

Node.js Backend Development

Learn how to build scalable and efficient backend applications using Node.js

Category: Programming · Duration: 3 days

WHO IT IS FOR

- JavaScript developers moving to the back end
- Developers and DBAs who work with data every day
- Teams that want hands-on practice on real scenarios

This training program covers the fundamentals of Node.js backend development, including building RESTful APIs, working with databases, implementing authentication and authorization, and deploying applications on cloud platforms. By the end of this course, participants will have a solid understanding of backend development using Node.js and be able to build robust and scalable web applications.

Prerequisites

Basic knowledge of JavaScript and web development concepts

Syllabus

- Introduction to Node.js
- Setting up a Node.js development environment
- Building RESTful APIs with Express.js
- Working with databases (MongoDB, MySQL, etc.)
- Implementing authentication and authorization
- Middleware and error handling
- Data validation and error handling
- File and image uploads
- Caching and performance optimization
- Async programming and promises
- Unit testing and test-driven development
- Logging and error handling
- Deploying Node.js applications on cloud platforms
- Security best practices
- Scaling and load balancing

- Monitoring and debugging
- Handling real-time data with WebSockets
- Integrating with front-end frameworks (React, Angular, etc.)
- API documentation and versioning
- Continuous integration and deployment (CI/CD)
- Performance monitoring and optimization