**Frontend Part:**

**Creating React app:**

To create react app go to the console of the vs code and type npx create react-app folder\_name/Nothing . then the react application automatically installed in the folder

**Install Tailwind in React app:**

Go to the link and follow the steps and the tailwind will be installed in the react app

<https://tailwindcss.com/docs/guides/create-react-app>

**Use React Icon:**

To use react icon go to the link and follow the steps

<https://react-icons.github.io/react-icons/>

**Using Layout for the project:**

We use layout for using the same component in the all pages or Routes .

**How to use it:**

import React from 'react'

import { Outlet } from 'react-router-dom'

import Header from '../header/header'

function layout() {

First create a Header component and then use the component In the layout component. And in layout component , must use <Outlet/>

  return (

    <div>

        <Header/>

        <Outlet/>

    </div>

  )

}

export default layout

**How to use Layout component**

import React from 'react'

import { Route, Routes } from 'react-router-dom'

import { UserContextprovider } from './components/useContext/userContext'

function App() {

  return (

    <div>

In the first route we use Layout component in the element of the Route

      <UserContextprovider>

        <Routes>

          <Route  element={<Layout />}>

             <Route path='/' element={<IndexPage/>} />

            <Route path='/register' element={<RegisterForm />} />

            <Route path='/login' element={<Login />} />

</Route>

        </Routes>

      </UserContextprovider>

    </div>

  )

}

export default App

**Use Axios https request:**

Go to the link to and use whatever you want

<https://www.npmjs.com/package/axios>

**Important react hooks:**

**useContext** : that is used to send all the important information or data through out the project .

**how to use this hook:**

1st , create a component named userContext.js

2nd , write the code

Create a context name UserContext and export it

import axios from "axios";

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

export let UserContext=React.createContext({})

Export the component name and return the children in the UserContext.Provider that provide all the values in the children

export let UserContextprovider=({children})=>{

    const [user, setuser] = useState("");

    const [ready, setready] = useState(false);

    const [searchPlaces, setsearchPlaces] = useState([]);

    useEffect(() => {

       if(!user)

       {

        axios.get("/profile").then(({data})=>{

            setuser(data)

            setready(true)

In the UserContext.Provider tag send all the values like user,setuser in the children. And those values we can use anywhere in the projects

        })

       }

    }, []);

    return(

        <UserContext.Provider value={{user,setuser,ready,setsearchPlaces,searchPlaces}}>

            {children}

        </UserContext.Provider>

    )

}

3rd , use the UserContextprovider.js component in app.js file

import React from 'react'

import { Route, Routes } from 'react-router-dom'

import { UserContextprovider } from './components/useContext/userContext'

function App() {

  return (

Import UserContextprovider in the app.js

    <div>

Use the UserContextprovider component as tag for the Routes tag. In the routes tag use Route tag for layout and inside this route tag import all the Route tag

      <UserContextprovider>

        <Routes>

          <Route  element={<Layout />}>

             <Route path='/' element={<IndexPage/>} />

            <Route path='/register' element={<RegisterForm />} />

            <Route path='/login' element={<Login />} />

</Route>

        </Routes>

      </UserContextprovider>

    </div>

  )

}

export default App

4th , then use the app.js in the index.js in the BrowserRouter tag

import React from 'react';

import "./index.css"

import ReactDOM from 'react-dom/client';

import { BrowserRouter } from 'react-router-dom';

import App from './App';

const root = ReactDOM.createRoot(document.getElementById('root'));

root.render(

  <React.StrictMode>

Use App component in the BrowserRouter tag

    <BrowserRouter>

    <App />

    </BrowserRouter>

  </React.StrictMode>

);

5th , to use this UserContext.js import this in any component and use it as your own

import { useContext } from 'react';

function Header() {

  let { user, searchPlaces, setsearchPlaces } = useContext(UserContext)

  return (

Import values from UserContext and use it in the Header component

    <div >

      {

  !!user && (

              <div className="">

                {user.name}

              </div>

            )

          }

    </div>

  )

}

export default Header

**useEffect:**

this hook is used to manage side effects in our react applications and enabling us to fetch data, update the DOM, manage subscription and event listener and optimize performance

 useEffect(() => {

       if(!user)

       {

        axios.get("/profile").then(({data})=>{

            setuser(data)

            setready(true)

        })

       }

    }, []);

**useState:**

useState is used to store and set the stored data in the project

    const [user, setuser] = useState("");