

Mern Stack Training

DURATION: 6 weeks

MODE OF TRAINING: Online / Classroom

LEVEL: Advanced

MernStack Course Curriculum

React.js/Redux Contents

- An introduction to React
- Introduction to JSX
- ES6 Basics
- Rendering elements
- Components and Props
- State & Lifecycle
- Handling events
- Conditional rendering
- Lists and Keys
- Ajax Requests with React
- Modeling Application State
- Managing Application State With Redux
- Redux Middleware
- React Router
- Forms

Introduction to CSS

- Introduction
- Inline styling
- Why CSS?
- CSS Levels
- Rules
- Developer Tools and CSS
- CSS Reset
- Specificity
- Inheritance
- Layout with CSS
- Position
- Float and Clear

Node.JS Contents

- Introduction to Node.JS
- Why Node.JS ?
- Node.JS Vs Web browser?
- Node.js REPL
- Hello World in Node.JS
- Asynchronous Programming & Callbacks
- How event loop works ?
- Promises, Async and Await
- Node Modules
- Events in Node.JS
- Streams
- Built-in Node Modules
- Node Package Manager aka NPM
- Basic NPM Commands & Package.Json file
- Importing 3rd party modules
- Basics of Socket.IO

ExpressJS Contents

- Introduction to ExpressJS
- Creating Express App
- Creating Restful APIs
- Defining and Handling Routes
- Route Parameters
- Sub routes
- Introduction to Middleware
- App Level Middleware
- Route Level Middleware
- Static File Middleware
- Body Parsing Middleware
- Error Handling
- Securing API endpoints & Authentication & Authorization
- Server side views and templates

MongoDB & Mongoose Contents

- Introduction to MongoDB
- MongoDB vs Relational DBs
- Schema free nature of MongoDB
- Data Modeling in MongoDB - Collections & Documents

- Performing CRUD operations
- Data Aggregation
- Indexing
- Mongoose as an ODM (Object Document Mapper)
- Why Mongoose ?
- Creating Schemas in Mongoose
- Models & Document Instances
- Statics & Virtuals
- Mongoose middleware
- CRUD operations with Mongoose
- Query Selection and Population
- Performing pagination
- Schema Validations