**What is JavaScript?**[**Section**](https://developer.mozilla.org/en-US/docs/Web/JavaScript/About_JavaScript#What_is_JavaScript)

**JavaScript**® (often shortened to **JS**) is a lightweight, interpreted, object-oriented language with [first-class functions](https://en.wikipedia.org/wiki/First-class_function), and is best known as the scripting language for Web pages,  It is a [prototype-based](https://en.wikipedia.org/wiki/Prototype-based_programming), multi-paradigm scripting language that is dynamic, and supports object-oriented, imperative, and functional programming styles.

JavaScript runs on the client side of the web, which can be used to design / program how the web pages behave on the occurrence of an event. JavaScript is an easy to learn and also powerful scripting language, widely used for controlling web page behaviour.

JavaScript can function as both a [procedural](https://en.wikipedia.org/wiki/Procedural_programming) and an [object oriented language](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Introduction_to_Object-Oriented_JavaScript). Objects are created programmatically in JavaScript, by attaching methods and properties to otherwise empty objects **at run time**, as opposed to the syntactic class definitions common in compiled languages like C++ and Java. Once an object has been constructed it can be used as a blueprint (or prototype) for creating similar objects.

## What JavaScript implementations are available?[Section](https://developer.mozilla.org/en-US/docs/Web/JavaScript/About_JavaScript#What_JavaScript_implementations_are_available)

The Mozilla project provides two JavaScript implementations. The first **ever** JavaScript was created by Brendan Eich at Netscape, and has since been updated to conform to ECMA-262 Edition 5 and later versions. This engine, code named [SpiderMonkey](https://developer.mozilla.org/en-US/docs/Mozilla/Projects/SpiderMonkey" \o "en-US/docs/SpiderMonkey), is implemented in C/C++. The [Rhino](https://developer.mozilla.org/en-US/docs/Rhino) engine, created primarily by Norris Boyd (also at Netscape) is a JavaScript implementation written in Java. Like SpiderMonkey, Rhino is ECMA-262 Edition 5 compliant.

**popular JavaScript engines such as:-**

* Google's [V8](https://code.google.com/p/v8/), which is used in the Google Chrome browser and recent versions of Opera browser. This is also the engine used by [Node.js](http://nodejs.org/).
* The [JavaScriptCore](https://www.webkit.org/projects/javascript/index.html" \o "https://www.webkit.org/projects/javascript/index.html) (SquirrelFish/Nitro) used in some WebKit browsers such as Apple Safari.
* [Carakan](http://my.opera.com/ODIN/blog/carakan-faq) in old versions of Opera.
* The [Chakra](http://en.wikipedia.org/wiki/Chakra_%28JScript_engine%29) engine used in Internet Explorer (although the language it implements is formally called "JScript" in order to avoid trademark issues).

**JavaScript resources**[**Section**](https://developer.mozilla.org/en-US/docs/Web/JavaScript/About_JavaScript#JavaScript_resources)

[**SpiderMonkey**](https://developer.mozilla.org/en-US/docs/Mozilla/Projects/SpiderMonkey)

Information specific to Mozilla's implementation of JavaScript in C/C++ engine (aka SpiderMonkey), including how to embed it in applications.

[**Rhino**](https://developer.mozilla.org/en-US/docs/Rhino)

Information specific to the JavaScript implementation written in Java (aka Rhino).

[**Language resources**](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Language_Resources)

Pointers to published JavaScript standards.

[**A re-introduction to JavaScript**](https://developer.mozilla.org/en-US/docs/Web/JavaScript/A_re-introduction_to_JavaScript)

[JavaScript guide](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide) and [JavaScript reference](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference).

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JavaScript is a programming language that adds interactivity to your website (for example: games, responses when buttons are pressed or data entered in forms, dynamic styling, animation).