**Day 2 : 12 Nov 2024**

Creating function style as well as class style component.

Function style component creation

function EmployeeFunctionStyle() {

// coding

return <div>Employee component in function style</div>

}

Class style component creation

class EmployeeClassStyle extends React.Component{

render() {

// coding..

return <div> Employee component in class style</div>

}

}

Login to VM

Open the terminal

npm install -g create-react-app

create-react-app component-style-app

then open this project in VS code

move inside a project folder

npm start

in React inside component we can declare two types of variables. Variable is use to describe the behaviour of component.

1. state : state is a type of variable which is use to describe the behaviour of component. state variable value we can change. So state variable is known as mutable. State variable also known as local variable.
2. props : props is a type of variable which help to share the data between one component to another component. props is known as immutable variable. Using props we can share state variable value between one component to another components.

If we want to create state variable in class component we need to use constructor. Then we need to create state variable inside a constructor and those value we can access inside JSX with {this.state.variableName}

Before React JS 18.x version in function style component we are not able to create state variable. Old version React function style component also known as state less component.

React hooks, with help of react hook we can create state variable in function components. Hook concept we can use only in function component not in class component.

So if we want to create state variable in function component react provided one of the pre defined hook ie useState(). Those function start the pre fix use followed by name is known as hook functions.

App -🡪 root component

EmployeeFunctionStyle -🡪Child component

EmployeeClassStyle 🡪Child component

Using props we can pass the value from App(parent component ) to EmployeeFunctionStyle or EmployeeClassStyle component.

Class style component Vs Function style component

1. In class style user defined class must be extends React.Component. But in function style component we can make normal function as a component.
2. Class style component support life cycle function as well as constructor ie render as well as more etc. but function style doesn’t support constructor.
3. In class style component inside render function we need to use return JSX. In function style component normal function or component return JSX.
4. In class style component inside constructor we create state variable. But in function style component with help of useState hook we can create state variable.

useState(): useState is a pre defined hook which help us to create state variable in function component.

syntax

let/var [variableName,function]=useState(initialValue);

useState function return type is array. 1st parameter is variable name of any type ie number, string, Boolean, array or object etc. 2nd parameter function which help to change the value. this function is type of asynchronous functions.

let [id,setId]=useState(100);

setId(200); this code we can call insider another function and that function we can invoke base upon some event like click.

If we change useState variable value directly those value or updated value doesn’t re-render once again on browser. If we do change through set function then only it will re-render.

create-react-app react-use-state-app

DOM or JS Event

<input type=”button” value=”Click Here” onClick=”functionName()”/>

React JS Event

In React JS Event value must be JSX and that JSX takes as callback. Function the function name or function itself to another function as parameter.

<input type=”button” value=”Click Here” onClick={functionName}/>