JavaScript and ECMAScript

Often you will hear the term ECMAScript while working with JavaScript.

[Ecma International](https://www.ecma-international.org/) is a non-profit organization that creates standards for technologies. ECMA International publishes the specification for scripting languages is called 'ECMAScript'. ECMAScript specification defined in [ECMA-262](https://www.ecma-international.org/ecma-262/5.1/) for creating a general-purpose scripting language.

JavaScript implements the [ECMAScript](https://www.tutorialsteacher.com/articles/what-is-ecmascript) standards, which includes features specified in ECMA-262 specification as well as other features which are not based on ECMAScript standards.

There are different editions of ECMAScript. Most browsers have implemented ECMA-262 5.1 edition.

* [ECMA-262 5.1 edition, June 2011](https://262.ecma-international.org/5.1/index.html)
* [ECMA-262, 6th edition, June 2015](https://262.ecma-international.org/6.0/index.html)
* [ECMA-262, 7th edition, June 2016](https://262.ecma-international.org/7.0/index.html)
* [ECMA-262, 8th edition, June 2017](https://262.ecma-international.org/8.0/index.html)
* [ECMA-262, 9th edition, June 2018](https://262.ecma-international.org/9.0/index.html)
* [ECMA-262, 10th edition, June 2019](https://262.ecma-international.org/10.0/index.html)

JavaScript Engine

JavaScript engine interprets, compiles, and executes JavaScript code. It also does memory management, JIT compilation, type system, etc. Different browsers use different JavaScript engines, as listed in the below table.

| Browser | JavaScript Engine |
| --- | --- |
| Edge | [Chromium](https://www.chromium.org/Home) with [Blink](https://www.chromium.org/blink) and [V8](https://v8.dev/) engines |
| Chrome | [V8](https://v8.dev/) |
| FireFox | [SpiderMonkey](https://spidermonkey.dev/) |
| Safari | [Nitro](https://en.wikipedia.org/wiki/WebKit#JavaScriptCore) |