Saturday, 7 October 2023

1. Node Js Introduction

Node JS is an open-source and cross-platform runtime environment built on Chrome's V8 JavaScript engine for executing JavaScript code outside of a browser. It provides an event-driven, non-blocking (asynchronous) I/O and cross-platform runtime environment for building highly scalable server-side applications using JavaScript

Most people are confused and understand it's a framework or a programing language. We often use NodeJS for building back-end services like APIs, Web App, or Mobile App. It's utilized in production by large companies like Paypal, Uber, Netflix, Walmart, etc.

Features of NodeJs

- Easy Scalability

- Real-Time Web Apps

- Fast Suite for microservices

- Easy to learn and code

- Data Streaming

- Corporate Support

Reason to Choose Node.js ?

There are other programming languages also which we can use to build back-end services so what makes Node.js different I am going to explain.

1. It's easy to get started and can be used for prototyping and agile development

2. It provides fast and highly scalable services.

3. It uses JavaScript everywhere, so it's easy for a JavaScript programmer to build back-end services using Node.js

4. Large ecosystem for open source library and has asynchronous or non-blocking nature.

Application of NodeJS:

NodeJS should be preferred to build Real-Time Chats, Complex Single-Page applications, Real-time collaboration tools, Streaming apps, JSON APIs based application.

What is NPM ?

NPM (Node Package Manager) is the default package manager for Node.js and is written entirely in Javascript. Developed by Isaac Z. Schlueter, it was initially released in January 12, 2010. NPM manages all the packages and modules for Node.js and consists of command line client npm. It gets installed into the system with installation of Node.js. The required packages and modules in Node project are installed using NPM.

Commonly Used NPM Commands:

- npm init: Initializes a new Node.js project and creates a package.json file.

- npm install [package]: Installs a package and adds it as a dependency in the package.json file.

- npm install [package] --save-dev: Installs a package as a development dependency and adds it to the devDependencies section of the package.json file.

- npm uninstall [package]: Uninstalls a package and removes it from the package.json file.

npm run [script]: Executes a script defined in the scripts section of the package.json file.