

Difference between Node.js and JavaScript



JavaScript and Node.js are both crucial in modern web development, but they serve different purposes and are used in different environments.

JavaScript is a programming language primarily used for client-side web development, while Node.js is a runtime environment that allows JavaScript to be executed on the server side.

This article explores the key differences between JavaScript and Node.js, detailing their roles, capabilities, and use cases to help you understand which technology is best for your project.

Use Cases of JavaScript:



Web Development: JavaScript is used to create interactive and dynamic web pages.

Web Applications: JavaScript frameworks like Angular, React, and Vue.js are used to build single-page applications (SPAs).

Mobile Applications: Frameworks like React Native use JavaScript to develop mobile application



Use Cases of Node.js:



Web Servers: Node.js is used to build fast and scalable web servers.

APIs: Node.js is often used to create RESTful APIs and microservices.

Real-Time Applications: Applications like chat applications, online gaming, and collaborative tools benefit from Node.js's event-driven architecture.

Command-Line Tools: Node.js can be used to build command-line tools and utilities.



| JavaScript | NodeJS |
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| Javascript is a programming language that is used for writing scripts on the website. | NodeJS is a Javascript runtime environment. |
| Javascript can only be run in the browsers. | We can run Javascript outside the browser with the help of NodeJS. |
| It is used on the client side. | It is mostly used on the server side. |
| Javascript is capable enough to add HTML and play with the DOM. | Nodejs does not have capability to add HTML tags. |
| Javascript can run in any browser engine as like JS core in Safari and Spidermonkey in Firefox. | V8 is the Javascript engine inside of node.js that parses and runs Javascript. |
| Javascript is used in front-end development. | Nodejs is used in server-side development. |
| Some of the javascript frameworks are RamdaJS, TypedJS, etc. | Some of the Nodejs modules are Lodash, express etc. These modules are to be imported from npm. |
| It is the upgraded version of the ECMA script that uses Chrome's V8 engine written in C++. | Nodejs is written in C, C++ and Javascript. |





