use these events to execute JavaScript coded responses, which cause buttons to close windows, messages to be displayed to users, data to be validated, and virtually any other type of response imaginable.
- Events are a part of the Document Object Model (DOM) Level 3 and every HTML element contains a set of events which can trigger JavaScript Code.

OnClick Event

This is the most frequently used event type which occurs when a user clicks the left button of his mouse.

```
<html>
  <head>
    <script type = "text/javascript">
      function sayHello() {
        alert("Hello World")
      }
    </script>
  </head>

  <body>
    <p>Click the following button and see result</p>
    <form>
      <input type = "button" onclick = "sayHello()" value = "Say Hello" />
    </form>
  </body>
</html>
```

Onsubmit Event

onsubmit is an event that occurs when you try to submit a form. You can put your form validation against this event type.

The following example shows how to use onsubmit. Here we are calling a **validate()** function before submitting a form data to the webserver. If **validate()** function returns **true**, the form will be submitted, otherwise it will not submit the data.

```
<html>
  <head>
    <script type = "text/javascript">
      function validation() {
        // all validation goes here
        // .....
        return either true or false
      }
    </script>
  </head>
```

Onsubmit Event (continued)

```
<body>
  <form method = "POST" action = "t.cgi" onsubmit = "return validate()">
    .....
    <input type = "submit" value = "Submit" />
  </form>
</body>
</html>
```

Beside this there are lots of javascript event that can be used in javascript file and add interaction by using them. To view all event list go to here : [Javascript Events](#)