

React Js v.16



Course Goals and Non Goals

- Course Goals
- Learning the ReactJS
- Course Non Goals
- Comparison with Angular2, Redux dev tools



Pre-requisites

HTML, JavaScript-OOPS & jQuery Basics



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Intended Audience

Web application developers



Day Wise Schedule & Table of Contents

Day 1

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
- Helloworld app in React



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Day Wise Schedule & Table of Contents

Day 1

React Essential Features and Syntax

- React App Project Directory Structure
- Overview of Webpack, Babel
- React Component Basic
- Create React Component
- Understanding JSX
- Limitations of JSX
- Working with Components and Reusing Components

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Day 1

React Components, Props and State

- Understanding and using Props and State
- Manipulating the State
- Two way data-binding
- Functional (Stateless) VS Class (Stateful) Components
- Parent – Child Communication
- Dynamically rendering contents
- Showing Lists, List and keys
- Styling Components
 - CSS Styling
 - Scoping Styles using Inline Styles
 - Limitations of inline styles
 - Inline Styles with Radium
 - Using Pseudo classes/media queries with inline styles
 - CSS Modules, importing css classes
 - Adding Bootstrap, Semantic UI to React apps
 - Using react-bootstrap, reactstrap packages

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Day 2

Debugging React Apps

- Understanding React Error Messages
- Handling Logical Errors,
- Debugging React apps using google developer tools and React DevTool
 - Understanding Error Boundaries

React Component life cycle

- Updating life cycle hooks
- PureComponent
- React's DOM Updating Strategy
- Returning adjacent elements
- Fragments

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Day 2

Component in Details

- Higher Order Components
- Passing unknown Props
- Validating Props
- Using References
- React Context API
- Updated Lifecycle hooks (16.3)
- Best practices for React Projects
- Demo apps

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Day 3

HTTP Requests/Ajax Calls/Redux/Thunk

- HTTP Requests in React
- Introduction of Axios package
- HTTP GET Request, fetching & transforming data
- HTTP POST, DELETE, UPDATE
- Handling Errors
- Adding/Removing Interceptors
- Creating/Using Axios instances
- Redux
- Thunk

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Day 3

React Routing

- Routing and SPAs
- Setting Up the Router Package
- react-router vs react-router-dom
- Preparing the Project For Routing
- Switching Between Pages, Routing-Related Props
- The "withRouter" HOC & Route Props
- Passing & extracting route/query parameters
- Using Switch to Load a Single Route
- Navigating Programmatically

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Day 3

React Forms and Form Validation

- Introduction
- Forms
- Handling User Input
- Handling Form Submission
- Adding Custom Form Validation

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References

<https://reactjs.org/docs/hello-world.html>
<https://reactjs.org/docs/react-api.html>
<https://reactjs.org/docs/react-api.html>
<https://gkedge.gitbooks.io/redux-course-notes/>
<https://blog.pusher.com/getting-started-with-react-router-v4/>
<https://thinkster.io/tutorials/getting-started-with-react>
https://www.kirupa.com/react/creating_single_page_app_react_using_react_router.htm
<https://scotch.io/tutorials/learning-react-getting-started-and-concepts#introduction>
www.medium.com



Next Step Courses (if applicable)

Creating application using React native and Redux



Other Parallel Technology Areas

React Devtools

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