React Router:

What?

It is a fully-featured client and server-side routing library for React.

Helps create and navigate between different URLs that makes up the web applications.

Provides unique URLs for different components in the app and makes the UI easily sharable with other users.

Good for medium to large scale web application.

**Important Topics**

1. Configuring routes
2. Navigating on Button click
3. Navigating programmatically
4. Dynamic Routes
5. Nested Routes
6. Route Parameters
7. Lazy Loading
8. Authentication

React router provides a component called <BrouserRouter> in which we need to wrap our entire app.

In Index.js import -

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

and wrap the <App/> componentin Index.js in side <BrouserRouter>, like below

root.render(

  <React.StrictMode>

    <BrowserRouter>

      <App />

    </BrowserRouter>

  </React.StrictMode>

);

Now we have to configure the routes in App.js

1. First import followings

import { Routes, Route } from "react-router-dom";

1. Create Home and About component in the folder. And import them in App component
2. In body of App component

return (

    <Routes>

      <Route path="/" element={<Home />}></Route>

      <Route path="/About" element={<About />}></Route>

    </Routes>

  );

1. We use <Link> tag to make a anchor tag , in-place of “a” tag we write “to”

return (

    <nav>

      <Link to="/">Home</Link>

      <Link to="/About">About</Link>

    </nav>

  );

Absolute route – when we use “/ ” to navigate page like “

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

Relative Route- When we don’t have to use “/” to navigate page

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

1. Styling of nav link.

Importing <NavLink> inplace of <Link > , <NavLink> contain a class with name “active”. With the help of that we can apply css to in Index.css file. Like below:-

return (

    <nav>

      <NavLink to="/">Home</NavLink>

      <NavLink to="/About">About</NavLink>

    </nav>

  );

Styling

nav a.active {

  text-decoration: none;

  font-weight: bold;

}

1. Navigating Programmatically

It means that when you have to complete certain task , after submitting you will be directed to the other page.

For Example- in case of order submission case in e-commerce app

To Achieve this we use <useNavigate> component.

We have to use use useNavigate as follow.

import React from "react";

import { useNavigate } from "react-router-dom";

const Home = () => {

// useNavigate is a method. And it returns a function and in that function we have to pass the link component as parameter. As in the example.

  const navigate = useNavigate();

  return (

    <div>

      HOmepage

      <button onClick={() => navigate("OrderSummery")}>Place Order</button>

    </div>

  );

};

Relative path ?