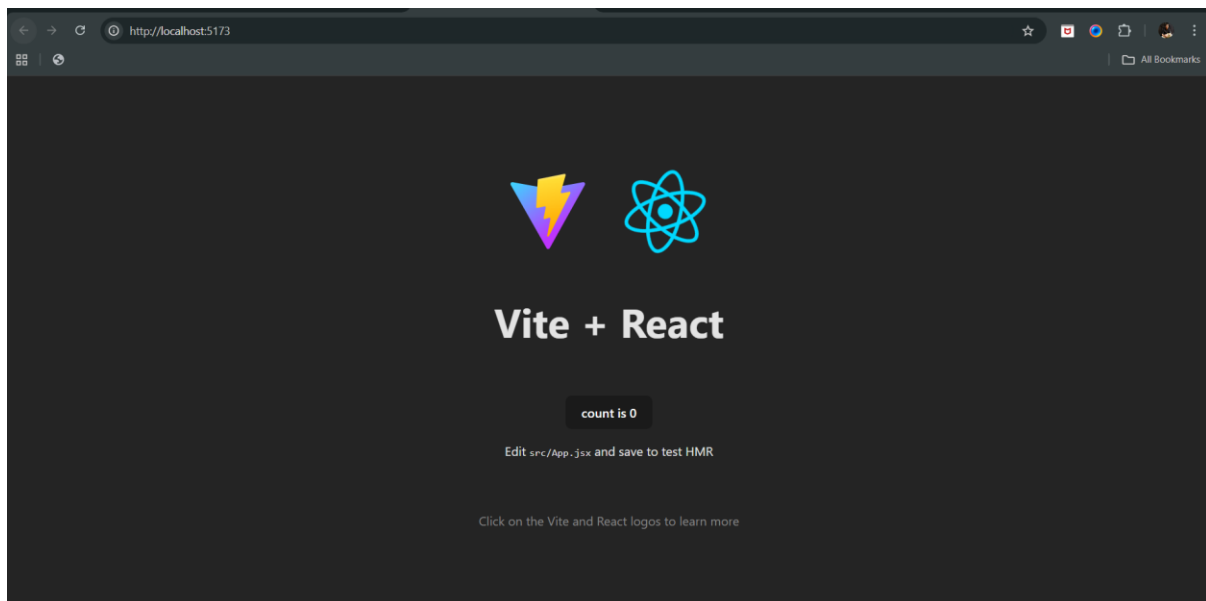# Day 60

"Web Development + Security"

React Router: Routing in React:

What is React Router?

React Router is a library that allows navigation between different pages or views in a single-page React application (SPA) — without reloading the page. It handles the routing logic inside the browser, keeping your app fast and smooth.

To understand from the basics, we will first start the React + Vite as we are doing since last few videos:

Now, first before we start anything, we should know what's the issue with <a> tag that we need react router? Basically, when we click on the link of the <a> tag, the new page appears, but reloaded, in react router this reloading doesn't take place. Hence, used.
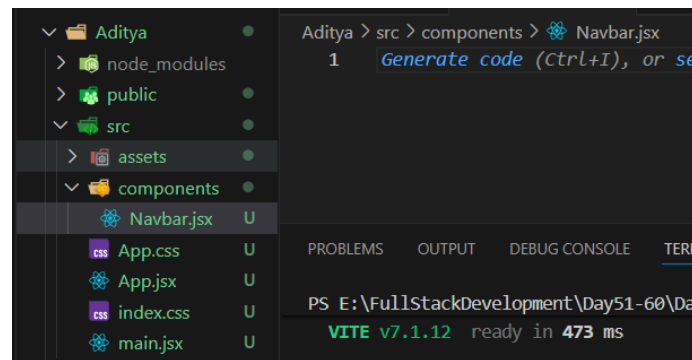
So, how to use it? Use the below command to install it:


```
PS E:\FullStackDevelopment\Day51-60\Day60\Aditya> npm i react-router-dom

added 4 packages, and audited 158 packages in 2s

32 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
```
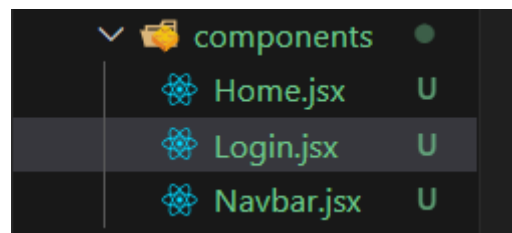
Now, to see the usage, let's first create a components folder and make Navbar.jsx inside it:
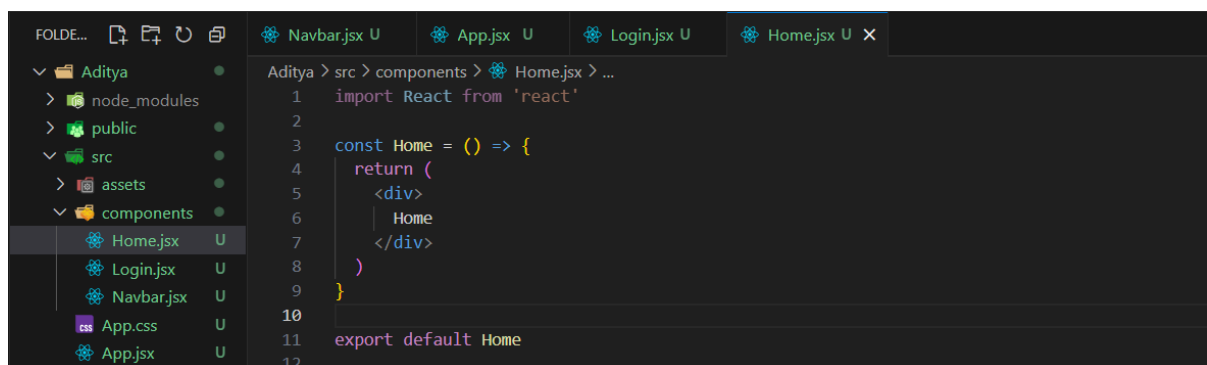

Also, we will add a home page, and for this we will create the Home.jsx in the components folder, and use it later in the App.jsx as the element.
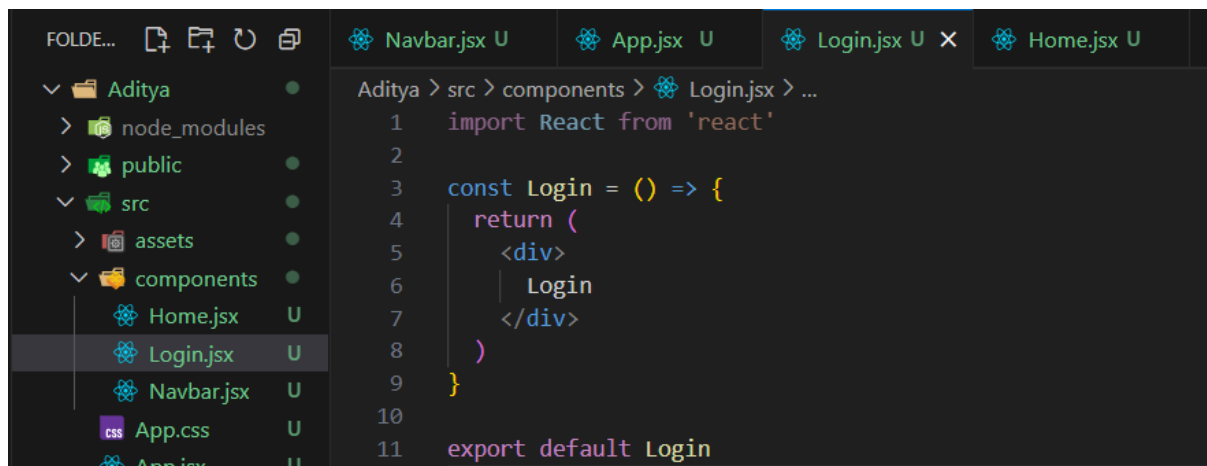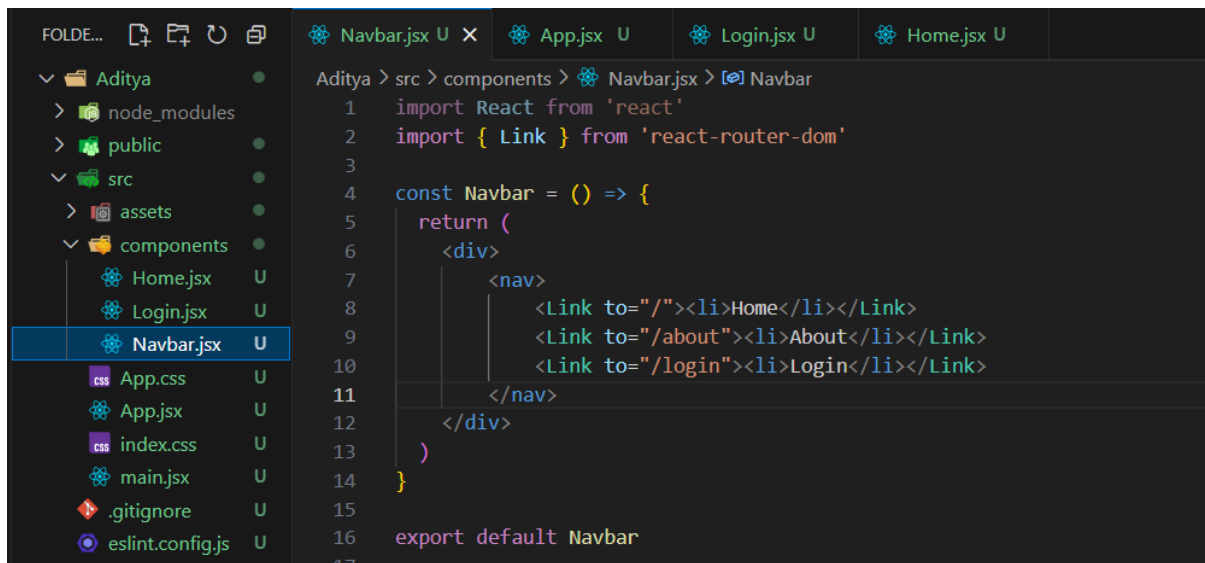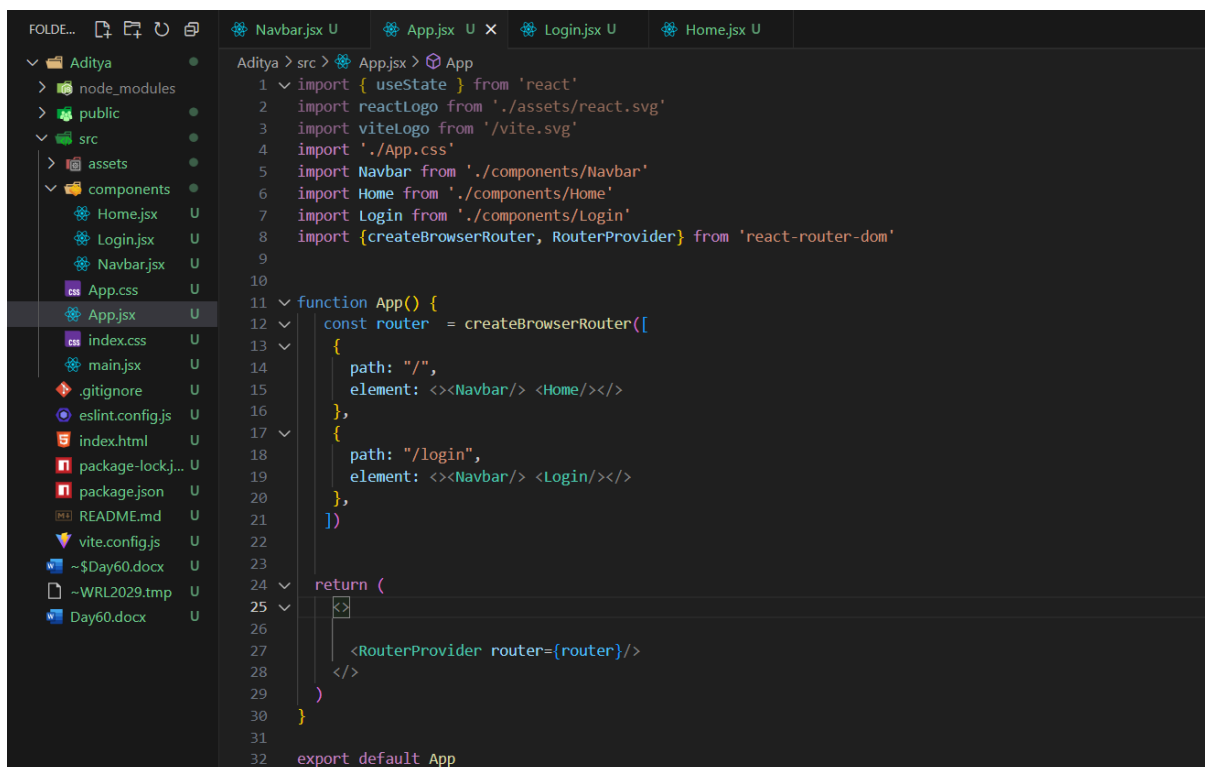

Now, code for each:

Home.jsx:


```jsx
import React from 'react'

const Home = () => {
  return (
    <div>
      Home
    </div>
  )
}

export default Home
```

Login.jsx:


```jsx
import React from 'react'

const Login = () => {
  return (
    <div>
      Login
    </div>
  )
}

export default Login
```

Navbar.jsx:

```jsx
import React from 'react'
import { Link } from 'react-router-dom'

const Navbar = () => {
  return (
    <div>
      <nav>
        <Link to="/"><li>Home</li></Link>
        <Link to="/about"><li>About</li></Link>
        <Link to="/login"><li>Login</li></Link>
      </nav>
    </div>
  )
}

export default Navbar
```
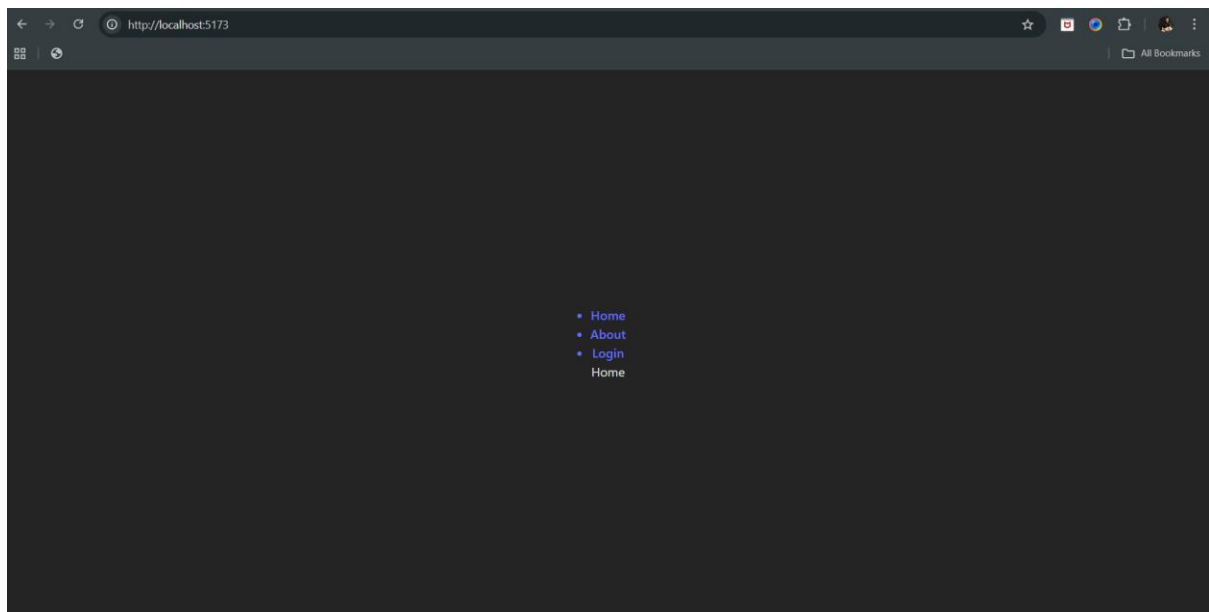
App.jsx:
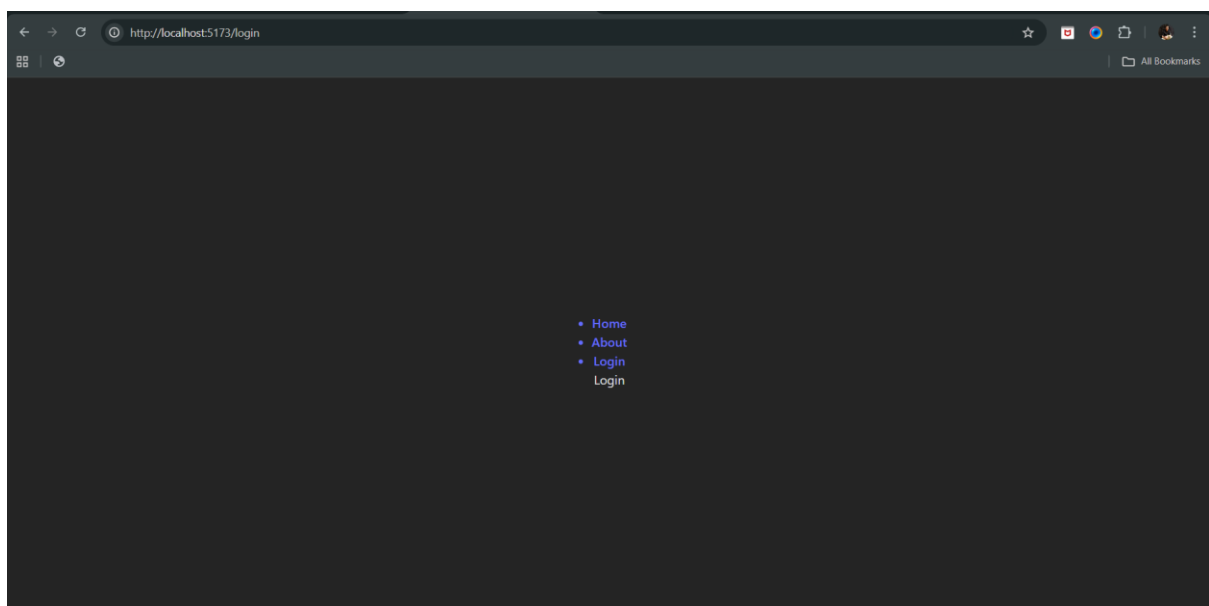
```jsx
import { useState } from 'react'
import reactLogo from './assets/react.svg'
import viteLogo from '/vite.svg'
import './App.css'
import Navbar from './components/Navbar'
import Home from './components/Home'
import Login from './components/Login'
import {createBrowserRouter, RouterProvider} from 'react-router-dom'

function App() {
  const router = createBrowserRouter([
    {
      path: "/",
      element: <><Navbar/> <Home/></>
    },
    {
      path: "/login",
      element: <><Navbar/> <Login/></>
    },
  ])

  return (
    <>

      <RouterProvider router={router}/>
    </>
  )
}

export default App
```

Output: at start

Output: when login was clicked, page don't reload.

--The End--