MEAN/MERN Stack Development(Offline)

Master MongoDB, Express.js, Angular/React, and Node.js to Create Dynamic Web Applications

WHAT YOU'LL LEARN

- Develop robust back-end systems with Node.js and Express.js.
- Design modern, interactive front-end applications using React (MERN) or Angular (MEAN).
- Implement efficient data storage and retrieval using MongoDB.
- Build and deploy full-stack applications with seamless integration between front-end and back-end.

REQUIREMENTS

Basic knowledge of JavaScript or programming fundamentals.

A computer with internet access and a code editor (e.g., VS Code).

Familiarity with HTML and CSS is helpful but not mandatory.

A proactive mindset to learn full-stack development concepts step-by-step.

WHO'S THIS COURSE IS FOR

Developers eager to build full-stack web applications using modern technologies.

Students or professionals looking to specialize in MEAN or MERN stack development.

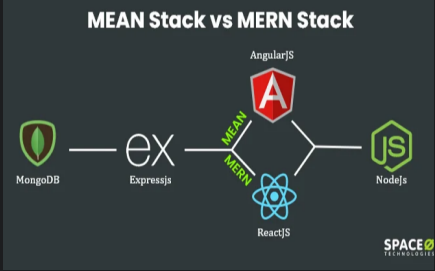Entrepreneurs aiming to create scalable and dynamic web applications for their businesses.

DESCRIPTION

Module 1: Introduction to Full-Stack Development

- Overview of web development technologies.
- Introduction to MEAN and MERN stacks.
- Setting up the development environment.

Module 2: Mastering Node.js

- Understanding Node.js: Event-driven architecture and non-blocking I/O.
- Core modules: File system, HTTP, path, and more.
- Building server-side applications with Node.js.

MEAN Stack vs MERN Stack

₹35000 ₹38000   7.9% off

★★★★★

Date
15 May to 15 Nov 2025

Time
10:00 AM - 11:00 AM

Total Sessions (Hours)
96 (96h 0min)

Location
Thaltej

Level
All

Language
Hindi

Vinod Sonava
Instructor

Instructor Rating
5

Courses
22

- Introduction to NPM (Node Package Manager).

Module 3: RESTful APIs with Express.js

- Introduction to Express.js framework.
- Middleware: Creating and using custom and built-in middleware.
- Designing and building RESTful APIs.
- Testing APIs using tools like Postman.
- Error handling and validation.

Module 4: MongoDB for Data Management

- Introduction to NoSQL databases and MongoDB.
- CRUD operations: Create, Read, Update, Delete.
- Data modeling and schema design with Mongoose.
- Aggregation framework and indexing for query optimization.

Module 5: Front-End Development with Angular (MEAN Track)

- Introduction to Angular and component-based architecture.
- Building dynamic user interfaces with Angular.
- Data binding, directives, and dependency injection.
- Routing and navigation.
- State management with RxJS.

Module 6: Front-End Development with React (MERN Track)

- React fundamentals: Components, JSX, and props.
- State and lifecycle methods.
- Hooks: useState, useEffect, and useContext.
- React Router for single-page applications.
- State management with Redux.

Module 7: Integration of Front-End and Back-End

- Connecting the front-end with back-end APIs.
- Authentication and authorization with JWT.
- Handling CORS issues during integration.
- Real-time communication with WebSockets (optional).

Module 8: Advanced Topics and Best Practices

- Understanding MVC architecture.
- Security: Data encryption, validation, and secure storage.
- Error handling and logging.
- Performance optimization for web applications.

Module 9: Deployment and DevOps Basics

- Preparing the application for deployment.

- Deploying applications using cloud platforms like AWS, Heroku, or Netlify.
- Version control with Git and GitHub.
- Continuous Integration and Deployment (CI/CD) basics.

Module 10: Capstone Project

- Build a fully functional web application:
  - E-commerce platform, blog, social media application, or custom project idea.
- Use MEAN or MERN stack for development.
- Document the development process.
- Present the final project.

Bonus Module: Trends in Full-Stack Development

- Introduction to GraphQL as an alternative to RESTful APIs.
- Real-time applications with Socket.IO.
- Overview of serverless architecture.

This structured course equips you with the comprehensive skills needed to become a proficient full-stack developer, focusing on both MEAN and MERN stacks.

4o