
NODE JS

1. Introduction To Node JS

- What Is Node JS?
- Features Of Node JS
- Node JS Architecture
- Setup Node JS & npm
- Writing First Node JS Program
- Understanding Event Loop & Non-blocking I / O



2. Node JS Modules

- Core Modules
- Creating Custom Modules
- Export & Require
- Module Caching
- Package.json & npm packages

3. File System Module

- Read / Write Files (sync & async)
- Create / Delete Files & Folders
- Rename & Move Files
- Streams & Buffers
- Working With Directories

4. Events & EventEmitter

- Understanding Events In Node.js
- EventEmitter Class
- Handling Events
- Creating Custom Events

5. HTTP Module

- Creating An HTTP Server
- Handling Requests & Responses

- Routing Basics
- Serving HTML & JSON Content
- Sending Status Codes & Headers

6. Express.js Framework

- Introduction To Express.js
- Creating Express App
- Middleware Functions
- Routing With Express
- Handling POST / GET Requests
- Serving Static Files

7. Templating Engines

- Introduction To Templating
- Using EJS / Handlebars / Pug
- Passing data To Views
- Conditional & Looping In Templates

8. Working With Forms & Validation

- Handling Form Data
- Using body-parser Middleware
- Validating Input (Manual & With Libraries)
- Flash Messages & Error Display

9. Database Integration

- Introduction To MongoDB / MySQL / PostgreSQL
- Connecting To MongoDB Using Mongoose
- CRUD Operations
- MongoDB Schemas & Models
- Querying & Filtering Data

10. RESTful APIs With Node.js

- Introduction To REST APIs
- Creating RESTful Routes
- API Status Codes
- Consuming JSON Data

- Postman For API Data

11. Authentication & Security

- User Registration & Login
- Hashing Passwords & Login
- Using jsonwebtoken (JWT) For Auth
- Sessions & Cookies
- Security Best Practices (Helmet, CORS, etc.)

12. Real-Time Communication

- Try-Catch & Async Error Handling
- Creating Error Middleware
- Logging Errors
- Debugging Tools & Tips

13. Deployment

- Environment Variables With dotenv
- Deploying To Heroku / Vercel / Render / DigitalOcean
- Using pm2 & nginx For Production
- Monitoring Tools

14. Projects

- To-Do List App
- Blog Platform
- Chat Application (with Socket.io)
- REST API For E-Commerce Products
- Authentication System (JWT-Based)

Trainer	Er Abinash Nayak
Discounted Fee	₹ 5999
Duration	2 Months