

JS Experts: React JS Syllabus

Week 1: Introduction to development stack

- What is JS?
 - Variables
 - Functions
 - Objects
 - Array
- What is CSS?
 - Spacing
 - Layout
 - Border
- Development stack?
 - Node JS
 - Webpack
 - Npm
- Precompilers in CSS
 - SASS/SCSS
 - Styled components

Week 2: How React JS works and develop a simple Todo App.

- Getting started with React JS
 - Prerequisites
 - Create react app
- Hello world in React app
- What are components in React JS?
 - Class based components
 - Functional components
 - Smart components vs dumb component
- What are states in React JS?
 - How does state work in class based components?
 - How does the state work in functional components?
- What are props in React JS?
- Lifting up states
- What are react hooks
 - useEffect
 - useState

- useReducer
- useCallback
- Let's do some coding(Todo App)

Week 3: How redux works and create an ecommerce application?

- What is redux and why do we need redux?
- Redux architecture
- What is a container?
- What is a store?
- What is a reducer?
- How can redux be useful and pitfalls of using redux?
- Installing redux in react app
- How to call backend APIs in React JS?
 - Axios/Fetch
- Let's do some coding(Ecommerce app)
 - List of products
 - Edit a product
 - Like a product
 - Add to cart a product

Week 4: Unit testing

- What is unit testing?
- Snapshot testing
- Mocking the server api calls
- React testing library
- Jest APIs
- Write unit tests for ecommerce app

Week 5: Cypress testing

- What are e2e tests?
- Tools used to do e2e testing
 - Cypress
 - Puppeteer
- Installing Cypress
- Write first test case in cypress
- Writing e2e tests for the Ecommerce website