React 10 > Keact JU is a Javascript Library oniginally developed by Facebook.

Thelps in building highly engaging Bingle-page web apps. =) React Js helps in Greating down Complex LII into Simplen Components Installation Finstly you need to install Vs code and NodeJs. 3) After installation Open Windows Power Shell (Shift + Right click and select WPS)

3) Write Node-Vension to check if Node is enstabled successfully. * We are going to learn React Js by creating a Todo List. Setting up the Development Environment. The windows Power shell Rype:

17px create-react-cypp todos-list Name of Town Rpp.

Npx: It is an npm package that is expected to be nun only once in a project. (i.e One time package)

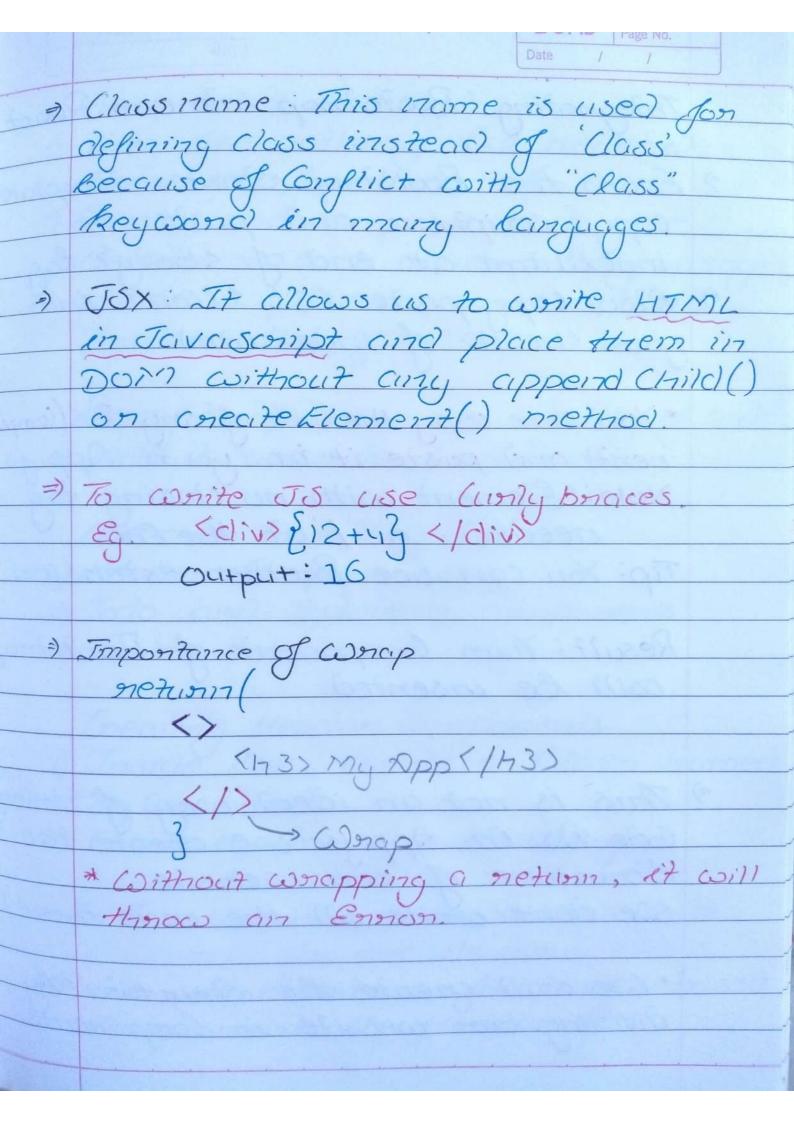
- Jolden incomed Todos-List will be created.
 -) Open the folder in VS Code.

Forden Staucture

- i) Readme. md: It is used to gerrencite
 HTML Summary, you see at the
 Bottom of projects.
- ii) Gitignone: Files which you do not want to push in Github.
- Public / index-lation: Main and only
 HTML file of our React app. This is the
 page that will be loaded on stanting
 the application.
- iv) sonc séndex. js: Js file connesponding le éndex. ntml file.

v) snc/App.js: Main component of any neact app. It acts as a containen for all other components. vi) sne | App. css: Help in injecting styling in the React app. Lets Stant the development senven =) Write upon stant in VS code terminal) Open browsen and go to http://localhost.3000 -) You knowe Stanted Your neact Npp. Now lets create the list (Todas). * Index. is is the entry point for Components. * Open App. js You will see function App() {
 neturn (); }

sode is written here,



Integnating Bootstorep into own React => From the Bootstrap stanten template copy scriptione and paste in index. Introl at end of <body> tag.

=) xiso copy-paste CSS < link> linto

your <head> of index. Introl * You can copy the code of any B.s. (Component) and paste it in your App. js

Note: * Element with no closing tag

needed a / at the End. Tip: You can use Prettien extension. Result: Youn Component of Bootstnap - will be insented. Finis is not an ideal way of writing Gale. De lin Depois we create the Structure of our website.

We don't write all the code there! * We will create the structure by dividing our website in Components.

	Date / /
	Components in React
=)	They are nothing but neusable
	Even if the component do not depend on each other, they menge inside a pament component to
=)	Even if the component do not
	depend on each other, they menge
r c.ro	inside a panent component to
	produce the final LII
	Borno 6:25 - 10022
:5	Bernefits: i) Xllows neusability of Code. Make it easien to find Ennon.
")	THEIRE IT CEIGIEST TO JUTICI ESTSTOTT.
	We are creating
(i)	Headen Component
	Todo and Todoiten components
111)	Footen component
A Maria	
,	Inside snc, Greate a folden named
(i &	Inside Snc, meate a joiden named
in)	My Components.
(1)	Create a new file Meaden. jo
	File which will contain all code
- min i	Son the Headen
3)	company in Headen.
	Component in Headen. 13

DA

	Page No.
	Date / /
	- · O 2000// Traston the extension
	Tip: Download/Install the extension EST React/ Redux / Graph QL/ R-N Snippets 4It will make the development easy.
	EST React Redux / Graph quit Part
	"It will make the development cong.
	Eg. White of and Enten. You will get React functionse component Syntax:
=)	You will get React functbase component
	Suntox:
	grace
	imment Ponct Panna 'monct'
	impont React from 'neact'
	Expost Cefault function headen (Brops) { setumn(
	exposit clefacilit, junction headen (mops)
	916+(1971n)
	1/statements that we want to
	२ १९२८११११)
	We are creating navban
	Using Bootstrap
	Props: They are nothing but JS objects. that are passed from parent Component to Child
	that are passed from account
15)	COMME PORCE PORCE
2	Tris means that was
	Will be passing the title Appigs (Later) Object from Appigs to Hope 2
	Object brown Don is to App. 35 (Laten)
	Object from App. js to Headen. js

Date / / In App. js

As mentioned Every React component
es menged in main component i.e., * Jo, wee need to import headen. =) To imposit a idefault function, type: Syntax:

import Meaden Inon' / My Component

Name / / Headen'

**Location

To neturn the fleaden Component

type:

function &pp() {

neturn (

<>>

neturn title = "Todos List"/> SHeaden title = "Toclos List"/>

() Component

); 3 We fiave passed title = "ToDos list," Rin oun Headen Component. Check out:-P. Timilany, You can eneate a footen in it. Do it by Younself?

Date / /

Default Brops

It will bet default values for the prop attributes if the parent component does not bend the values Eg.

Headen defaultprops = &

title: Your Title"

Style while importing, then the default value would show up.

Creating Todo and Todoitem

- i) Todo Component: This component will be nesponsible for keeping track of all items included inside the todas list.
- ii) Todo Item: This component will be nesponsible for Reeping track of the endividual todo item.

100	15	Page No.
Date	1	1

2 We will create a Todo list in the panent component, and then we will pass the list to Todos Component

In App. 15

Import [Todos] from ./Mycomp/Todos'
Import [TodoItem] from './My Col Greated Laten

function App() & Let Todos = [\$ 5170:7

Title: "Go to manket", Desc: "By vegetables" }

¿ S170:2 - - - 3 [Sno:3---3]

* We have created a Js object of etems in the Todos Rist

netunn (

(Headen title = "To Dos List"/) 5 The Fleaden (we have created carlier (Toclos todos = £ Todos /)

Scomponent (Checite it)

(/); 3 Hene, we Frave passed todas object to Todos Component Now, we need to Create our Todo Component. * Create new file Todos. js in My Components Jolden In Todos, js

import React from 'neact'

import & Todo etems from "./Todoitem"; Expont Const Todos = (props) =) {

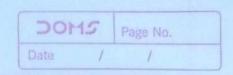
neturn (< div Classname = "(ontainer") (SS C-[1/13 (Rassiname = "Text-center) Todos
in 'Todos List' Text (ist: (//13) Props. todos. map ((todo) =) {

netum (Todoitem todo- Etodo))

3)3

Created component

(/div/) }



* Props. todos. map

This calls the call back function one

time for each element in the armay

- =) Let's cheate our thind component that is Todoitem
- =) Create Todoitem. jo in My component.

In Todo item. js

Import React from neact'

Exposit (01707 Todo Item = ([Todo, Ondererez]) =) {

Discussed Later

* Open the server, and all items of our todalist are displayed successfully

Date / / * Now, we will crecite delete Button to delete êtems from Todo list. Greating Delete Button
To create the delete button, we will use the state in React. In Appels
Finstly empont state hooks, by
typing import React, Eusestate & Inom 'neact'; Usestate: It is a hook that lets you add neact state to function component Type the following: function Npp() {

Const onderete = (todo) => {

set Todos (Todos filten((e) =) {

netunn e! = = todo; g)); Const [Todos, set Todos] = cisestate ([Esno. - - 1/ Eanlien Codedy

Date 1

The Above code, we're checking the length of the todos, so if the usen deletes all todo item[length=0] then "No Todos to display" will be shown.

In Todvitem, jo

In the above code, we have created a Delete Button, which will call the ondelete function once the usen clicks on it and the panticular todo item will be removed.

Work Jon Cou. =) In a Similian fastion, You can conecite Nootogis You can simply do it by eneating a Junction such that on using it added en oun list. (Without neloading thre page). Keact Routen It enables inavigation among views of Vanious components in React app, allow Changing the Browsen URL and Reep the UI Sync with URL. In terminal write,

upm install react-nouter-dom * Visit documentation of React nouten, an empont neact nouten-claim by Simply copying et.

3) Whop our app using React nouten (nouten) (mouten) nenclening we will use switch. (Switch) (Route exact path = "/" grenden = o() =) { 2707(1) (Add Todo add Todo = {addtodo}/) (Todos todos= {todos} Ondelete={Ondelete}/) 33) nenden if path is " (/Route) (Route exact path = "/about") Swill be nerdenig porth is about. (About/) => You can create (/Route) (/Switch) about js easily Pages, without relocating the App. Nu the Best