**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-01 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Watch video

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-02 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Watch video

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-03 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Watch video

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-04 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* Component \*\*\*

(1)What is component

(2)Why use component : For using single code to multiple time

(3)Type of component: (a)functional component (b)class component

(4)Create a component

(5)Use a component

>>Creating class component:

Right click on ‘src’ folder>>New file>>put file name (suppose that Home.js [First letter must be capital ])

Open Home.js file and paste below code:

import React from 'react';

export default class Home extends React.Component

{

    render()

    {

        return

(

            <div>

                <h1>Home Component is important</h1>

            </div>

        )

    }

}

Note:

(a)return function ke andar sirf ek hi div rahega , us div ke andar ham multiple div use kar sakte hai.

<div> tag ki jagah React fragment (<></>) bhi use kar sakte hai.

(b)class name and file name must be same.

(c) render() is compulsory to make.

Open App.js file and import the component:

import Home from './Home';

and add the component with in <header> tag of App() function:

   <Home />

Than save and check browser.

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-05 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\*Class Component \*\*\*

(1)What is class(stateful) component

(2)When to use

(3)Example

Right click on ‘src’ folder >> New file >>put name ‘Profile.js’[first later must be in capital later]

Open Profile.js file and paste below code:

import React from 'react'

class Profile extends React.Component

{

    render()

    {

        return

(

            <div>

                <h1>Profile Component</h1>

            </div>

        )

    }

}

export default Profile;

Open App.js file and import this component:

import Profile from './Profile';

and add this component with in <header> tag of App() function:

 <Profile />

Than save check browser

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-06 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* Functional component\*\*\*

(1)What is component

(2)Type of component

(3)Function component

(4)Example of component

(5)Benefits of component

Right click on ‘src’ folder >> New file >>put name ‘Profile.js’

Open Profile.js file and paste below code:

import React from 'react'

export default function Profile(gettext)

{

const red=()=>

{

        alert("red functiion has called")

    }

return

(

        <div>

            <h1 onClick={red}>{gettext.text}</h1>

        </div>

    )

}

Open App.js file and import this component:

import Profile from './Profile';

and add this component with in <header> tag of App() function:

<Profile text="Function Profile Component(with onClick function)" />

Than save and check browser.

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-07 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**//Getting Error**

\*\*\* JSX(Java Script Xml)\*\*\*

(1)What is JSX : (to write html tags )

(2)JSX in React

(3)Example with out JSX

---With out JSx---

Open App.js file , comment <header> tag and paste below code after <header> tag:

 {

        React.createElement(

          'h1','null','Hello JSX'

        )

 }

To use class on h1 tag use below code:

 {

        React.createElement(

          'h1',{className:'head-tag'},'Hello JSX'

        )

 }

Note: for with jsx , uncomment <header> tag

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-08 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* Props\*\*\*

(1)What is Props

(2)Why use Props

(3)Props with functional component

(4)Props with class component

Right click on ‘src’ folder >> New File >>put name ‘Profile.js’

Open Profile.js file and paste below code: (Props with functional component)

import React from 'react'

export default function Profile(gettext)

{

return

(

        <div>

            <h1>{gettext.text.name}</h1>

            <h1>{gettext.data}</h1>

        </div>

    )

}

Open App.js file and import this component:

import Profile from './Profile';

and add this component with in <header> tag of App() function

 <Profile text={{name:'peter'}} data="Profile Data"/>

 <Profile text={{name:'Bruce'}} data="Bruce Data"/>

Than save and check browser.

>>for class component

Paste below code in profile.js file:

import React from 'react'

export default class Profile extends React.Component

{

   render()

   {

        return(

        <div>

            <h1>{this.props.data}</h1>

            <h1>{this.props.text.name}</h1>

        </div>

        )

    }

}

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-09 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* State \*\*\*

(1)What is State : State is internal object of class and this is private. It works as a variable.State is changeble while Props is not changeble.

(2)State Example

(3)Update State on button click

Right click on ‘src’ folder>>File Name>>put name ‘Profile.js’

Open Profile.js file and paste below code:

import React, { Component } from 'react'; // or import React from ‘react’ than extends React.Component

class Profile extends Component

{

    constructor()

    {

        super()

        this.state={

            name:'Peter',

            email:'peter@gmail.com',

            count:0

        }

    }

    updateState() /\*when call updateState() function then render() function will call automatically.

    {

        this.setState({

            name:'Brush',

            count:this.state.count+1

        })

    }

    render()

    {

         console.warn("render")

         return

(

         <div>

             <h1>Count: {this.state.count}</h1>

             <h1>email: {this.state.email}</h1>

             <button onClick={()=>{this.updateState()}}>Update Name</button>

         </div>

         )

     }

}

export default Profile;

Open App.js file and import this component:

import Profile from './Profile';

and add this component with in <header> tag of App() function

 <Profile />

Than save and check browser.

Note:

When call the updateState() function then render() function will call automatically.

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-10 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* hide and show \*\*\*

Open App.js file and paste below code instead of App() function:

class App extends React.Component

{

  constructor()

  {

    super();

    this.state={

      show:true

    }

  }

  render()

  {

return

(

      <div>

       {

         this.state.show ? <h1>hide and show</h1> : null

       }

       <button onClick={()=>{this.setState({show:!this.state.show})}}>Toggle me</button>

    </div>

    );

  }

}

Than save and check browser.

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-11 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* Event Handling \*\*\*

Right click on ‘src’ folder >> File name >>put name ‘Profile.js’

Open Profile.js file and paste below code: (For class component)

import React from 'react'

export default class Profile extends React.Component

{

   testFun()

   {

       alert("test fun");

   }

   render()

   {

        return(

        <div>

            <h1>Profile</h1>

            <button onClick={()=>this.testFun()}>Click me</button>

        </div>

        )

    }

}

Open App.js file and import this component:

import Profile from './Profile';

and add this component with in <header> tag of App() function:

<Profile />

Than save and check browser.

Note: for functional component use below code in Profile.js file:

import React from 'react'

export default function Profile ()

{

   function testFun()

   {

       alert("test fun");

   }

        return(

        <div>

            <h1>Profile</h1>

            <button onClick={testFun}>Click me</button>

        </div>

        )

}

OR

import React from 'react'

export default function Profile ()

{

  const testFun=()=>{

        alert("test fun");

  }

        return(

        <div>

            <h1>Profile</h1>

            <button onClick={testFun}>Click me</button>

        </div>

        )

}

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-12 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* Life Cycle Method \*\*\*

(1)What is life cycle method

(2)Phase of life cycle

(3)Example

(4)Importance of life cycle

Constructor() =>render()=>componentDidMount()=>componentDidUpdate()=>componentWillUnmount()

Pahle constructor() than render() than componentDidMount() than componentDidUpdate() than

componentWillUnmount() call hota hai.

Note: Agar componentDidMount() ke andar kuch update hota hai to uske baad ek baar fir render() call hota hai.

Open App.js file and paste below code instead of App() function:

class App extends React.Component

{

   constructor()

   {

      super();

      console.warn("constructor");

   }

    componentDidMount()

    {

      console.warn("componentDidMount");

    }

   render()

   {

    console.warn("render");

     return(

       <div>

         <h1>Life cycle method</h1>

       </div>

     )

   }

}

Save and check console in browser.

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-13 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* componentDidMount() \*\*\*

(1)when componentDidMount() is called

(2)Example

(3)why use

Note: Agar componentDidMount() ke andar kuch update hota hai to uske baad ek baar fir render() call hota hai.

Open App.js file and paste below code instead of App() function:

class App extends React.Component

{

   constructor()

   {

      super();

      this.state={

        data:null

      }

      console.warn("constructor");

   }

    componentDidMount()

    {

      this.setState({data:"updated"});

      console.warn("componentDidMount");

    }

   render()

   {

    console.warn("render");

     return(

       <div>

         <h1>Life cycle method</h1>

       </div>

     )

   }

}

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-14 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* componentDidUpdate \*\*\*

1. What is componentDidUpdate
2. Understand somepoints from official website
3. Example
4. Test it

<https://reactjs.org/docs/react-component.html#componentdidupdate>

Note:

componentDidUpdate() method me maximum 3 parameter pass kar sakte hai, pahla **prevProps**, dusra **prevState** aur tisra **snapshot**

jarurat ke according 1,2 ya 3 parameter use kar sakte hai koi mandatory nahi hai.

jab koi state update hota hai to ye method automatically call ho jata hai.

Open App.js file and paste below code instead of App() function:

class App extends React.Component

{

   constructor()

   {

      super();

      this.state={

        active:null,

        who:null

      }

    }

    componentDidUpdate()

    {

      console.warn("componentDidUpdate");

      if(this.state.who == null)

      {

        this.setState({who:"vikash"})

      }

    }

   render()

   {

     return(

       <div>

         <h1>componentDidUpdate {this.state.who}</h1>

         <button onClick={()=>{this.setState({active:"yes"})}}>Activate</button>

       </div>

     )

   }

}

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-15 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* componentWillUnmount() \*\*\*

<https://reactjs.org/docs/react-component.html#componentwillunmout>

jab component destroy OR unmount OR remove ho jata hai tab ye method call hota hai. Is method ke andar setState() method call nahi karni chahiye kyoki component destroy hone ke baad render() nahi hota hai ya render() method execute nahi hota hai.

Right click on ‘src’ folder >> Make File >> put name ‘Profile.js’

Open Profile.js file and paste below code:

import React,{Component} from 'react'

class Profile extends Component

{

      componentWillUnmount()

      {

            alert("user has been deleted")

      }

      render()

      {

            return(

                  <div>

                        <ul>

                              <li>name:vikash</li>

                              <li>email:vikash@gmail.com</li>

                              <li>contact:9893098930</li>

                        </ul>

                  </div>

            )

      }

}

export default Profile;

open App.js file and import this component:

import Profile from './Profile';

and paste below code instead of App() function:

class App extends React.Component

{

   constructor()

   {

      super();

      this.state={

        toggle:true

      }

    }

   render()

   {

     return(

       <div>

         <h1>componentWillUnmount </h1>

         {

           this.state.toggle ? <Profile /> : null

         }

         <button onClick={()=>{this.setState({toggle:!this.state.toggle})}}>Delete User</button>

       </div>

     )

   }

}

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-16-I \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* React Hooks \*\*\*

1. What are react hooks
2. Make a functional component
3. Use react hooks
4. Test it

Hooks functional component me work karta hai class component me work nahi karta hai.

Note:

App.js file jab **App()** function ka use karte hai matlab wo **functional component hota hai** aur jab **class App** use karte hai tab wo **class component** hota hai.

Open App.js file and modidy below component:

import React,{useState} from 'react';

and paste below code instead of App() function:

function App() {

   const[name,setName]=useState("varun");

   const[empid,setEmpid]=useState("V567");

   const[empage,setEmpage]=useState(30);

   const[count,moreCount]=useState(30);

   // const updateValue=()=>

  //  {

  //   setName("Arun")

  //   setEmpid("var786")

  //   setEmpage("40")

  //  }

             //OR

function updateValue()

             {

                  setName("Arun")

                  setEmpid("var786")

                  setEmpage("40")

                  moreCount(count+1)

             }

  return (

    <div >

     <h1>hooks name is {name}</h1>

     <h1>hooks empid is {empid}</h1>

     <h1>hooks age is {empage}</h1>

     <h1>count {count}</h1>

     <button onClick={updateValue}>update value</button>

    </div>

  );

}

Than save and check browser

Note:

1. **name** is a variable and **varun** its value i.**e name=”varun”**
2. **setName** is a function, we can update value of name variable by using **setName()** function.
3. Hooks are the new feature introduced in the React 16.8 version.
4. It allows you to use state ad other React features without writing a class. Hooks are the functions which “hook into” React state and lifecycle features from functional components.
5. It does not work inside classes.
6. Hook should always be used at the top level of the React functions.
7. Node version 6 or above. NPM version 5.2 or above.

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-16-II \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**hooks**

Open App.js file and modidy below component:

import React,{useState} from 'react';

and paste below code instead of App() function:

function App()

{

  const [count,setCount] = useState(0)          //bydefault value kuch bhi rakh sakte hai yaha par 0 hai

   return(

     <div>

         <h1>Hooks in funtional component {count}</h1>

         <button onClick={()=>{setCount(count+1)}}>Increment</button>

     </div>

   )

}

Than save and check browser

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-17 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**//confusion**

\*\*\* React Hooks \*\*\*

(1)what is hooks

(2)what is useEffect hooks

(3)what is the need of them

(4)replacement for componentWillUnmount()

componentDidMount()

componentDidUpdate()

(5) Example

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-18 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* Form Submission \*\*\*

(1)Make component

(2)make 2 input field and button

(3)use state for every input field

(4)update state on change

(5) Print state on button click

Right click on ‘src’ folder >> File Name >> put ‘Forms.js’

Open Forms.js file and paste below code:

import React from 'react';

export default class Forms extends React.Component

{

    constructor()

    {

        super()

        this.state={

            user:null,

            password:null

        }

    }

    submit()

    {

        console.warn(this.state)

    }

    render()

    {

        return

(

            <div>

                <h1>Form handling</h1>

                <input type="text" name="user" onChange={(e)=>this.setState({user:e.target.value})} />

                <br/><br/>

           <input type="password" name="password" onChange={(e)=>this.setState({password:e.target.value})} />

                <br/><br/>

                <button onClick={()=>this.submit()}>Submit</button>

            </div>

        )

    }

}

Open App.js file and import this component:

import Forms from './Forms';

and paste below code instead of App() function:

function App()

{

   return(

     <div className="App">

       <Forms />

     </div>

   )

}

Than save and check console in browser on button submission.

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-19 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* Form validation \*\*\*

(1)make some input field

(2)get data from input field

(3)check some validation

(4)show validation error message

Open App.js file and paste below code instead of App() function:

class App extends React.Component

{

   constructor()

   {

      super();

      this.state={

        name:"",

        password:"",

        nameError:"",

        passwordError:""

      }

    }

    valid()

    {

        if(!this.state.name.includes("@") && this.state.password.length<5)

        {

          this.setState({nameError:"Invalid Name please include @",passwordError:"Password length should be more than 5 char"})

        }

        else if(!this.state.name.includes("@") )

        {

          this.setState({nameError:"Invalid Name please include @"})

        }

        else if(this.state.password.length<5)

        {

          this.setState({passwordError:"Password length should be more than 5 char"})

        }

        else

        {

          return true

        }

    }

    submit()

    {

      this.setState({nameError:"",passwordError:""})

      if(this.valid())

      {

        alert("submit")

      }

    }

   render()

   {

     return

(

       <div className="App">

         <h1>form validation</h1>

         <input type="text" onChange={(event)=>this.setState({name:event.target.value})} />

         <p style={{color:"red",fontSize:"14px"}}>{this.state.nameError}</p>

         <input type="password" onChange={(event)=>this.setState({password:event.target.value})} />

         <p style={{color:"red",fontSize:"14px"}}>{this.state.passwordError}</p>

         <button onClick={()=>this.submit()}>Submit</button>

       </div>

     )

   }

}

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-20 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* Listing \*\*\*

(1)Make constructor and state

(2)Save some names in state

(3)Use Map function for making list of map

Open App.js file and paste below code instead of App() function:

class App extends React.Component

{

   constructor()

   {

      super();

      this.state={

        list:

[

          {name:'Anil',phone:'9893098930',email:'anil@gmail.com' },

          {name:'Sunil',phone:'9826098260',email:'sunil@gmail.com' },

          {name:'arun',phone:'9770890568',email:'arun@gmail.com' }

         ]

       }

    }

   render()

   {

     return

(

       <div className="App">

         <h1>Listing</h1>

         {

           this.state.list.map((item)=>

         <div>

            <span>Name:{item.name}</span> Email:<span>{item.email}</span>

          </div>

           )

         }

       </div>

     )

   }

}

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-21 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* Style \*\*\* [Ignore]

(1)Global style [External css]

(2)Inline style [Inline css]

(3)Conditional style

(4)Moduler style

Right click on ‘src’ folder and create 2 files (Forms.js and custom.css)

Open Forms.js file and paste below code:

import React from 'react';

import './custom.css';

export default function Form(props)

{

    const h2={

        color:'green',

        fontSize:'36px'

    }

    const h3={

        color:'green',

        fontSize:'36px'

    }

    return <div>

        <h1 className="header">Global Style</h1>

        <h1 style={h2}>Inline Style</h1>

        <h1 style={props.data=='apply'? h2 : h3}>Conditional Style</h1>

        {/\* agar condition true hai to hai to h2 class apply hoga other wise h3 class apply hoga,

            agar h3 ko apply nahi karna hai to uske jagah "" likhenge \*/}

             <h1 className={props.data=='apply'? "header" : ""}>Conditional2 Style</h1>

    </div>

}

Open custom.css file and paste below code:

.header

{

    color:red;

    text-align: center;

    font-size: 20px;

}

Open App.js file and import the component:

import Forms from './Forms';

and paste below code instead of App() function:

class App extends React.Component

{

   render()

   {

     return(

       <div className="App">

        <Forms data="apply" />

       </div>

     )

   }

}

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-22 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**//Not working**

\*\*\* Routing[page redirection] \*\*\*

(1)what is routing

(2)make 3 component

(3)install routing package :

Run below command inside second folder by command prompt-

**npm install react-router-dom**

(4)Import package

(5) write code for routing

Right click on ‘src’ folder and create a folder name of ‘cmp’ than right click on ‘cmp’ folder and create 3 files

Home.js, About.js and Forms.js

Open Home.js file and paste below code:

import React from 'react';

export default class Home extends React.Component{

    render()

    {

        return(

            <div>

                <h1>Home Routing</h1>

            </div>

        )

    }

}

Open About.js file and paste below code:

import React from 'react';

export default class About extends React.Component{

    render()

    {

        return(

            <div>

                <h1>About Routing</h1>

            </div>

        )

    }

}

Open Forms.js file and paste below code:

import React from 'react';

export default class Forms extends React.Component{

    render()

    {

        return(

            <div>

                <h1>Form Routing</h1>

            </div>

        )

    }

}

Open App.js file and import all components and installed router package:

import About from './cmp/About';

import Home from './cmp/Home';

import Forms from './cmp/Forms';

import {BrowserRouter as Router,Route,Link} from 'react-router-dom';

than paste below code instead of App() function:

class App extends React.Component

{

   render()

   {

     return(

       <div className="App">

                                {/\* Routing ke liye sabko <Router> tag ke andar likhenge \*/}

         <Router>

           <Link to="">Home</Link>

           <Link to="/about">About</Link>

           <Link to="/forms">Forms</Link>

           <Route exact path="/" Component={Home}></Route>

           <Route path="/about" Component={About}></Route>

           <Route path="/forms" Component={Forms}></Route>

           {/\* <About />

           <Home />

           <Forms /> \*/}

         </Router>

       </div>

     )

   }

}

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-23 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* Fetch API Data \*\*\*

(1)make constructor and make a state

(2)call api function with fetch function

(3)what is the need of them

(4)use map function to make listing of data

To get free api for testing :

<https://reqres.in/>

open App.js file and paste below code instead of App() function:

class App extends React.Component

{

   constructor()

   {

      super();

      this.state={

        users:null

      }

    }

    componentDidMount()

    {

      fetch('https://reqres.in/api/users').then((resp)=>{

        resp.json().then((result)=>{

           // console.warn(result) // to display all data

           console.warn(result.data)

           this.setState({users:result.data})

        })

      })

    }

   render()

   {

     return(

       <div className="App">

         <h1>fetch api data</h1>

        {

          this.state.users ?

          this.state.users.map((item,i)=>

        <div><p>{i}--{item.first\_name} {item.last\_name}</p></div>

          )

          :

          null

        }

       </div>

     )

   }

}

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-24 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* React Portal \*\*\*

(1)what is react portal

(2)make a component

(3)write code for portal

(4)make a element id

Open public>>index.html file and paste below code instead of <div id=”root”></div>

<div id="other-root"></div>

Right click on ‘src’ folder >> Make File >> put name ‘Other.js’

Open Other.js file and paste below code:

import React,{Component} from 'react';

//import reactDOM from 'react-dom';

class Other extends Component{

    render()

    {

        return reactDOM.createPortal(

            <div>

                <h1>Portal Component</h1>,

document.getElementById(‘other-root’)

            </div>

        )

    }

}

export default Other;

OR

import React,{Component} from 'react';

import ReactDOM from 'react-dom';

    ReactDOM.render()

    {

            <>

                <h1>Portal Component</h1>

<p>This is paragraph tag</p>

</>,

document.getElementById(‘other-root’)

    }

export default Other;

Note: when we will check by inspect element then we will get these html element with in a div tag whose id is root, but if we will use <React.Fragment></React.Fragment> OR <> </> tag instead of <div> tag then we will get only inner elements. This is called react fragment.

open App.js file and import this component:

import Other from './Other';

and paste below code instead of App() function:

class App extends React.Component

{

   render()

   {

     return(

       <div className="App">

         <h1>react portal</h1>

        <Other />

       </div>

     )

   }

}

Than save and check console in browser for adding <div id=”other-root”></div>

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-25 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* Ref \*\*\*

(1)what is Ref

(2)when to use and when to not use

(3)example

<https://reactjs.org/docs/refs-and-the-dom.html>

open App.js file and paste below code instead of App() function:

class App extends React.Component

{

   constructor()

   {

      super();

     this.userRef = React.createRef();   //userRef is self defined variable with empty value

    }

    editVal()

    {

        //console.warn(this.userRef)

              // OR

        this.userRef.current.focus()

              //OR

        this.userRef.current.value=10000

    }

   render()

   {

     return(

       <div className="App">

         <h1>ref</h1>

       <input ref={this.userRef} type="text" name="user" />

       <button onClick={()=>this.editVal()}>Click me</button>

       </div>

     )

   }

}

Than save and check console and input field on browser.

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-26 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* Bootstrap \*\*\* **//ignore**

(1)install bootstrap package => **npm install bootstrap**

(2)import package in index.js or current component =>

**import '../node\_modules/.bootstrap-NwMZ6FRT/dist/css/bootstrap.min.css'**

(3)what is the need of them =>

<https://react-bootstrap.github.io/> goto Getstarted

install bootstrap aside folder location by below command using terminal of visual studio code:

**npm install bootstrap**

open **index.js** file and import below package on second last position:

import  '../node\_modules/.bootstrap-NwMZ6FRT/dist/css/bootstrap.min.css'

than paste below code instead of App() function:

(we can use bootstrap 3 or 4 or 5)

class App extends React.Component {

  render() {

    return (

      <div className="App">

        <h1>bootstrap</h1>

        <input type="text" name="user" />

        <Button onClick={() => alert("button clicked")}>Click me</Button>

        <Container>

          <Row className="justify-content-md-center">

            <Col xs lg="2">

              1 of 3

    </Col>

            <Col md="auto">Variable width content</Col>

            <Col xs lg="2">

              3 of 3

    </Col>

          </Row>

          <Row>

            <Col>1 of 3</Col>

            <Col md="auto">Variable width content</Col>

            <Col xs lg="2">

              3 of 3

    </Col>

          </Row>

        </Container>

      </div>

    )

  }

}

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-27 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* Bootstrap Modal \*\*\* **//ignore**

(1)install bootstrap package => **npm install react-bootstrap bootstrap**

(2)add file in index.js => import ‘bootstrap/dist/css/bootstrap.min.css’; (on 2nd last position)

(3)import modal component and use it

(4)Make a example

Install bootstrap by below command aside folder location by using terminal:

**npm install react-bootstrap bootstrap**

(if already installed than ignore)

Open index.js file and import below file on second last position:

import ‘bootstrap/dist/css/bootstrap.min.css’;

open App.js file and import below classes:

import { Button,Modal } from 'react-bootstrap';

than paste below code instead of App() function:

class App extends React.Component

{

   constructor()

   {

      super();

     this.state={ show:false  }

   }

handleModal()

  {

    // this.setState({show:true})    //also check this statement behalf of below statement

    this.setState({show:!this.state.show})

  }

render() {

    return (

      <div className="App">

        <h1>bootstrap modal</h1>

       <Button onClick={()=>this.handleModal()}>Show Modal</Button>

        <Modal show={this.state.show} onHide={()=>this.handleModal()}>

            <Modal.Header closeButton>Modal Heading</Modal.Header>

            <Modal.Body> Hello Everyone </Modal.Body>

            <Modal.Footer>

              <Button onClick={()=>this.handleModal()}>Close</Button>

              <Button onClick={()=>this.handleModal()}>Save</Button>

            </Modal.Footer>

        </Modal>

</div>

    )

  }

}

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-28 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**//confusion**

\*\*\* Error Boundary \*\*\*

(1)what is error boundary

(2)make user component

(3)make errorboundary component

(4)write code and test it

Right click on ‘src’ folder and create 2 components: **User.js** and **ErrorBound.js**

Open User.js file and paste below code:

import React,{Component} from 'react';

class User extends Component{

    render()

    {

        if(true)

        {

            throw new Error('Custom Error')

        }

        return(

            <div>

                <h1>User Component</h1>

            </div>

        );

    }

}

export default User;

open ErrorBound.js file and paste below code:

import React,{Component} from 'react';

class ErrorBound extends Component{

    constructor()

    {

        super()

        this.state={

            error:null

        }

    }

    static getDerivedStateFromError()

    {

        return {error:true}

    }

    render()

    {

        return(

            <div>

               {

                   this.state.error?<h1>Custom page for error handling</h1>:this.props.children

                   //ErrorBound class ko parent class bana denge

               }

            </div>

        )

    }

}

export default ErrorBound;

open App.js file and import both components:

import User from './User';

import ErrorBound from './ErrorBound';

and paste below code instead of App() function:

class App extends React.Component

{

  render() {

    return (

      <div className="App">

        <h1>Error boundary Component</h1>

        <ErrorBound> <User /></ErrorBound>

      </div>

    )

  }

}

Than save and check browser.

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-29 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* Rendering \*\*\* [only theory]

Types of rendering:

(1)Server side rendering (jsp,php,asp)

(2)Client side rendering (react.js,java script,jquery)

**SSR:**

**SSR** is popular technique for rendering a normally client side app on the server and then sending a fully rendered page to the client.

**Benefits of SSR:**

One majaor benefits using SSR is in having an app that can be crawled sor search engine which help for SEO.

SSR can also often help with performance because a fully loaded app is send down on the server on the first request.

**SSR in React.js:**

(1)Hydrate instead of render.

(2)Use RectDOMServer renderToString

(3)Simple Express Server

(4)Configuring webpack and Babel

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-30 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**//complex code**

\*\*\* Server side rendering \*\*\*

(1)Create new App

(2)Some changes for SSR

(3)Install some npm package

(4)write some code for server

(5)Make build test server side rendering

<https://github.com/anil-sidhu/react-ssr-with-routing#install-expree-with-below-command->

open src>>index.js file and paste below code

ReactDOM.hydrate(                //  replaced hydrate instead of render

  <React.StrictMode>

    <App />

  </React.StrictMode>,

  document.getElementById('root')

);

Instead of

ReactDOM.render(                //  replaced hydrate instead of render

  <React.StrictMode>

    <App />

  </React.StrictMode>,

  document.getElementById('root')

);

Than open terminal in visual studio and run below 2 command one by one aside folder location:

**npm install express**

**npm install @babel/register @babel/preset-env @babel/preset-react ignore-styles**

create new folder with in ‘**myapp’** folder by clicking on + symbol of right side and put name ‘**server’** ,

than create 2 file with in ‘**server’** folder first is **index.js** and second is **server.js**

**open** server.js file and paste below code:

import path from 'path'

import fs from 'fs'

import express from 'express'

import React from 'react'

import ReactDOMServer from 'react-dom/server'

import App from '../src/App'

const PORT = 8080 //we will take any port no.

const app = express()

const router = express.Router()

const serverRenderer = (req, res, next) => {

fs.readFile(path.resolve('./build/index.html'), 'utf8', (err, data) => {

if (err) {

console.error(err)

return res.status(500).send('An error occurred')

}

return res.send(

data.replace(

'<div id="root"></div>',

`<div id="root">${ReactDOMServer.renderToString(<App />)}</div>`

)

)

})

}

router.use('^/$', serverRenderer)

router.use(

express.static(path.resolve(\_\_dirname, '..', 'build'), { maxAge: '30d' })

)

// tell the app to use the above rules

app.use(router)

// app.use(express.static('./build'))

app.listen(PORT, () => {

console.log(`SSR running on port ${PORT}`)

})

Open index.js file and paste below code:

require('ignore-styles')

require('@babel/register')({

ignore: [/(node\_modules)/],

presets: ['@babel/preset-env', '@babel/preset-react']

})

require('./server')

than run below command on terminal aside folder location:

**npm run build**

it will generate a new file (project folder)>>build>>index.html (new generated file)

than run below command:

**node server/index.js**

than open **localhost:8080** on browser (because we are mentioned port no. 8080 ,we can change it)

this is our SSR file because data are showing in <div id=”root”></div> we can also check by ctrl+u

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-31 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* Pure Component \*\*\*

(1)what is pure component

(2)why use pure component

(3)Test and example

<https://reactjs.org/docs/react-api.html#reactpurecomponent>

right click on ‘src’ folder and create a component ‘**Forms.js’**

open Forms.js and paste below code:

import React,{Component,PureComponent} from 'react';

class Forms extends React.PureComponent{

    constructor()

    {

        super()

        this.state={

            data:10

        }

    }

    render()

    {

        console.warn(this.state)

        return(

            <div>

                <h1>Pure component {this.state.data}</h1>

                <button onClick={()=>this.setState({data:20})}>Update state</button>

            </div>

        )

    }

}

export default Forms;

open App.js file and import this component:

import Forms from './Forms';

than paste below code instead of App() function:

class App extends React.Component

{

  render() {

    return (

      <div className="App">

         <Forms />

      </div>

    )

  }

}

Agar **Component** class use karenge to **render**() method bar bar call hoga ( jab element update hota hai ) aur agar **PureComponent** class use karenge to **render**() method ek baar call hoga.

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-32 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* React Memo \*\*\*

(1)what is memo

(2)make two component

(3)Apply memo

(4)Test it

Right click on ‘src’ folder and create a component(make file) name of ‘**Home.js**’

Open Home.js file and paste below code:

import React,{memo} from 'react';

function Home(props) // We can use const Home = (props) => instead of function Home(props)

{

  console.warn("inner component",props.senddata)

    return(

        <div>

            <h1>Home component</h1>

        </div>

    )

}

export default memo(Home);

open App.js file and modify below :

import React,{useState} from 'react';

and import this component:

import Home from './Home';

than paste below code instead of App() function:

function App() // we can use **const App = () => instead of function App()**

{

  const[count,setCount]=useState(0)

  const[delta,setDelta]=useState(200)

  return(

      <div>

          <h1>Memo with react {count}</h1>

          <h1>{delta}</h1>

          <Home senddata={delta} />

          <button onClick={()=>setCount(count+1)}>count</button>

          <button onClick={()=>setDelta(delta+1)}>data</button>

      </div>

  )

}

Save and check browser with console

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-33 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* JWT \*\*\* **[ignore]**

**Noe: use self api for solving error.**

(1)Test jwt with postman

(2)make login from with react

(3)call login API

(4)Handle jwt token

(5) call other api with jwt auth

Open App.js file and modify below:

import React,{Component} from 'react';

and paste below code instead of App() function:

class App extends React.Component

{

   constructor()

   {

      super();

     this.state={

       email:null,

       password:null,

       login:false,

       store:null,

     }

   }

   componentDidMount()

   {

   this.storeCollector();

   }

   storeCollector()

   {

     console.warn("Hello Collector")

    let store = JSON.parse(localStorage.getItem('login'))

    this.setState({store:store})

    if(store && store.login)

    {

     this.setState({login:true})

    }

    console.warn(store)

   }

   login()

   {

     //console.warn("form data",this.state)

     fetch('http://127.0.0.1:5000/api/login',{  //use self api

       method:"POST",

       body:JSON.stringify(this.state)

     }).then((resp)=>{

        resp.json().then((result)=>{

          console.warn("result",result)

          localStorage.setItem('login',JSON.stringify({

            login:true,

            token:result.token

          }))

          this.setState({login:true})

          this.storeCollector();

        })

     })

   }

   post()

   {

     let token = "Bearer "+this.state.store.token;

     console.warn(token)

    fetch('http://127.0.0.1:5000/api/posts',{  //use self api

    method:"POST",

    headers:{

      'Authorization':token

    },

    body:this.state.post,

    }).then((resp)=>{

     resp.json().then((result)=>{

       console.warn("result",result)

     })

   })

   }

  render() {

    return (

      <div className="App">

       <h1>JWT</h1>

        {

          !this.state.login ?

          <div>

          <input type="text" onChange={(event)=>{this.setState({email:event.target.value})}}  /><br/><br/>

         <input type="password" onChange={(event)=>{this.setState({password:event.target.value})}}  /><br/><br/>

          <button onClick={()=>{this.login()}}>Login</button>

        </div>

        :

        <div>

           <br/>

           <textarea onChange={(event)=>{this.setState({post:event.target.value})}}>

           </textarea>

           <button onClick={()=>{this.post()}}>Post Data</button>

        </div>

        }

      </div>

    )

  }

}

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-34 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* Uncontrolled Component \*\*\*

(1)what is uncontrolled component.

(2)make a form.

(3)Handle it with uncontrolled component way.

Open App.js file and paste below code instead of App() function:

class App extends React.Component

{

   constructor()

   {

      super();

    this.name = React.createRef();

    this.password = React.createRef();

   }

  submitHandle(event)

  {

    event.preventDefault();

    console.warn("hello",this.name.current.value);

    console.warn("hello",this.password.current.value);

  }

  render() {

    return (

      <div className="App">

      <form onSubmit={(event)=>{this.submitHandle(event)}}>

        <input type="text" placeholder="enter email" ref={this.name}/><br/><br/>

        <input type="password" placeholder="enter password" ref={this.password} /><br/><br/>

        <button type="submit">submit</button>

      </form>

      </div>

    )

  }

}

Save and check console in browser.

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-35 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**Project Work (Ignore)**

\*\*\* React Hooks \*\*\*

(1)create an app

(2)add routing

(3)login api

(4)register api

(5)listing api

(6)login auth

<https://reactrouter.com/web/guides/quick-start>

open terminal and run below command aside folder location:

npm install react-router-dom

right click on ‘src’ folder and create a new folder name of ‘**cmp**’ and right click on cmp folder and create 5 components:

About.js , Auth.js , Home.js , Listing.js , Protected.js

Open About.js file and paste below code:

import React,{Component} from 'react';

class About extends Component{

    render()

    {

        return(

            <div>

                About Component

            </div>

        )

    }

}

export default About;

open Auth.js file and paste below code:

import React,{Component} from 'react';

import {

    Redirect

   } from "react-router-dom";

class Auth extends Component{

    constructor()

    {

        super();

        this.state={

            isRegister:false

        }

    }

    login()

    {

        console.warn("login called",this.state);

        fetch('http://127.0.0.1.8000/api/login',{    // use self api to solve error

            method:"POST",

            headers:{

                "Accept" : "application/json",

                "Content-Type" : "application/json",

            },

            body:JSON.stringify(this.state)

        }).then((result)=>{

            result.json().then((resp)=>{

                console.log(resp)

                localStorage.setItem("auth",JSON.stringify(resp.success.token))

            })

        })

    }

    register()

    {

        console.warn("login called",this.state);

        fetch('http://127.0.0.1.8000/api/register',{    // use self api to solve error

            method:"POST",

            headers:{

                "Accept" : "application/json",

                "Content-Type" : "application/json",

            },

            body:JSON.stringify(this.state)

        }).then((result)=>{

            result.json().then((resp)=>{

                console.log(resp)

                localStorage.setItem("auth",JSON.stringify(resp.success.token))

            })

        })

    }

    render()

    {

        var auth = JSON.parse(localStorage.getItem('auth'))

        return(

            <div>

                {

                    auth ?  <Redirect to="home"></Redirect>:null

                }

               {

                   !this.state.isRegister?

                   <div>

                   <input type="text" placeholder="email" onChange={(e)=>{this.setState({email:e.target.value})}} /><br /><br />

                   <input type="text" placeholder="password" onChange={(e)=>{this.setState({password:e.target.value})}} /><br /><br />

                   <button onClick={()=>this.login()}>Login</button>

                   <button onClick={()=>this.setState({isRegister:true})}>Goto Register</button>

               </div>

               :

                <div>

                    <input type="text" placeholder="name" onChange={(e)=>{this.setState({name:e.target.value})}} /><br /><br />

                    <input type="text" placeholder="email" onChange={(e)=>{this.setState({email:e.target.value})}} /><br /><br />

                    <input type="password" placeholder="password" onChange={(e)=>{this.setState({password:e.target.value})}} /><br /><br />

                    <input type="password" placeholder="confrim password" onChange={(e)=>{this.setState({c\_password:e.target.value})}} /><br /><br />

                    <button onClick={()=>this.register()}>Register</button>

                    <button onClick={()=>this.setState({isRegister:false})}>Goto Login</button>

                </div>

                }

            </div>

        )

    }

}

export default Auth;

Open Home.js file and paste below code:

import React,{Component} from 'react';

class Home extends Component{

    render()

    {

        return(

            <div>

                Home Component

            </div>

        )

    }

}

export default Home;

Open Listing.js file and paste below code:

import React,{Component} from 'react';

class Listing extends Component{

    constructor()

    {

        super()

        this.state={

            items:null

        }

    }

    componentDidMount()   // use self api to solve error

    {

        fetch('http://127.0.0.1.8000/api/product').then((result)=>{

            result.json().then((data)=>{

                console.warn("data",data)

                this.setState({items:data})

            })

        })

    }

    render()

    {

        return(

            <div>

                {

                    this.state.items ?

                    this.state.items.map((item)=>

                    <div>

                        <h1>{item.name}</h1>

                        <h1>{item.category}</h1>

                    </div>

                    )

                    : null

                }

            </div>

        )

    }

}

export default Listing;

Open Protected.js file and paste below code:

import React,{Component} from 'react';

import {

   Redirect

  } from "react-router-dom";

function Protected(props){

        const Cmp = props.cmp;

        var auth = JSON.parse(localStorage.getItem('auth'))

        console.warn(auth)

        return ( <div>

                {auth ? <Cmp /> : <Redirect to="login"></Redirect>}

               </div>

        )

}

export default Protected;

open App.js file and import below components:

import About from './cmp/About';

import Home from './cmp/Home';

import Listing from './cmp/Listing';

import Auth from './cmp/Auth';

import Protected from './cmp/Protected';

import {

  BrowserRouter as Router,

  Switch,

  Route,

  Link

} from "react-router-dom";

and paste below code instead of App() function:

class App extends React.Component

{

  render() {

    return (

      <div className="App">

     <h1>welcome</h1>

     <Router>

        <Link to="home" >Home</Link>

        <Link to="about">About  </Link>

        <Link to="list">Product Listing  </Link>

        <Link to="/">Login</Link>

        <Switch>

          <Route path="/about">

            <About />

            {/\* <Protected cmp={About} /> \*/}

          </Route>

          <Route path="/home">

            <Home />

            {/\* <Protected cmp={Home} /> \*/}

          </Route>

          <Route path="/list">

            <Listing />

            {/\* <Protected cmp={Listing} /> \*/}

          </Route>

          <Route path="/">

          <Auth />

          </Route>

        </Switch>

     </Router>

      </div>

    )

  }

}

Open index.css file and add below code:

a{

  padding: 10px;

}

Than save and check browser with console.

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-36 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* Interview Questions \*\*\*

Create notes……

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-37,38,39\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**//getting error**

\*\*\* Redux \*\*\*

Not audible watch another writter video…

(1)what is redux understand with diagram

(2)why we use understand with diagram

(3)make folder structure

Right click on ‘src’>>make file >> put name ‘**rootReducer.js**’

Than make 3 folder(**Components**, **Containers**, **Services**) with in ‘src’ folder

Than create **Home.js** file with in **Components** folder, make **HomeContainer**.js file with in **Containers** folder and create **actions**.js,**constants**.js and **reducers**.js file with in **Services** folder

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*38\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

(1)react-redux

(2)redux

(3)redux-thunk -- >>> middleware for handle async call

(4)make provider and combine with rootReducer

(5) make global store.

Open terminal and run below command aside folder location:

**npm i react-redux**

than run below command:

**npm i redux**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*39\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

(1)Connect component with action

(2)Click event and call action

(3)mapStateToProps

(4)mapDispachToProps

Open **Home**.js file and paste below code:

import React,{Component} from 'react';

import {connect} from 'react-redux';

import {helloRedux} from '../Services/actions'

class Home extends Component{

  render()

  {

      return(

          <div>

              Home Component

              <button onClick={()=>this.props.helloRedux()} >Click me</button>

          </div>

      )

  }

}

const mapDispachToProps = dispach => ({

    helloRedux : ()=>dispach(helloRedux())

})

const mapStateToProps = state =>{

    {

    }

}

const HomeCmp = connect(

    mapStateToProps,

    mapDispachToProps

)(Home)

export default HomeCmp;

Open **rootReducer**.js file and paste below code:

import {combineReducers} from 'redux';

export default combineReducers({

})

Open src >> index.js file and add below code after ending of imports:

import {Provider} from 'react-redux';

import {createStore,applyMiddleware} from 'redux';

import ReduxThunk from 'redux-thunk';

import rootReducer from './rootReducer';

const store = createStore(rootReducer,applyMiddleware(ReduxThunk))

and **replace** below code instead of previous code:

ReactDOM.render(

  <React.StrictMode>

        <Provider store={store}>

         <App />

         </Provider>

  </React.StrictMode> ,

  document.getElementById('root')

);

Open App.js file and import **Home** component:

import Home from './Components/Home';

and paste below code instead of App() function:

function App()

{

   return(

     <div className="App">

        <Home />

     </div>

   )

}

Open actions.js file and paste below code:

export const helloRedux = () => (dispatch:any)=>{

    alert("helloRedux")

}

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-40 to 48,50,51 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**Project Work (ignore)**

\*\*\* Project (Restaurent) \*\*\*

(1)make a project structure (2) routing

(3)Login and Registration (4)API calls

(5)Listing of Restaurents (6)make new restaurant

(7)update restaurant details (8)delete restaurant

(9)search restaurant (10) style and design …..etc

(11)advance (12)google map

(13)redux (14)upload photos

(15)gallery (16)Login with facebook,google

>> Make a folder name of ‘**ReactjsProject’** on desktop location:

Than Open command prompt and run below command aside ‘**ReactjsProject’** folder:

**npx create-react-app** restaurent-app //( restaurent-app is a folder name , it will take apx 10 minute )

>>Direct run below command to install json-server:

**npm install -g json-server**

create ‘**db**’ folder with in ‘**ReactjsProject’** folder

than create **db.json** file with in ‘**db**’ folder and paste below code with in **db.json** file:

    {

  "login":

[

{"name":"anil","password":"abc@123"}

   ],

        "restaurant":

        [

            { "id": 1,"name": "Mcdonald","address": "Delhi","rating": "4.0","email": "mcdonald@gmail.com"},

            { "id": 2,"name": "sagar gaire","address": "Bhopal","rating": "5.0","email": "sagar@gmail.com"}

        ]

    }

To run json server use below command aside ‘**db**’ folder:

**json-server --watch** db.json [db.json is file name]

>> Run below command to install Routing-Package aside **restaurent-app** folder:

**npm install react-router-dom**

<https://reactrouter.com/web/guides/quick-start> // for reference..

>>than click on ‘**extension’** option or (**ctrl+shift+x**) in visual studio code , search reactjs code snippets and install this plugin.

Note: js file me **rcc**  likh kar enter karne se auto code ho jata hai.

>>Run below command to install Bootstrap aside **restaurent-app** folder:

**npm i bootstrap react-bootstrap**

{/\* The following line should be included in your src/index.js or App.js file\*/}

import 'bootstrap/dist/css/bootstrap.min.css';

<https://react-bootstrap.github.io/> //for reference

>>Run below 3 command to use icons aside **restaurent-app** folder:

npm i --save @fortawesome/fontawesome-svg-core

npm i --save @fortawesome/free-solid-svg-icons

npm i --save @fortawesome/react-fontawesome

than, jis component me icons use karna hai us component me below files import karte hai:

import { FontAwesomeIcon } from '@fortawesome/react-fontawesome';

import { faCoffee } from '@fortawesome/free-solid-svg-icons';

<https://github.com/FortAwesome/react-fontawesome> //Reference

<https://fontawesome.com/icons?d=gallery> // for getting icons

---------------------------------------------------------------------**Start Project** -------------------------------------------------------------------------

>> create a folder name of ‘**component**’ with in **src** folder, than create 6 components**[Home.js, RestaurantCreate.js, RestaurantDetails.js, RestaurantSeacth.js, RestaurantsList.js, RestaurantUpdate.js, Login.js, Logout.js and Protected.js]** with in **component** folder,

And will also edit in **App.js** file,App.cs

Open **Home.js** file and paste below code:

import React, { Component } from 'react';

class Home extends Component {

    render() {

        return (

            <div>

                <h1>Home</h1>

            </div>

        );

    }

}

export default Home;

open **RestaurantCreate.js** file and paste below code:

import React, { Component } from 'react';

class RestaurantCreate extends Component {

    constructor()

    {

        super();

        this.state={

            name:null,email:null,rating:null,address:null

        }

    }

    create()

    {

       // console.warn(this.state)

       fetch("http://localhost:3000/restaurant",{

           method:"Post",

           headers:{

                'Content-Type':'application/json'

           },

           body:JSON.stringify(this.state)

       }).then((result)=>{

           result.json().then((resp)=>{

               console.warn(resp)

           })

       })

    }

    render() {

        return (

            <div>

                <h1>Restaurant Create</h1>

                <div>

                    {/\* To insert data, field name of this file(name,email,rating,address) and column name of

                    db.json file

                    must be same \*/}

                    <input onChange={(event)=>{this.setState({name:event.target.value})}}

                    placeholder="Restaurant Name" /><br/><br/>

                     <input onChange={(event)=>{this.setState({email:event.target.value})}}

                    placeholder="Restaurant Email" /><br/><br/>

                     <input onChange={(event)=>{this.setState({rating:event.target.value})}}

                    placeholder="Restaurant Rating" /><br/><br/>

                     <input onChange={(event)=>{this.setState({address:event.target.value})}}

                    placeholder="Restaurant Addrress" /><br/><br/>

                    <button onClick={()=>{this.create()}}>Add Restaurant</button>

                </div>

            </div>

        );

    }

}

export default RestaurantCreate;

open **RestaurantDetails.js** file and paste below code:

import React, { Component } from 'react';

class RestaurantDetails extends Component {

    render() {

        return (

            <div>

                <h1>Restaurant Details</h1>

            </div>

        );

    }

}

export default RestaurantDetails;

open **RestaurantSeacth.js** file and paste below code:

import React, { Component } from 'react';

class RestaurantSeacth extends Component {

    constructor()

    {

        super()

        this.state={

            searchData:null,

            noData:false

        }

    }

    search(key)

    {

        fetch("http://localhost:3000/restaurant/"+key).then((data)=>{

            data.json().then((resp)=>{

                //console.warn("resp",resp)

                if(resp.length>0)

                {

                    this.setState({searchData:resp,noData:false})

                }

                else

                {

                    this.setState({noData:true,searchData:null})

                }

            })

        })

    }

    render() {

        return (

            <div>

                <h1>Restaurant Seacth</h1>

                <input type="text" onChange={(event)=>this.search(event.target.value)} />

                <div>

                    {

                        this.state.searchData ?

                        <div>

                            {

                                this.state.searchData.map((item)=>

                            <div>{item.name}</div>

                                )

                            }

                        </div>

                        :

                        ""

                    }

                    {

                        this.state.noData ? <h2>No record found</h2> : null

                    }

                </div>

            </div>

        );

    }

}

export default RestaurantSeacth;

open **RestaurantsList.js** file and paste below code:

import React, { Component } from 'react';

import {Table} from 'react-bootstrap';

import {BrowserRouter as Router,Route,Link,Switch} from 'react-router-dom';

import { FontAwesomeIcon } from '@fortawesome/react-fontawesome';

import { faCoffee,faEdit,faTrash } from '@fortawesome/free-solid-svg-icons';

class RestaurantsList extends Component

{

    constructor()

    {

        super();

        this.state = {

            list: null,

        }

    }

    componentDidMount()

    {

        this.getData()

    }

    getData()

    {

        fetch("http://localhost:3000/restaurant").then((response) => {

            response.json().then((result) => {

               // console.warn(result)

                this.setState({list:result})

            })

        })

    }

    delete(id)

    {

        fetch("http://localhost:3000/restaurant/"+id,{

            method:"DELETE",

            headers:{

                 'Content-Type':'application/json'

            },

            body:JSON.stringify(this.state)

        }).then((result)=>{

            result.json().then((resp)=>{

               alert("deleted")

               this.getData()

            })

        })

    }

    render()

    {

        console.warn(this.state)

        return (

            <div>

                <h1>RestaurantsList</h1>

                {

                    this.state.list?

                    <div className="top-div">

                        <Table striped bordered hover>

                        <thead>

                            <tr>

                                <th>#</th>

                                <th>Name</th>

                                <th>Rating</th>

                                <th>Location</th>

                                <th>Action</th>

                            </tr>

                        </thead>

                        <tbody>

                        {

                            this.state.list.map((item,i)=>

                            // <div>

                            //    <span>{item.name}</span>,<span>{item.email}</span>

                            // </div>

                            <tr>

                            <td>{item.id}</td>

                            <td>{item.name}</td>

                            <td>{item.rating}</td>

                            <td>{item.address}</td>

                            <td>

                                <Link to={"/update/"+item.id}><FontAwesomeIcon icon={faEdit} color="blue" /> </Link>

                                <span onClick={()=>this.delete(item.id)}><FontAwesomeIcon icon={faTrash} color="blue" /> </span>

                            </td>

                          </tr>

                            )

                        }

                         </tbody>

                        </Table>

                    </div>

                    :

                    <p>Please wait...</p>

                }

            </div>

        );

    }

}

export default RestaurantsList;

open **RestaurantUpdate.js** file and paste below code:

import React, { Component } from 'react';

class RestaurantUpdate extends Component {

    constructor()

    {

        super();

        this.state={

            name:null,email:null,rating:null,address:null,id:null

        }

    }

    componentDidMount()

    {

        fetch("http://localhost:3000/restaurant/"+this.props.match.params.id).then((response) => {

            response.json().then((result) => {

               // console.warn(result)

                this.setState({

                    name:result.name,

                    email:result.email,

                    id:result.id,

                    rating:result.rating,

                    address:result.address

                })

            })

        })

    }

    update()

    {

       fetch("http://localhost:3000/restaurant/"+this.state.id,{

        method:"PUT",

        headers:{

             'Content-Type':'application/json'

        },

        body:JSON.stringify(this.state)

    }).then((result)=>{

        result.json().then((resp)=>{

           alert("updated")

        })

    })

    }

    render() {

        //console.warn(this.props.match.params.id)

        return (

            <div>

                <h1>Restaurant Update</h1>

                <div>

                    <input onChange={(event)=>{this.setState({name:event.target.value})}}

                    placeholder="Restaurant Name" value={this.state.name}/><br/><br/>

                     <input onChange={(event)=>{this.setState({email:event.target.value})}}

                    placeholder="Restaurant Email" value={this.state.email} /><br/><br/>

                     <input onChange={(event)=>{this.setState({rating:event.target.value})}}

                    placeholder="Restaurant Rating" value={this.state.rating}/><br/><br/>

                     <input onChange={(event)=>{this.setState({address:event.target.value})}}

                    placeholder="Restaurant Addrress" value={this.state.address}/><br/><br/>

                    <button onClick={()=>{this.update()}}>Update Restaurant</button>

                </div>

            </div>

        );

    }

}

export default RestaurantUpdate;

open **src >> App.css** file and add below code:

span{

  color: red;

    padding: 10px;

}

.top-div{

  background-color: pink;

}

open **App.js** file and add below components:

import {BrowserRouter as Router,Route,Link,Switch} from 'react-router-dom';

import Home from './component/Home';

import RestaurantCreate from './component/RestaurantCreate';

import RestaurantDetails from './component/RestaurantDetails';

import RestaurantSeacth from './component/RestaurantSeacth';

import RestaurantsList from './component/RestaurantsList';

import RestaurantUpdate from './component/RestaurantUpdate';

import 'bootstrap/dist/css/bootstrap.min.css';

import {Navbar,Nav} from 'react-bootstrap';

import { FontAwesomeIcon } from '@fortawesome/react-fontawesome';

import { faCoffee,faEdit,faList,faHome,faPlus,faSearch } from '@fortawesome/free-solid-svg-icons';

than paste below code instead App() function:

function App() {

  return (

    <div className="App">

      <Router>

        {/\* navigation bar \*/}

  <Navbar bg="light" expand="lg">

  <Navbar.Brand href="#home">Restaurant</Navbar.Brand>

  <Navbar.Toggle aria-controls="basic-navbar-nav" />

  <Navbar.Collapse id="basic-navbar-nav">

    <Nav className="mr-auto">

      <Nav.Link href="#home"><Link to="/"><FontAwesomeIcon icon={faHome}/>Home</Link></Nav.Link>

      <Nav.Link href="#link"><Link to="/list"><FontAwesomeIcon icon={faList}/>List</Link></Nav.Link>

      <Nav.Link href="#home"><Link to="/create"><FontAwesomeIcon icon={faPlus}/>Create</Link></Nav.Link>

      <Nav.Link href="#link"><Link to="/search"><FontAwesomeIcon icon={faSearch}/>Search</Link></Nav.Link>

    </Nav>

  </Navbar.Collapse>

</Navbar>

        {/\* navigation bar \*/}

         <Route path="/list">

             <RestaurantsList />

         </Route>

         <Route path="/create">

             <RestaurantCreate />

         </Route>

         <Route path="/search">

             <RestaurantSeacth />

         </Route>

         <Route path="/details">

             <RestaurantDetails />

         </Route>

         <Route path="/update/:id" render={props=>(<RestaurantUpdate {...props} />)}></Route>

          {/\* Parameter receive karne k liye id use kiya gaya hai \*/}

         {/\* Home sabse last me rahta hai exact keyword se home component sabhi pages me show nahi hoga \*/}

         <Route exact path="/">

             <Home />

         </Route>

      </Router>

    </div>

  );

}

Than save and check in browser.

Note: json server must be started on firstly.

C:\Users\VEDESHI\Desktop\ReactjsProject\db\ **json-server --watch** db.json

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-49 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\* controlled component \*\*\*

(1)what is controlled component

(2)how to make it

(3)Test controlled component

Open App.js file and paste below code instead of App() function :

class App extends React.Component

{

  constructor()

  {

    super()

    this.state={

      name:"",

      password:""

    }

  }

  submit()

  {

    console.warn(this.state);

  }

  render()

  {

    return (

      <div>

        <input type="text" placeholder="enter name"

        onChange={(event)=>this.setState({name:event.target.value})} /> <br/><br/>

        <input type="password" placeholder="enter password"

        onChange={(event)=>this.setState({password:event.target.value})} />

        <button onClick={()=>{this.submit()}}>Submit</button>

      </div>

    );

  }

}

Save and check in browser..

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-52 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

\*\*\*Lazy Loading\*\*\*

Create 2 components (**Home.js** and **About.js**) with in **src** folder….

Open **Home.js** file and paste below code:

import React, { Component } from 'react';

class Home extends Component {

    render() {

        return (

            <div>

                <h1>home</h1>

            </div>

        );

    }

}

export default Home;

Open **About.js** file and paste below code:

import React, { Component } from 'react';

class about extends Component {

    render() {

        return (

            <div>

                <h1>about</h1>

            </div>

        );

    }

}

export default about;

Open **App.js** file and modify below import:

import React,{Suspense,lazy} from 'react';

than paste below code instead of **App()** function:

const Home = lazy(()=>import('./Home'))

const About = lazy(()=>import('./About'))

class App extends React.Component

{

 render() {

    return (

      <div className="App">

         <h1>Lazy Loading</h1>

      <Suspense fallback={<div>Please wait...home is loading</div>}>

          <Home />

      </Suspense>

     <Suspense fallback={<div>Please wait...about is loading</div>}>

        <About />

     </Suspense>

      {/\* jis component me jyada data hoga wo component late se load hoga \*/}

      </div>

    )

  }

}

Save and check browser .

Note: right click>>inspect elements>>Network>> select **slow 3G** (from dropdown)

Than check…

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-53 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**//put correct api to store file**

\*\*\* File Uploading \*\*\*

Open **App.js** file and paste below code instead of **App()** function:

class App extends React.Component

{

   upload(e)

   {

      console.warn(e.target.files)

      const files = e.target.files

      const formData = new FormData();

      formData.append('img',files[0])

      fetch('http://127.0.0.1:8000/api/store',{

         method:"POST",

         body:formData

      }).then((resp)=>{

         resp.json().then((result)=>{

            console.warn("result",result)

         })

      })

   }

 render() {

    return (

      <div className="App">

         <h1>file uploading</h1>

         <input type="file" name="img" onChange={(e)=>{this.upload(e)}} />

      </div>

    )

  }

}

Note: Put Correct api to store file.

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-54 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**//something error**

\*\*\* Type checking with proptypes \*\*\*

To find type of prototypes seach on google..

Create a component **About.js** with in **src** folder….

Open **About.js** file and paste below code:

import React, { Component } from 'react';

import PropTypes from 'prop-types'

class About extends Component {

    render() {

        return (

            <div>

                <h1>about component</h1>

                <h2>{this.props.age}</h2>

                <h2>{this.props.name}</h2>

            </div>

        );

    }

}

About.propTypes={

    age:PropTypes.number,

    name:PropTypes.string

}

export default About;

Open **App.js** file and import this component:

import About from './About';

and paste below code instead of **App()** function:

class App extends React.Component

{

 render() {

    return (

      <div className="App">

         <h1>Type checking with prototypes </h1>

         {/\* <About age={"20"} /> agar age ko string declare karenge to console me warning aayega \*/}

         <About age={20} name="anil sidhu" />

      </div>

    )

  }

}

Than save and check browser with console.

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-55 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**//Pending**

\*\*\* Custom Hook \*\*\*

Create a component **useTitle.js** with in **src** folder…

Open **useTitle.js** file and paste below code:

import {useEffect} from 'react';

const useTitle = () => {

useEffect(()=>{

    document.title=this.props

})

};

export default useTitle;

Open **App.js** file and modify below import:

import React,{useState,useEffect} from 'react';

than import this component:

import useTitle from './useTitle';

than paste below code instead of **App()** function:

const App = () =>{

   const [count,setCount] =useState(0)

   useEffect(()=>{

      document.title = count + " hits on button"

   })

  return(

      <div>

          <h1>Custom Hook </h1>

          <button onClick={()=>setCount(count+1)}>click</button>

      </div>

  )

}

Save and check title on browser…

See another video:

https://www.youtube.com/watch?v=hGjh-Y01oOI

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PART-56 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**//Theory**

\*\*\* how react works \*\*\*

(1)React is javascript library.

(2)React is not a MVC frame work

(3)Over 5.5 millions weekly downloads

(4)It works with virtual DOM.

how react works : watch video and another video

Jsx in react : watch video and another video

Virtual dom : watch video and another video

.