



Nodejs

Duration- 4 Weeks

Events and Streams

- Understanding Events
- EventEmitter class
- Understanding Streams
- Reading and writing streams
- Using pipe()

Building web applications using Express.js

- Installing Express.js
- Routing
- Parameters and queries in routing
- Building views using Jade view engine
- Using blocks for layout
- Displaying data
- Working with forms

Introduction to Node.js

- Environment Setup
- Node Package Manager
- Callbacks
- Streams and Buffers

Modularizing code

- Understanding built-in modules
- Techniques for modularizing JavaScript code
- Techniques for modularizing JavaScript code
- Using npm for third-party modules Handling Exceptions

Scaling Node applications

- The Child process model
- exec, spawn, and fork functions
- Using the Cluster module



Monitoring

- Monitoring Node.js processes
- Detecting Memory Leaks

Introduction to MongoDB

- Introduction to MongoDB
- Connecting Node.js to Database
- Mongoose Module
- Creating Rest APIs

Accessing Local Resources

- Process Object
- Manipulating File System
- Understanding Buffers

Node.js and the web

- Building a web server
- Understanding the need for web sockets
- Realtime interaction using socket.io

Node.js Eco System

- Node Packages
- Packages of interest
- Deciding Factors

Advanced

- Configuration Node processes
- Authentication
- Authorization
- Injections and Input Validation