**React JS & Node JS**

**Day-1**

**Contents:**

* **Getting started with Node.js**
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* How JavaScript works
* Event loop
* Stack, Heap and Queue
* Node.js Fundamentals
* Introduction to Node.js
* Why Node.js?
* Traditional Programming Limitations
* **React Introduction**
  + Overview of frameworks, libraries for client side Web applications
  + React introduction,
  + Understanding “what” and “why” React
  + React Component Demonstration using codepen
  + Environment Setup for React Application
  + Understanding NPM commands
  + Using VS Code
  + VS Code extensions for ES6, React(formatting and checkstyles)
  + Helloworld app in React
* **React Essential Features and Syntax**
  + React App Project Directory Structure
  + Overview of Webpack, Babel
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  + Working with Components and Reusing Components
* **Day-2**
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  + Manipulating the State
  + Two way data-binding
  + Functional (Stateless) VS Class (Stateful) Components
  + Parent – Child Communication
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  + Showing Lists, List and keys
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  + CSS Styling
  + Scoping Styles using Inline Styles
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  + Debugging React apps using google developer tools and React DevTool
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  + React’s DOM Updating Strategy
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  + Passing unknown Props
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  + Using References
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* **HTTP Requests/Ajax Calls**
  + HTTP Requests in React
  + Introduction of Axios package
  + HTTP GET Request, fetching & transforming data
  + HTTP POST, DELETE, UPDATE
  + Handing Errors
  + Adding/Removing Interceptors
  + Creating/Using Axios intances
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  + Preparing the Project For Routing
  + Switching Between Pages, Routing-Related Props
  + The "withRouter" HOC & Route Props
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  + Using Switch to Load a Single Route
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* **Day-5**
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  + Creating a Custom Dynamic Input Component
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  + Dynamically Create Inputs based on JS Config
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  + Handling User Input
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* Deploying React App to the Web
* Unit Testing Using JEST