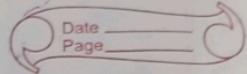


for k \Rightarrow make a copy



#React Components

Component is unique, reusable part of the JSX code which helps us to create good looking ~~com~~ & well mannered websites

\Rightarrow Component help us to make a big structure with small count of code

\rightarrow Component are function which are able to return some HTML code from it

\Rightarrow All component function start their name with Capital alphabets

\Rightarrow You don't have to use component like Common functions you have to use function name inside tags

Ex:

```
function H1heading() {
```

```
    return <h1> Hello world </h1>  
    }
```

In JS code of render.

Component tag \Rightarrow `<div>`
`<H1heading> </H1heading>`
normal html tags \Rightarrow `<p> Some blah blah blah </p>`
`<div>`

Read Node.js vs React JS

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So you can also use

<Heading />

If your component don't have external child

Read Airbnb React / JSX style guide

⇒ In programming it is good practice that to store all function in separate file & a main content in another file

so Where to store

created a .jsx file for storing function

⇒ the import react in it

⇒ write function

⇒ Export function

⇒ In main function import that function from that file

Ex

import xyz from "./heading.jsx"

import react

&

Blah

Blah

Blah

app.js

heading.js

Import react

function xyz()

return Htm

export default

function

You can suggest

import * from ".Heading"

this should be enough

↳ store component

You can create a component & you may store it inside that folder

so say component folder to save the

(Component) Heading.jsx

It is not case that component may return a html value it can be anything which is supported datatype among components

→ You can provide single tag or multiple tag output for a component as return value

⑦ export default varname;

It is very important when you're dealing with stuff of multiple file so plzz be aware of how to use them properly

→ Components are used to be object's function it is good idea which help us to not make multiple file one each

→ you have to be keen about
• 1 folder/ component name & component
for every function inside the component
This should be followed or you may get error

Import export modules

Bringing functionalities from other files

⇒ Import

Bringing out functionalities from a file

⇒ export

You can export multiple values or functions from same file, But it is not that good idea. so if want a specific value you can add a property in one object & return that object

⇒ You can use export from file only once

→ There can be only one default export but may have multiple non-default exports

It makes our life easy so that we get different segregated code & helps us to provide functionalities without overwhelming size of main files

import * as pi from "./math.jsx"

so we are bringing things which called for exporting with ~~export module~~ from math.jsx file

so pi is an object which helps us to find values exported from pi

* means everything
select * from table \Rightarrow will show all table

the default values can be accessed in SQL

Pi. default
& non default file

Pi. name of non default attribute

\Rightarrow * make things worse as it will import all thing from that file so unnecessary items also come by with necessary items

~~#start doing React const Components~~

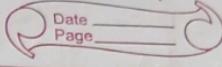
If you want to use same structure of code for multiple no of type which has some basic structure block but have some differences in the data within

Example when you go to amazon.com you see blocks of product each has same size but only image & few things are different & all other things are same

\Rightarrow so If you want to make it so we have to take help from react which has props container which provide structure & props are one who acts like parameters to the component

\Rightarrow React helps us to create such technologies

In html tag each tag has own attribute & you can't add user defined attribute



How to use props

In react we can add our attribute inside the tags (components) & that are called as properties or props. & they are user defined & that things can be accessed inside Components.

<Card name="ghansham" />

Declaration of component Card:

so all attributes are embedded inside a object call props & you can access props inside function Card (props) { return <h1> Hello {Props.name} </h1> }

⇒ thus how simply can transfer data through tag as a attribute & can access through object props

⇒ you can't add classes inside user defined components

⇒ Props are basically the userdefined object element just like predefined tag has own set of attributes fixed

React devtools

① React Devtools it is developer tool just like Chrome developer tool.

It can be used to debug a website

Mapping data inside component

so as you say you have to write each & every component in main index.js & pass the values through them

⇒ It makes too much much of trouble so let's create them with loop

④ Mapping in react new components

It will create dynamically

Passing functions to a function as argument is called functional programming & it found useful

functional programming
Just like calculator example where we send the add, sub, mul & division functionalities as argument to operation function

⇒ so in array we use map function

so lets see how map function works

E function is_odd (number){

 if number % 2 == 0

 return -1;

 else

 return +1;

}

so above function will check that no. is odd or even

so lets see map function

arr = [10, 20, 28, 13, 17, 18, 29, 9, 1]

so arr.map(is_odd);

you have need to
pass anything

array arr automatically pass argument
to is-odd function

④ lets code

mapping will return values in form of
list & it will iterate all array elements
one by one

We will take array of object value from & pass it to map function createCard (cont) {

return (

<obj>.card:

name = { cont.name },

email = { cont.email },

contact.no = { cont.phone },

17

& this is very small & intelligent way to show all the values from then as output

④ Here came a catch as you're passing value so in order to make things unique

⇒ In separate each card has own id so if you want to make things easy for you

Just whenever you are mapping a object from array so must add something in array which can differ or maintain uniqueness from other elements.

⇒ Key should be unique from all other instances in your dataset

⇒ You can't fetch the key with props as key is only there to maintain uniqueness & not for the passing as argument
⇒ with JSX

③ Emoji meanings

#ES6 map functions

map is based on functional programming

It uses another function & fetch element from an array and then return a list output

④ filter

It will return a list such that only those elements get entry in output
If they follow found true after going through a function

arr = [10, 11, 12, 13, 14, 15, 15, 17]

function Odd(n) {

 if ($n \% 2 \neq 0$)

 return true

 return false

}

⑤ Reduce it has two value as parameter

accumulator which is like static variable

Current No which is no. which is currently mapping

we can use reduce function for using functions like sum

: for

numbers.reduce(function (accum, curro) {

return accum + curro;

}

+ this will give sum of whole array at once

function

① find

It contains a function as soon as first one who satisfies condition from its function, it will return that value

② Find Index

As soon as its condition got satisfied then function will return index of no.

for which the function got condition == True

③ similar function

→ includes: check that particular value is present in array or not

→ indexof: If you specify particular element of array then it will return ~~ide~~ index of that element

#Arrow function

It is a simplified way for making function inside Javascript.

Ex:-)

Say a function is there you can give any name to it & a,b,c are three parameters are there for them.

function xyz(a,b,c) {

return anything } function

so we can write function like

let a = function (a,b,c) {
return anything
}

So above two ways are there but arrow functions make them more simpler

let a = (a,b,c) => {
return anything
}

All of three of above function has different declaration but end of the day all work is same

Read

hacks.mozilla.org

ES6-depth arrow functions

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Keep app

React use virtual DOM

Read what is
virtual DOM

Conditional Rendering

So we have many condition & according to that conditions we have parse different component on screen

⇒ Say you're handling some company site so if a registered customer search for website should have different data to show that of one who new user

⇒ so for that we should make our page more & more interactive so that leads to conditional rendering (i.e. is interactive)

so one possible way it to create function & send or return output accordingly

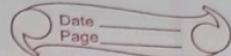
loggedin = true
function renderCondition() {

If (loggedin == true) { *Fry this code*

Return <h1> hello sir </h1>
else {

return <form to log in>

JSX helps us to



But it take lot of code

Fry

② Ternary operator

It is one line If else statement which is an expression & normal if for, while are statements.

Condition ? If true do this : else do this if false

a = 10 b = 5

a > b ? console.log("a is bigger") :
 console.log("b is bigger").

Declarative vs imperative programming

⇒ Declarative programming is which depends on state of program

⇒ # Hooks

they are functions which helps us to fetch into the state under which html is rendered & we are able to do it with hooks

Example : say you have a button & a hide when you click on button the text inside it will get highlighted by horizontal line