

Lesson:

What is Express JS and Why we use ExpressJs

Topics to be covered

- What is Express
- Why do we use Express

What is Express

Express.js or simply Express is an **open-source backend web application framework** for **building Restful APIs with Nodejs**. It is relatively minimal with many features available as plugins. Express is a back-end component of popular development stacks like **MEAN**(MongoDB, Express, Angular, Node), **MERN** (MongoDB, Express, React, Node), or **MEVN**(MongoDB, Express, Vue, Node), together with the MongoDB database software and a Javascript Front-end framework or library. It was originally founded by TJ Holowaychuk.

Express is designed to be **unopinionated**, which means that it doesn't dictate how you should structure your application or what components you should use. This gives the developers the freedom to choose their own approach to building web applications.

The main **key features** of Express are **Routing and middleware** functions. In Routing it allows developers to map HTTP requests to specific handlers. This makes it easy to create APIs and web pages that respond to different types of requests. In addition to routing Express also supports middleware functions, which can be used to modify or enhance the behavior of requests and responses.

Express.js can be used in Nodejs applications by first installing and importing it and then creating an instance of it.

Install

```
`npm install express`
```

importing

```
`const express = require("express")`
```

Create an instance of Express

```
`const app = express()`
```

Why do we use Express.js?

The Express.js framework provides a number of features and benefits for building web applications. Here is some reason why Express is needed:

1. **Lightweight and unopinionated:** Express is a minimalist framework that provides just enough features to build web applications, without imposing a specific structure or philosophy which gives developers the flexibility to choose their own approach to building applications.
2. **Fast and Efficient:** Express is designed to be lightweight and fast, making it a great choice for building scalable web applications that can handle high traffic.

- 3. Large and active community:** Express has a large and active community of developers who contribute to the framework and provide support to other developers which means that there are plenty of resources available for learning and troubleshooting.
- 4. Easy to learn:** Express has a simple and intuitive API that is easy to learn, even for developers who are new to Node.js or web development.
- 5. Modular and Extensible:** Express is designed to be modular and extensible, with a wide range of plugins and middleware available for adding functionality to applications.
- 6. Routing and middleware support:** Express provides a powerful routing system and middleware support, making it easy to handle complex requests and responses.