**REACT CONTENTS**

* **Introduction To React**
* **Features of React**
* **DOM, Shadow DOM & Virtual DOM**
* **Cons of React**
* **Installation of React**
* **React using npm**
* **Introduction to React Component**
* **How to use multi components in React Application**
* **Class Component**
* **Difference between Function and Class component**
* **Data Bindings**
* **Simple, Nested Bindings**
* **Fetching Data from API and Bind**
* **How to Use State functionality and Event Binding in Functional**

**Component**

* **How to use Two Way Data Binding**
* **State, FakeStoreAPI**
* **How to Use State functionality in and Event Binding Class**

**Component**

* **Dynamic Style Change, Theme Change.**
* **Forms and Validations**
* **Using React (Lengthy Process)**
* **Using 3rd Party API/Library i.e Formik (Easy & Industrial Standard)**
* **Formik Validations. (React Forms)**
* **Data Binding & Validations using YUP Library.**
* **Formik Components.**
* **Validation State.**
* **Component Life-Cycle Hooks.**
* **For Class Component.**
* **For Functional Component.**
* **Predefined React Hook**

**\*useState()**

**\*useEffects()**

**\*useContext()**

**\*useCookies()**

**\*useReducer()**

* **Custom Hook**
* **Working with APIs (Get/Post/Patch/Delete)**
* **React Routing**
* **Intro to Routing**
* **Basic Routing Components**
* **Complete Login & Register Example using Routing**
* **Route Parameters**
* **Nested Routes**
* **Route Hooks**
* **Typescript Concepts (33-38 ½)**
* **Using typescript in React Application**
* **Material UI for React Project**
* **Redux**
* **Route Hooks**
* **Deployment (Local Server, Firebase)**
* **React Native (Generally not for web developers, it is for mobile app developers)**
* **Creating React App using Web Pack.**

**THNINGS NEEDS TO BE PRACTISE**

* **How to work with APIS, GET/POST/PATCH/PUT**

**Using Forms (Using Formik) (Refer Video No 27)**

* **Use Login and Register**
* **Perform data binding and validations. (Done)**
* **How to create Authenticate Route.** **(React\_JS\_Notes Page No: 375)**
* **Redux Example.**
* **How to show our projects on git-hub repository.(similar to git-hub desktop, we need to put the *build file* inside clone repository.**
* **Web Pack Example.**

**FAQs in REACT**

* **What is the pros of developing screen using typescript with React applications?**

**Ans. Using typescript in react application helps to develop robust, scalable & maintainable applications. It helps to reduce runtime errors because of we can handle the data type in in frontend as per the expected structure. In case of typescript errors can be noticed at the time of compilation.**

* **How to solve the error while downloading react app with typescript?**
* **npx create-react-app react-typescript-app --template typescript**

**(got error)**

* **npx create-react-app react-typescript-app --template typescript --legacy-peer-deps  
  (tsconfig.json did not get created)**
* **Manually created tsconfig.json file  
  inside this file added  
  *{***

***"compilerOptions": {***

***"target": "es5",***

***"lib": ["dom", "dom.iterable", "esnext"],***

***"allowJs": true,***

***"skipLibCheck": true,***

***"esModuleInterop": true,***

***"allowSyntheticDefaultImports": true,***

***"strict": true,***

***"forceConsistentCasingInFileNames": true,***

***"noFallthroughCasesInSwitch": true,***

***"module": "esnext",***

***"moduleResolution": "node",***

***"resolveJsonModule": true,***

***"isolatedModules": true,***

***"noEmit": true,***

***"jsx": "react-jsx"***

***},***

***"include": ["src"]***

***}***

* **Then   
  rm -rf node\_modules package-lock.json**
* **Then  
  npm install**
* **Then   
  npm install --save-dev @types/react @types/react-dom  
    
  Then at last worked fine.**
* **How copy and paste ignoring some file/folder?**

**robocopy.exe "C:\Users\bibhu\OneDrive\Desktop\About\_me\_some\_Imp\_things\13\_React JS@18\React\_Notes" "C:\Users\bibhu\OneDrive\Desktop\About\_me\_some\_Imp\_things\13\_React JS@18\React\_Notes\Notes\32 Nested Routes" /S /XD node\_modules .git Notes React-Web-App Some\_Technical\_Things\_On\_React Developed\_Components\_Inside\_Components\_folder /XF "C:\Users\bibhu\OneDrive\Desktop\About\_me\_some\_Imp\_things\13\_React JS\React\_Notes\.gitignore" React\_JS\_Notes.pdf**

* **How to change the default port number in React?**

**Create one .env file inside root directory.**

**Inside .env file  
PORT: 3001**

**Then use the command *npm start***

**When to go for React and when to Go for Angular in Java fullstack development?**

**Ans. Use React for flexible applications, custom/dynamic UIs, Smaller bundle size, better performance, small teams, Next JS. for Better SEO and SSR, product/ startup environments it is beneficial.**

**Use Angular for fully structured framework where everything included(Routing, DI, forms, testing), large enterprise apps, When frontend and backend teams are separate at that time Angular plays best role.**

**What is the use of Next.js?**

**Ans. It is used when the frontend apps needs better SEO optimization, SSR, Performance optimization.**

**\*\*Questions On REACT\*\***

**1. What is the use of Gats by. (1)**

**2. What are the challenges in modern web development and what is the solution.**

**3. What are the issues with Js and DOM and what is the solution.**

**4. What is the difference between Angular & React. (2)**

**5. What is the difference between library and framework.**

**6. What is React and its Features.**

**7. What is DOM. (3)**

**8. Define the architecture & flow of browser engine.**

**9. What is the use of Rendering engine, Js interpreter, Data persistence & Network.**

**10. What is Shadow DOM & Virtual DOM.**

**11. Why React used Virtual DOM.**

**12. What is Single source of truth & Reconciliation.**

**13. What are the cons of React. (4)**

**14. In how many ways we can create a React application.**

**15. What is package manager.**

**16. What is the command to install package.json file.**

**17. What are the libraries required to use React.**

**18. What is the name of JS compiler used in React.**

**19. What is the meaning of --save at the time of installing of any tool. (5)**

**20. What are the module systems are available.**

**21. What is the command to create a new React App.**

**22. What is the command to run React app and what is the default port number for react application.**

**23. What is a components and what it contains. (6)**

**24. How the functional and class component returns the markup.**

**25. In which file we need to import boostrap.**

**26. What are the JSX rules are there in React.**

**27. How to use Arraow functions in component. (7)**

**28. When to use normal function and when to use arrow function.**

**29. What is the benfites of using arrow function.**

**30. What is a class and what are its behaviors. (8)**

**31. What are the members of a class and define each one.**

**32. Does it mandatory to call a base class constructor.**

**33. React Class components extends from which library.**

**34. What is React and what is Component and What is a namespace.**

**35. Which is better class component or functional component.**

**36. What are the drawbacks of using class component.**

**37. What are the differences between functional and class component.(9)**

**38. What are the state management techniques are there.**

**39. Which component you will design it as a class.**

**40. What is data binding.**

**41. What are the methods that jQuery uses for data binding.**

**42. What is the data binding expression that is used for React.**

**43. What are the differences between Attribute and property.**

**44. Can we bind the data for attribute.**

**45. What are the methods are there for binding a collection.**

**46. How to bind multiple data in a list(ordered/unordered). (10)**

**47. Does React supports two-way bindings.**

**48. How to manage two-way bindings in React.**

**49. Which object is used to store the data.**

**50. Class & Function which has the default state.**

**51. How to manage state in both class and functional approach.**

**52. Which method acts as a constructor in React.**

**53. Javascript objects are managed by which object. (11)**

**54. What are the JS borwser events are there.**

**55. Is React directly use browser events. if not then it uses which event.**

**56. In React Synthetic events support how many arguments.**

**57. What is the rule for binding a value into a form element.**

**58. What is the dfiierence between useState() and useEffects(). (12)**

**59. What are the state functionality includes.**

**60. What state functionality returns.**

**61. What is the rule for declaring the state.**

**62. What useEffects() do.**

**63.**