**JavaScript**

JavaScript is a dynamic computer programming language. It is lightweight and most commonly used as a part of web pages, whose implementations allow client-side script to interact with the user and make dynamic pages. It is an interpreted programming language with object-oriented capabilities.

JavaScript was first known as **LiveScript,** but Netscape changed its name to JavaScript, possibly because of the excitement being generated by Java. JavaScript made its first appearance in Netscape 2.0 in 1995 with the name **LiveScript**. The general-purpose core of the language has been embedded in Netscape, Internet Explorer, and other web browsers.

The [ECMA-262 Specification](http://www.ecma-international.org/publications/index.html) defined a standard version of the core JavaScript language.

* JavaScript is a lightweight, interpreted programming language.
* Designed for creating network-centric applications.
* Complementary to and integrated with Java.
* Complementary to and integrated with HTML.
* Open and cross-platform

**Advantages of JavaScript**

The merits of using JavaScript are −

* **Less server interaction** − You can validate user input before sending the page off to the server. This saves server traffic, which means less load on your server.
* **Immediate feedback to the visitors** − They don't have to wait for a page reload to see if they have forgotten to enter something.
* **Increased interactivity** − You can create interfaces that react when the user hovers over them with a mouse or activates them via the keyboard.
* **Richer interfaces** − You can use JavaScript to include such items as drag-and-drop components and sliders to give a Rich Interface to your site visitors.

**Limitations of JavaScript**

We cannot treat JavaScript as a full-fledged programming language. It lacks the following important features −

* Client-side JavaScript does not allow the reading or writing of files. This has been kept for security reason.
* JavaScript cannot be used for networking applications because there is no such support available.
* JavaScript doesn't have any multi-threading or multiprocessor capabilities.

**JQUERY**

**JQuery**is an open source JavaScript library that simplifies the interactions between an HTML/CSS document, or more precisely the Document Object Model (DOM), and JavaScript.  
Elaborating the terms, jQuery simplifies HTML document traversing and manipulation, browser event handling, DOM animations, Ajax interactions, and cross-browser JavaScript development.

**Advantages of JQuery:**

* Wide range of plug-ins. JQuery allows developers to create plug-ins on top of the JavaScript library.
* Large development community
* It has a good and comprehensive documentation
* It is a lot more easy to use compared to standard javascript and other javascript libraries.
* JQuery lets users develop Ajax templates with ease, Ajax enables a sleeker interface where actions can be performed on pages without requiring the entire page to be reloaded.
* Being Light weight and a powerful chaining capabilities makes jQuery more strong.

**Disadvantages of JQuery:**

* While JQuery has an impressive library in terms of quantity, depending on how much customization you require on your website, the functionality may be limited thus using raw javascript may be inevitable in some cases.
* The JQuery javascript file is required to run JQuery commands, while the size of this file is relatively small (25-100KB depending on the server), it is still a strain on the client computer and maybe your web server as well if you intend to host the JQuery script on your own web server.