

KODEITraining

KODE IT SOLUTIONS Industrial Training

MERN Stack WEB DEVELOPEMENT

18th October 2021 to 18th December 2021

Every Friday, Saturday & Sunday (Friday, Saturday - 4:00 p.m. to 6:00 p.m.) (Sunday - 2:00 p.m. to 4:00 p.m.)



KODE IT Solutions

- Kode IT Solutions is a leading software development team with having experience working on different packages for a variety of businesses.
- Whether you are after a simple software for collection results or a complex one for statistical analysis, we have you covered.
- We are a team of professional, energetic individuals with talented designers and developers to guide our clients through flawless and timely execution of any project we work on.
- We are the thought-leaders in the domain of professional IT services in implementing world-class infrastructure and technology.



SYLLABUS

PRE-REQUISITES:

1] Working with HTML5

- HTML Introduction and History
- Working with HTML Elements
- Adding Attributes to HTML Element
- Working with Input Elements
- Working with Forms
- Working with Lists
- Working with HTML Tables
- Adding Styles to HTML Elements

2] Introduction to HTML5

- Introduction to HTML5 Doctype
- HTML5 New Elements
- Working with HTML5 Geolocator APIs
- Working with Local and Session Storage
- HTML5 Audio and Video Tag



3] Working with Application Styling

- Working with Classes for Styling
- Attaching Styling to Element Id
- CSS Box Model
- Working with Flexbox
- Adding Animation to the Elements
- Working with "position"
- Introduction to "display" Property

4] <u>Working with Bootstrap</u>

- Introduction to Bootstrap
- Bootstrap Layout Model
- Working with Bootstrap Components
- Working with Bootstrap Utilities

5] Introduction to JavaScript

- Creating Variables in JavaScript
- Creating Functions in JavaScript
- Returning Data from Functions
- Working with Conditions
- Looping in JavaScript
- JavaScript Execution Model
- Understanding "false" and "falsy" Values
- Block Scope Variables
- Function Definition vs Declarations



6] Working with Objects

- Creating Object using Object Literals
- Working with Module Pattern
- Working with IIFEs
- Creating Singleton Objects
- Creating Objects with Prototype Pattern

7] Manipulating DOM Elements with JavaScript

- Accessing DOM Elements using "tag" name
- Accessing DOM element using "classes"
- Accessing Elements using "id"
- Manipulating DOM Elements
- Updating DOM styling with JavaScript

8] Working with Modern JavaScript

- Working with ES6
- Variable and Block Scope
- Arrow Functions
- Object Literals
- Rest and Spread Operators
- Template String
- Working with Classes
- Promises in ES6
- Working with Async and Await



MERN STACK

1] INTRODUCTIONS

- What is MERN Stack
- Course Structure
- Node Installation

2] ES6 BRUSH UP

- Let Keyword
- Const Keyword
- Arrow Functions
- For Of loop
- Template Literals
- Spread Operator

3] REACT-INTRO

- What is React
- What is Component
- JSX Overview

4] FIRST REACT APP

- Helloworld App in React
- Project Structure of React-App
- Debuggung React App



5] **COMPONENTS**

- Components Introduction
- Class Components
- Functional Components
- Parent, Child Components
- What is state
- setState Method
- Props in Class Components
- Props in Functional Components

6] EVENT HANDLING IN REACT

- Event Handling in Class Components
- Event Handling in Functional Components

7] CSS IN REACT

- Inline CSS
- Local CSS
- Manipulating CSS using Events

8] PROJECT - COUNTER APP

Counter App

9] LIFECYCLE

• Class Component Life Cycle Methods



10] REACT HOOKS

- What is a React Hook
- useState Hook
- useEffect Hook
- Manipulating CSS using Hooks

11] REACT FORMS WITH HOOKS

- Forms Introduction
- Forms Submission
- 12] ROJECT USER AUTHENTICATION
- 13] PROJECT TODO LIST
- 14] REACT ROUTER
- 15] MAPS IN REACT

16] HTTP METHODS

- · Fetch Method
- Axios Method
- Return HTML Content using HTTP Methods



17] PROJECT - HOTEL APP

18] <u>NODE JS</u>

- Hello World in Node JS
- Hello World On Screen
- Creating Multiple Routes

19] NODE JS MODULES

- What is Node JS Module
- Local Modules
- NPM
- Installing first NPM Module Nodemon

20] CREATING REST API

- Postman GET Method
- Postman POST Method

21] EXPRESS ROUTER

22] MONGODB

- What is Mongo DB
- Installing Mongo DB
- Mongo DB Insert
- Mongo DB Update and Delete



23] MONGODB WITH NODEJS

- Connecting Node JS with Mongo DB
- Node-Mongo Create, Read Operations
- Node-Mongo Delete and Update Operations

24] MERN HelloWorld

- Connecting React and Node
- Helloworld in MERN

25] MERN AUTHENTICATION

- Creating Front-End
- Applying Styles
- User Registration
- User Login
- Getting Users List