



Node.js

Length:	5 Days
Type:	Course
Delivery Method:	Instructor-led (classroom)

Node.js is an Open-Source server framework, completely free, and used by thousands of developers around the world. Node.js allows you to run JavaScript on the server. Node.js is a very powerful JavaScript-based framework/platform built on Google Chrome's JavaScript V8 Engine. It is used to develop I/O intensive web applications like video streaming sites, single-page applications, and other web applications.

Course Objectives

- Learn why server-side JavaScript is useful
- Install Node.js
- Learn how Node.js is architected to allow high scalability with asynchronous code
- Create basic web applications with Node.js
- Automate tasks with Gulp
- Build an HTTP server using the core modules in Node.js
- Use stream I/O to efficiently serve the web pages
- Create modules to organize the server
- Test the reliability of the application with unit tests
- Convert the application to an MVC framework using Express
- Interface to a MongoDB database and a web service

Public

- Professional Web developers,
- Team leaders in Web Development
- Web Architects who have knowledge of JavaScript



Prerequisites

- Basic understanding of JavaScript.

Course Content

Module 1: Understanding Node environment

- Extending JavaScript
- V8
- The Process Object

Module 2: Understanding Asynchronous Event Driven Programming

- Broadcasting Events
- Listening for Events
- Timers
- Understanding the Event Loop
- Callbacks and errors

Module 3: Streaming Data Across Node And clients

- Exporting Steams
- Creating and HTTP Server
- The Request objects
- Working with Headers
- Handling Post Data

Module 4: Access the File System

- Directories & iterating overs files and folders
- Reading from File
- Writing to a File



Module 5: Using Express

- Installing Express and Making it Easier to Build Web Server
- Routes
- Static File and Middleware
- JSON

Module 6: Databases

- Relational Database and SQL
- Node & MYSQL
- NoSQL and Documents
- MongoDB and Mongoose
- CRUD operation using MongoDB

Module 7: Working with MySQL

- CRUD Operation using MYSQL

Module 8: Connecting Node with Angular

- Installation of Angular
- Components
- Services
- Template Form
- Event Handling

Module 9: CRUD operation with HTTP

Module 10: Deploymnet.