**Course**

UI Development - Angular and React

**Duration**

10 days @ 8hrs a day

Course Content

**Day1**

**Forenoon**

* HTML Concepts
* HTML5 and CSS3 concepts
* Static Website Layout design Handson

**Afternoon**

* Javascript Concepts
* Advanced Javascript
* ES2015 and later
* Hands on – Javascript Advanced Features

**Day2**

**Forenoon**

* Node JS Basics
* Understanding NPM
* Understanding Node Environment
* Understanding packaging and bundling tools
* Hands on – Node JS Handson

**AfterNoon**

* Understanding Devops
* Github and Git
* Jenkins
* Handson – Jenkins and Git handson

**Day3**

**Forenoon**

* Typescript Quick overview
* Angular
* Setting up angular application
* Understanding Project Structure
* Angular Component
* Parent and Child Component
* Handson – Creating Angular Components

**Afternoon**

* Angular Input and Output
* Angular Pipes
* Inbuilt Directives
* Handson – Making use of pipes, Directives and @Input, @output

**Day 4**

**Forenoon**

* Angular Services
* Understanding RxJS
* HttpClient
* Calling Rest Services
* Hands on – Calling REST API using Angular
  + - Building an application with services

**Afternoon**

* Angular Component Life Cycle
* Angular Localization
* Building Custom Directives

**Hands on –**

**Enhancing the application with custom directives and i18n**

**Day 5**

* Form Handling
* Template based vs Model Based Form Handling
* Handling File Uploads
* Handling Validation
* Dynamic Forms

**Hands on – Form Handling in Angular**

**Day 6**

**Forenoon**

* Angular Animation
* Building Angular Application best practices
* Material Frameworks
* Using Angular Material PrimeNG with Angular

Hands on - Adding animation to the app and using material components

**Afternoon**

* Test Driven Development
* Testing fundaments
* Jasmine unit testing
* Testing Components, Pipes ,Services and Directives
* Understanding e2e

**Day 7**

**Forenoon**

* React JS
* React Components
* Properties Vs State
* Component Life Cycle
* Hands on – React Application Set up and Creating Components

**Afternoon**

* Form Handling
* Calling Rest API
* Using Material UI

Hands on – Enhancing application by calling Rest API and form Handling

**Day 8**

* Functional Components
* React Hooks
* Controlled vs uncontrolled Components
* Context API
* Hands on – Enhancing the application with Functional Components

**Day 9**

* Redux Architecture
* Creating React Application with Redux Architecture
* Understanding Reducers , Actions , Store and Providers
* Handling Synchronous vs Asynchronous Code

**Hands on – Create Redux Application**

**Day 10**

* Handling Asynchronous Code
* What is Middleware in Redux
* Redux Thunk
* Redux Saga
* Creating End to end Application With Redux Saga
* Testing React Redux application with Jest and Enzyme

Hands on – Handling Asynchronous code by using Redux Saga and unit testing the application