

ReactJS & Node JS Training Content

JavaScript

- Basics of JavaScript.
- JavaScript in depth.

React

- Introduction to React
- Original DOM vs Virtual DOM
- React Components
- React Components with JSX
- React Components with ES6
- Props and state

Node

- Basics of Node and Installation.
- Introduction to Npm
- Adding and removing modules

React with Node

- Creating an application using Create React App.
- Life Cycle
- Debugging
- Default values
- SetState in depth
- Creating Forms
- Creating Table
- Handling Events
- Applying Filters
- JSX in depth
- Validations

- Applying Styles
- Backend calls
- Stateful Components
- Stateless Components
- Local Storage
- Routing
- Basic Routing and Passing Params
- Hyperlinks
- Master Pages
- Reconciliation
- Creating Reusable Components
- React.Component vs React.pure Component
- Composition vs Inheritance
- Code Reusability and Optimization
- Fragments
- Bundling
- Deploying

Integration of 3rd party Modules

- Google Maps
- Bootstrap Controls
- Material UI
- Toast Messages for notifications

Others

- Other Debugging Options
- Developer Tools
- Current Applications developed in React
- Future of React.
- Introduction to Starter Kits
- Integration with other libraries

Introduction to Node.js

- RAM vs. I/O latency
- Blocking vs. Non-Blocking
- Event-driven Programming
- Event Loop
- Blocking The Event Loop
- Node.js Philosophy

Node.js Platform Setup

- Download and Install
- Node REPL
- First Hello World

Modules and npm

- Anatomy of a module
- Private code
- Accessing and using modules
- npm commands
- package.json

The Callback Pattern

- What are callbacks
- Callback-last
- Error-first

Events

- When to use Event Emitters
- Binding Functions to Events
- Event Requests and Listening

Error Handling

- Callbacks: Error-first
- Errors in Event Emitters
- Uncaught Exceptions
- Using Domains

Buffers

- Why Buffers exist
- Creating Buffers
- Reading and Writing Buffers
- Manipulating Buffers

Streams

- What are streams
- Read and Write Stream API
- Flow Control
- Piping
- Duplex Stream
- Transform Stream

Express.js

- Intro and Installing Express.js
- Building a Hello Express application
- Creating routes
- Rendering Layouts
- Using templates
- Adding partials
- Using locals and conditional templates
- Modularizing routes

Socket.io

- Listening for
- Broadcasting
- Answering questions

Connecting to Databases

- No SQL and Document Stores
- Relational DBs
- Configuration and platform setup
- CRUD Operations