Day 2 : 9 June 2024

React js events :

Html, css, JS

Event provide bridge between html dom elements and JavaScript functions.

JavaScript provided lot of pre defined events. All those events start with prefix on followed by event name.

Like

onClick

onDblClick

onMouseOver

onKeyUp

onKeyDown

onSubmit

onChange

onFocus

onBlur

etc

DOM Events

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

It is a function part of JavaScript which help handle particular events.

React JS use same concept for events.

We need to use same events name using camel naming rules and while calling the event we need use JSX syntax

React JS Events

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

By default function name take as event reference as parameter or callback function. If we want to pass custom parameter then we need use inline function concept.

<input type=”button” value=”Click Here” onClick={(event)=>console.log(“event generated ”+event)}/>

<input type=”button” value=”Click Here” onClick={(event)=>{

Local logic consider.

} }/>

create-react-app react-event-app

cd react-event-app

after project created

code . (open the project in VS code)

to run the project

npm start

In React JS every component contains two types of variables ie

Props : props is a type special object which help to pass the value from one component to another components. Props can’t be ie immutable.

State : state variable is use to describe the behaviour of the components.

State variable can be change.

Types of components.

State full components : the component hold its state information is known as state full components.

To create state full component we are/were using class style components.

State less component : the component doesn’t hold it state information.

To create state less component we were using function style components.

Function component responsible to take props as parameter and return DOM or JSX.

In new version of React JS we can use function style component with hook to make state full components.

React with useState hook to create State variable.

create-react-app react-use-state

cd react-use-state

code . open the project in VS code

npm start

react JS provide lot of pre defined hooks.

All hooks start with pre-fix use followed by hook name.

All hooks we can use only in function component not in class components.

useState() is a type of react hook which help to create state variable in function components.

useState() take default value as undefined if we want to can assign. ie null, 0, 100 etc and it return array values.

1st element in array value which hold default value and 2nd element takes are function as parameter which help to change the value.

With help of 2nd parameter function whenever we do any changes on state variable it will re-render on dom. 2nd parameter function help to change the value.

In useState variable can be number, string , Boolean, array, array object etc.

Every state variable local to those components. To share data between parent component to child component as state variable we can use props.

Array state variable

let [employee,setEmployee]=useState({id:102,name:"Vijay",salary:34000}); // object state variable

useEffect() : useEffect is another type of hook which we can use with functional component to do side effect. Like fetching data, updating the DOM directly, event listener, timer etc.

if component contains any normal function we need to call explicitly. But useEfffect get call automatically initially.

useEffect take two parameter

1. Callback function
2. Dependency (optional).

Syntax

useEffect(cb)

like

useEffect(()=> { initial render

})

useEffect(()=> { it render only once

},[])

useEffect(()=> {

},[state,props]) it re-render whenever any changes happen on specific variable like state or props when only get called.

create-react-app react-use-effect

cd react-use-effect

code .

npm start

Rest full web service :

Consume rest api in react JS.

1. Using fetch() function
2. Using axios() third party module

fetch() : fetch() is a pre defined JavaScript which help to consume rest api. return type of fetch is promise object.

create-react-app react-fetch-api

cd react-fetch-api

code .

npm start