MEAN Stack

Learn MEAN Stack technology to build high-performing websites and applications

Duration: 5 months course+1 month internship

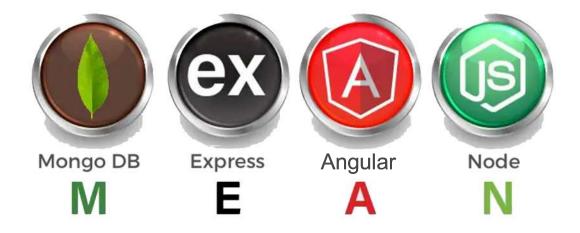PRACTICAL ORIENTED CURRICULUM

About the course :

MEAN is a technology stack that combines MongoDB, ExpressJS, AngularJS, and NodeJS, all built on JavaScript for developing modern web applications. This live project-based course will guide you through mastering these tools for both front-end and back-end development. Since MEAN completely depends on JavaScript, it offers an easy and efficient learning experience.

What you will learn :

Mongo DB — M
Express — E
Angular — A
Node — N

1. Prerequisites

➤ Basic knowledge of HTML, CSS, JavaScript
➤ Understanding of ES6+ features (arrow functions, destructuring, async/await)
➤ Git & GitHub
➤ Basic knowledge of TypeScript

2. MongoDB (Database - NoSQL)

- Introduction to NoSQL & MongoDB
- Installing MongoDB & Compass
- CRUD operations (Create, Read, Update, Delete)
- Schema design & validation
- Aggregation framework
- Connecting MongoDB with Node.js using Mongoose

3. Node.js (Runtime for Backend)

- Node.js Basics & Event Loop
- npm & package management
- File System & Modules
- Building a server with Express.js
- Connecting with MongoDB

4. Express.js (Backend Framework)

- Setting up Node.js & Express
- Creating RESTful APIs
- Middleware & Routing
- Handling requests & responses
- Error handling & logging
- Authentication (JWT, OAuth)
- Connecting Express with MongoDB (Mongoose ORM)

5. Angular (Frontend - UI Framework)

- Introduction to Angular & TypeScript
- Components, Directives & Pipes
- Angular Forms: Template-Driven & Reactive Forms
- Services & Dependency Injection
- HTTP Client & API Calls (Fetch & Axios equivalent)
- Routing & Navigation
- State Management (RxJS, NgRx)
- Authentication (JWT)
- Building & Deploying Angular Apps

6. Full-Stack Integration (MEAN)

- Connecting Angular Frontend with Express Backend
- CORS & API Calls
- Authentication with JWT & Cookies
- Role-Based Access Control (RBAC)
- File Uploads (Multer, Cloudinary)

7. Advanced Topics

- Payment Integration (Stripe, Razorpay)
- WebSockets & Real-time updates (Socket.io)
- Server-Side Rendering (SSR) with Angular Universal

8. Live Project

- Building a real-world full-stack MEAN application

Why Techno Dot Academy?

Guaranteed Placement Assistance and Internship

Endorsed by Leading IT Firms

Scholarship/Earn & Learn Option

Exit Profiles

➤ **Full Stack Developer**
➤ **Back-End Developer**

➤ **Front-End Developer**

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