

Benefits of Node.js

Overview

Node.js is built on Chrome's V8 JavaScript engine for building easy, fast and scalable web applications.

Node.js is an open-sourced, runtime environment written on JavaScript for developing cross-platform server-side applications.

Node.js provides an extensive library of various prepackaged JavaScript modules and to make things easy, the Express and Meteor Frameworks written over Node.js simplifies the process of developing web applications to a great extent.



Benefits of using Node.js

- Easy to learn as it is written over JavaScript which makes it easy for developers to work on both frontend and backend simultaneously.
- Easy to Implement due to the availability of great documentation and resources.
- It is open-sourced and comes with a great number of tools and prepacked modules which are free to use and make things much easier and simplified to work on.
- The availability of multiple frameworks (Express.js, Meteor, Sales.js, Koa.js, Keystone.js, Loopback.js.) written over Node.js makes it the most preferred in the industry.

Node.js over other Frameworks

- Node.js allows developers to write backend applications in JavaScript which allows developers to develop both frontend and backend applications in JavaScript using a runtime environment.
- Developers trained in frontend JavaScript can start developing the server-side with minimum effort and great efficiency.
- It is regarded as a full-stack JavaScript as it serves both client and server-side.
- It uses Chrome's V8 JavaScript engine and compiles the written code directly into the machine code which makes it easier, faster and highly efficient to implement.
- It has a large and active community and rich documentation against other popular backend frameworks.



- **Node.js vs Java**
 - PayPal, for instance, noticed a 35% decrease in response time since migrating from Java, pages were served 200ms faster.
 - Their Node.js app was built twice as fast with fewer people, meanwhile, the code consisted of 33% fewer lines and 40% fewer files.
 - Netflix Reduced its 40 Mins Startup Time With Node.
- **Node.js vs .NET**
 - GoDaddy shifter to Node.js from .NET and was able to handle 10.000 requests per second without zero downtime.
 - It could handle the same load as before with only 10% of the hardware while serving 1.7 million requests per month.
- Node.js offers reusable code which can be used on both client and server-side.
- **Node.js vs Ruby on Rails**
 - Although quite popular, Ruby on Rails lags behind Node.js in terms of regular updates and adapting to new requirements and technologies.
- **Node.js vs Django**
 - Node.js is more scalable i.e. it is easy to grow the code base and develop and adapt easily to increased workload and market demands.
 - Large and Active Community in comparison to Django.
 - Easy to Understand and Implement and less complex in comparison to Django.