React js is a client-side technology, which basically helps to make more user-interactive user applications.

React is all about components: a button, a paragraph, even a paragraph can be a component. The main thing is we can use these components into multiple pages without re-writing the code multiple times in raw HTML.

If you want to install react in your local machine then use NPM(NODE PACKAGE MANAGER)

but if you want to use react as part of work then use NPX.

**For creating a fresh quick new react app:**

npx create-react-app app\_name

**\*\* note: when you apply a tag into react, you always need to close that particular tag.**

Ex: <br>contents</br>

**vs code extensions**

Top 10 Extensions for ReactJs in VSCode are:

• The Bracket Pair Colorizer extension. (Deprecated)

• The change-case extension.

• The Code Spell Checker extension.

• The Duplicate Selection extension.

• The EditorConfig for VS Code extension.

• The VSCode React Refactor extension.

• The npm Intellisense extension.

• The ESLint extension.

• The ES7 React/Redux/GraphQL/React-Native snippets extension.

• The Prettier – Code formatted extension.

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After installing extensions, just make a tweak,

go to settings -> emmet -> include languages [ javascript - javascriptreact]

There are basically two types of components available: class-based components and functional components.

Nowadays, class-based components seem to be deprecated, so we will focus on functional components.

Before starting react you need to know that your app starts by ‘index.html’ which is inside /src directory. In there <div id="root"></div> which loads the code for the app.

Now, if you want to write your own code then,

write inside className=”App”

|  |
| --- |
| function App() {  return (  <div className="App">  write your own code  </div>  );  } |

The thing is, if you want to *write your own code then it will start from* ***App.js***

\*\* note: if you want to import any custom files then, first placed that into /src directory

If you want to apply any class name from css file, then write like:

|  |
| --- |
| <div className="row">  <div className="col-2"></div>  </div>  </div> |

Here I basically apply bootstrap 5 classes.

now, inside App.js file write:

import './bootstrap.min.css';

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Topic: react refragement/empty tags:

In react <> and </> is just a syntactic sugar for <React.Fragment> . What it basically means is all components should be wrapped in a parent element. So without disturbing the whole schematic design <> provides a wrapper to wrap all your elements inside it .

|  |
| --- |
| <React.Fragment>  // your code  </React.Fragment> |

is same as

|  |
| --- |
| <>  // your code  </> |

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We can place vanilla javascript code, inside react:

The code looks like

|  |
| --- |
| var name = "microcodes.in";  var num1=20,num2=30;  var num3=num1+num2;  function App() {  return (  <>  <font className="fs-3">Welcome your rupee is: {num3} for website </font> {name}  </>  );  } |

We can call a javascript function also….

|  |
| --- |
| function callme(){  alert('button clicked');  }  // inside function App()  <button onClick={callme}>hit me</button> |

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Applying CSS inside reactjs

|  |
| --- |
| <font style={{color:"blue"}}>  This is a blue line  </font> |

You can use many ways to apply css, but recommend way :

|  |
| --- |
| <font className="myfont1">  this is a text via custom css  </font> |

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Inside /public directory there are many files which are basically accessible unversally.

Fies like: index.html, robots.txt[helps search engineers from crawler], manifest.json[helps to create PWA’s]

The role of the manifest.json file in ReactJS is to configure and customise the behaviour of a Progressive Web Application (PWA). It includes metadata about the web application, enables installation to the user's device, defines the appearance and display mode, and provides a more immersive user experience.

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REFERENCE VIDEOS:

<https://www.youtube.com/watch?v=hnVOvvbQrwA&list=PLu0W_9lII9agx66oZnT6IyhcMIbUMNMdt&index=2>