

1. Installation & setup-4 Hours (4/12)
2. React.js Fundamentals with JSX - 6 Hours (4/12)
3. ES6 for React- 6 Hours (4/13)
4. React.js Fundamentals with ES6 & Web pack – 8 Hours
(4/18- 4/19)
5. React JS Flux – 8 Hours (4/20 - 4/21)
6. React Redux + Immutable – 10 Hours (4/22-4/23)
7. React App testing using Frameworks (4 Hours 4/25)
8. Demo App using Redux React (4 Hours 4/26)
9. React Native iOS – (3 Hours)

1. Installation & setup

1. Introduction of React JS
 - 1.1 <https://slides.com/tkssharma/deck-2>
2. JS frameworks like React Angular 2.0
 - 1.2 https://slides.com/tkssharma/angular2_vs_react
3. Quick comparison between All
4. Completed Projects - GitHub Links (git push pull for working with sections)
5. The Purpose of Boilerplate Projects
 - https://github.com/link_for_section_01
6. Environment Setup
 - <https://slides.com/tkssharma/deck-5-4>
7. Project Setup
 - <https://slides.com/tkssharma/react-dev-workflow-release-mgmt>
8. A Taste of JSX
 - <https://babeljs.io/repl>
9. A Taste of Node & NPM
 - <https://slides.com/tkssharma/react-dev-workflow-release-mgmt>
10. Startup with Webpack loader & Browserify
 - <https://slides.com/tkssharma/webpack>
11. A Taste of ES6
 - <http://es6-features.org/>
12. A Taste of Transpilers
 - <http://slides.com/tkssharma/deck-18>
13. Quiz & QA

2. React.js Fundamentals with JSX ES5

- React Fundamentals with Code snippets using ES5 JSX

Concepts with Explanation

1. React JS Component Creation
2. Composition
3. Unidirectional Dataflow
4. JSX
5. Virtual DOM
 - <https://slides.com/tkssharma/deck-5-3>
6. createClass
7. Accessing state & props
8. Getting props.children
9. createElement
 - <https://slides.com/tkssharma/deck-5-3-17>
10. Lifecycle Hooks
 - <https://slides.com/tkssharma/react>
11. Container vs Presentational Components
12. Stateless Functional Components
13. Events
 - <https://slides.com/tkssharma/reactivating-the-web>
14. **Demo using Application**
15. Creating Basic React Component
16. Creating Basic React Component using Create Element
17. Event Handling in React component
18. Accessing the Props Obj in React component
19. Initialize the React Component State
20. Quick Recap on Component Lifecycle

21. Reacts JS getting data using Refs
22. Reacts js Creating todo app components
23. Reacts js Creating Shopping Cart application
24. Reat JS Creating Cart and Product list Components
25. React js Creating Product Component
26. Reacts js communicate components using event \$publish and \$subscribe
27. Exercise and quick Quiz

React.js Fundamentals with JSX ES5

This course is made up of 30 lessons. Each lesson is made up of two sections. Throughout each video lesson we'll be building a project together. So each video lesson will be in the context of building a "real world" example. Last is a quiz that will verify you're learning and retaining what you should be. After all 12 lessons you'll be given access to a GitHub repo that contains instructions for the curriculum. Going through the lessons is not enough to build any real sort of knowledge. You need to put into practice what the lessons show you.

Code will be accessible from GitHub repo

Prerequisites

A solid understanding of JavaScript will help but isn't entirely required (you might have to do some extra research though). If you have no JavaScript experience but you're coming from another programming language, you'll be fine.

3. ES6 for React (ECMAScript 2015)

Learn basic of ES6 and how we can modulate our code in ES6 with React js with Module Loader and Transpilers

- Module loaders & Transpilers with ES6 Intro
 - <https://slides.com/tkssharma/ecmas-18>
- ES6 Features
 - <https://slides.com/tkssharma/deck-18-18>
- let
- const
- Template Strings
- Concise Object Methods
- Arrow Functions
- Classes
- Object Destructuring
- Modules
- Default Parameters
- Native Promises
- Async/Await
- Spread Operator
- Rest Parameters
- ES6 class and Import for React Components
- Exercise and quick Quiz

Course Format

This course is made up of 10 lessons. Here we are covering ES6 basic syntax and what are new concepts added in ES6 will talk about each in details with examples. After this module we will start writing our code in ES6 with React

Code will be accessible from GitHub repo

4. React.js Fundamentals with ES6 & Web pack

What You'll Learn

- Advanced React using ES6
 - <https://slides.com/tkssharma/webcomps-19>
- introduction package.json and npm
- Deep dive Webpack Module Loader
 - <https://slides.com/tkssharma/webpack>
- es6 classes as web component
- es6 modules Import Export
- es6 import and export statements
- **Stateless Components, Stateless Functional Components, and Functional Components.**
- Differences Between Component Instances and Component Classes
- Understanding Functional Components to Class Components
- Render Targets
- Composing Multiple React.js Components
- State vs Props & Application Data
- JavaScript Events & Data Changes in React
- React Router & Intro to Single Page Apps with React JS
- React Router Params & Queries
- React Inline Styles & Component Arrays
- Exercise and quick Quiz

- State Basics
- Owner Ownee Relationship
- Using Refs to Access Components
- Accessing Child Properties
- Component Lifecycle - Mounting Basics
- Component Lifecycle - Mounting Usage
- Component Lifecycle - Updating
- Higher Order Components
- Composable Components
- Dynamically Generated Components
- Developer Tools (Chrome tools)

Develop Application using ES6 + React

- YouTube Search App using Google YouTube API
- Export Statements and ES6 class components for App
- Class-Based Components for App
- Handling User Events in App
- Ajax Requests with React for fetch Data
- YouTube Search Response
- Building Lists with Map
- List Item Keys
- Video List Items
- Detail Component and Template Strings
- Styling with CSS & Searching for Videos

Course Format

This course is made up of 15 lessons.. Throughout each video lesson we'll be building a project together. First will learn Module Loader and Web pack in

deep then will start React js with ES6 using web pack Module loader with Babel transpiler

Code will be accessible from GitHub repo

Prerequisites

You'll be tempted to jump straight into Redux & Reflux when you first start using React. Don't do this, trust me. If you're already familiar with React and ES6/7, you'll be just fine. If not, check out the first two courses in this program.

5. React JS Flux

- <https://slides.com/tkssharma/ui-problems-2>
- What is flux
- How flux different from MVC
- What is Redux
- What is reducer
- Let's start with Flux to-do application
- Creating action dispatcher & stores
- Understanding Flux data flow & stores
- Understanding View component & action dispatcher
- Understanding all in one flow of application.

6. Redux + Immutable Middleware

- <https://slides.com/tkssharma/deck-1-19>
- <https://slides.com/tkssharma/redux-from-twitter-hype-to-production-20>
- <https://slides.com/tkssharma/redux-21>
- What is Redux with difference between Redux & Flux

Managing App State with Redux Developing Book List App

- Understanding the data flow pattern in Redux
- Reducers
- Containers - Connecting Redux to React
- Reducers with Containers
- Implementation of a Container Class
- Containers and Reducers Review
- Actions and Action Creators
- Binding Action Creators
- Creating an Action for App
- Consuming Actions in Reducers
- Consuming Actions in Reducers Continued
- Conditional Rendering
- Reducers and Actions Review

Redux: Middleware

- App Overview and Planning
- Component Setup
- Controlled Components and Binding Context
- Form Elements in React
- Working with API's

Introduction to Middleware

- Ajax Requests with Axios (REST calls)
- Redux-Promise in Practice
- Redux-Promise Continued
- Avoiding State Mutations in Reducers
- Building a List Container

React Router + Redux with Form Blogging App

- App Overview and Goals
- Exploring the Posts Api in Demo app
- Installing React Router
- React Router - What is It?
- Setting Up React Router
- Route Configuration
- Nesting Of Routes
- IndexRoutes with React Router
- Back To Redux - Index Action
- Catching Data with Posts Reducer
- Catching Data with Posts Reducer Continued
- Fetching Data with Lifecycle Methods
- Fetching Data with Lifecycle Methods Continued
- Creating New Posts

- Navigation with the Link Component
- Forms and Form Submission
- More on Forms and Form Submission
- Passing Control to Redux Form
- CreatePost Action Creator
- Form Validation
- Form Validation Continued
- Navigating on Submit
- Dynamic Route Params
- Quick Recap
- QA & Exercise Rounds

7. React App testing using Frameworks

- Introduction to test framework
- Understanding TDD BDD programming.
- Deciding test cases for application
- to-do list test cases
- Exercises and solutions
- Exercises will be test cases for the apps done in this course
- Quick Recap & Exercise

8. Weather app using React + Redux

- Creating actions, reducers and components using Redux
- Multiple routes with react router
- Test cases
- Exercises and solutions

9. React Native Application Development

- Bundling Web Applications in a Mobile Web Browser
- Getting Started with this React Native
- Unidirectional Data Flow
- “Hello World” native App
- Adding navigation to app
- Running the Application on IOS
- Bundling App and deploy