

## **Benefits of learning MEAN Stack development before placements**

Websites have played an integral role in everyone's life of late. Whether searching for lip-smacking recipes, solution for your academic doubts, or online purchase, everything is carried over by a website. With the growth in the usage of websites, the need for website developers is in great demand. Websites are created using Hypertext Markup Language (HTML), which works for the content. Cascading Style Sheets (CSS) which works with styling the webpages, and JavaScript and its frameworks for the functionality of webpages. Approximately 98% of websites use JavaScript. For creating flexible websites with better functionality, frameworks like MEAN are implemented in web development.

### **What is MEAN Stack?**

MEAN is the acronym of the frameworks MongoDB, ExpressJS, AngularJS, and NodeJS used in full-stack web development. Let's get into deeper of MEAN.

#### **MongoDB**

MongoDB is a NoSQL document-based database that stores data in the form of collections. Developers prefer MongoDB for its functionality, scalability, high availability, and many more.

#### **Express.js**

Express.js, the back end of MEAN, is a fast framework for Node.js. With Express.js, you can create a server quickly. It handles communication between the front and back end website, cookies, and routes.

#### **Angular**

Angular is a default frontend framework of JavaScript. Angular is used for its high functionality, ability to create functions for mobile and simultaneously, and its easy-to-use structure.

#### **Node.js**

Node.js, the well-known open-source framework of JavaScript, enables developers to create dynamic webpages. With Node.js, developers can work on both the client and server sides.

## Why Learn Mean Stack?

MEAN is an open-source technology to build extendable, scalable, and adaptable cloud-based applications. A MEAN application has numerous advantages that favor performance and cost savings. Here are a few reasons to adopt a MEAN stack course: Free of cost: It is an open-source technology that is freely available and usable by anyone. It is cost-effective for organizations and web development needs.

**Flexible & Scalable:** It is a technology employed in start-ups and influential organizations. It has numerous technologies and requirements that are continually changing and evolving, so adaptability becomes an important feature.

**Speed & User Friendly:** It is a JavaScript-based online application that creates chatbots, single-page apps, and progressive web pages. It improves app performance and makes everything faster and more efficient. It has a one-page application that complicates a dynamic. The Angular front-end framework distinguishes itself by using technology that produces user-friendly outcomes. It is a framework that has altered the user experience and the fundamentals of interactive and dynamic content. It is a programming language widely used in many frameworks, which implies that developers must understand a variety of other languages, where you must study various programming languages such as PHP, Ruby, and Python. Among various programming languages in which, you may quickly begin full-stack web development.

## How to become a MEAN Stack Developer?

To get into MEAN Stack development, having a preliminary knowledge of basic web development technologies, such as HTML, CSS, and JavaScript, will be an added advantage. With a good base in primary web development technologies, getting into each framework and implementing it in real-life projects help you master MEAN Stack Development efficiently.

## What is the difference between a MEAN Stack developer and a Full-Stack developer?

A Full-Stack developer knows all stages of web development and is skilled under the intermediate level of some web frameworks. In short, a Full-Stack developer is a jack of all trades. On the other hand, a MEAN Stack developer focuses only on the collection of JavaScript frameworks, namely MongoDB, ExpressJS, NodeJS, and AngularJS. We can get to know that MEAN Stack development is a subset of Full-Stack development. MEAN Stack developers aren't much skilled in all stages of web development as Full-Stack developers.

## **What companies use MEAN Stack?**

For its greater scalability and faster development, MEAN Stack is used by some top companies around the globe.

### **LinkedIn**

LinkedIn is a well-known site for professional careers of Microsoft, uses MEAN Stack for faster functioning in both web and mobile apps. Previously LinkedIn used Ruby on Rails for its development. In the year 2011, the company moved to Node.js with the view of optimizing its mobile application, and the application proved to be faster than the older versions.

### **PayPal**

PayPal, the famous international payment gateway, uses Node.js for its User-Interface.

### **Netflix**

Netflix, a subscription-based video streaming service, uses Node.js for its modularity. It highly increased the volume of streaming high-quality content over the internet.

### **Uber**

Uber, an online taxi booking service implemented Node.js to correct the errors in the code. As a result, it doubled the speed of the response and enhanced the overall performance of the application.

### **NASA**

The National Aeronautics and Space Administration by the US government implemented Node.js and microservices for upgrading their organization to the cloud.

### **eBay**

eBay one of the top e-commerce platforms implemented Node.js in their application which leveraged the connectivity between the servers and users.

This proves that Node.js plays a crucial role in MEAN Stack development.

## **How does MEAN work?**

The MEAN stack components MongoDB, Express.js, Node.js, and Angular.js, serve as the database tier, server tier, and frontend service.

### **Angular.js frontend**

Angular.js works with the basic HTML tags and elaborates them to create dynamic and interactive web pages. Its data binding and dependency injection facilities help developers write code in fewer lines.

### **Express.js and Node.js server tier**

Node.js creates a run-time environment, whereas Express.js handles requests and routes from the Angular.js front.

### **MongoDB database tier**

A database that works efficiently with the frameworks Angular, Express, and Node is required for the stable functioning of a website. The JSON documents created in Angular.js is passed to the Express.js server, which is processed and stored in the MongoDB for future uses.

## **Advantages of MEAN Stack**

- MEAN stack is free and open source, so there's no need to spend a single penny for developing interactive cum high-quality mobile and web applications.
- As MEAN Stack is coded in a single language, JavaScript, it eliminates running for different languages for different modules. It makes it easier for you to create an entire application faster.
- With MEAN, you can easily switch to the client and server side, allowing you to examine, develop and introduce your applications on a cloud platform.
- MEAN stack reduces the cost of investing in the developers for the recruiters as it requires developers proficient in JavaScript compared to the LAMP stack, which requires developers skilled in contrasting frameworks such as MySQL and PHP.
- Moving the code to one more system written in one specific structure is made simpler with the assistance of the MEAN stack. This made MEAN stack the main edge innovation. The MEAN stack improvement organizations are thinking about many advances in MEAN to help the greatness in applications and web improvement projects.

## **Job opportunities**

JavaScript is a buzzword in web development, and the demand for JavaScript developers is gradually increasing to compensate for many needs for mobile and web applications. With good knowledge of the MEAN stack, one can get hired as a web developer or mobile app developer. Many IT companies use MEAN stack for building reliable mobile and web applications, so the opportunities are high with pretty-good wages. The average salary of a MEAN stack developer in India is about 4.2LPA. The demand for MEAN Stack developers is going to be very high in the upcoming years.

## **What Skills Do You Need to Be a Good MEAN Stack Developer?**

Mean stack developer is an intriguing job profile in which you have appropriate knowledge of the sector and know about every product demand on your own. Many large firms and startups utilize it. It is utilized to create interactive consumer data that aid in the resolution of technological challenges. The candidate will get the opportunity to work with various large corporations such as Wipro, Netflix, Amazon, TCS, OYO, Byjus, Udaan, Google, and others. According to a recent survey, a typical stack is a technology that provides over 3 million career prospects in the JavaScript technology sector.

- HTML, CSS, and JavaScript programming languages are necessary and required.
- A framework built with CSS and JavaScript.
- An understanding of client-side processes and requirements is required.
- Basic knowledge of server-side technology.
- Mean stack developers must know MongoDB, Express.js, Angular.js, and Node.js.
- You should be familiar with the package manager npm.
- Understanding of Git and design frameworks such as MotionUI.
- Basic knowledge of architecture and workflow.
- Understand time management, critical thinking, and communication abilities.

## **Conclusion**

MEAN Stack, the subset of full-stack development has many functionalities such as easy adaptability between client and server-side, scalability, and user friendly. As this is written with one programming language as base developers with good understanding with JavaScript can learn MEAN Stack development quicker. It reduces the amount of code due to its isomorphic nature. The demand for MEAN stack developers is quite high and mastering this will land you in a high-paying job.