**1. React Router ni iki?**

React Router ni ibikoresho bya JavaScript bikoreshwa mu kubaka **Single Page Applications (SPA)**. Ibitandukanye na HTML isanzwe, React Router ikoresha **routing** y'imbere muri React, ituma urubuga rutongera gukuramo ibintu byose buri gihe uko ukanda kuri links, ahubwo igahindura gusa ibice bikenewe.

**2. Installation (Uburyo bwo kuyishyiramo)**

Injira muri project yawe ukoresha command:

npm install react-router-dom

Iyi command ni yo ishyiramo **React Router** muri project yawe.

**3. Ibintu by'ibanze bikwiriye kumenya**

1. **BrowserRouter**: Iyi niyo ikora nk'umutwe cyangwa umubyeyi w'ikoranabuhanga rya routing.
2. **Routes**: Izi ni inzira zihuza **path** (urugero: /about) n’ibice (components) bizerekanwa.
3. **Route**: Iyi ni inzira imwe yihariye yerekana component imwe kuri URL imwe.
4. **Link**: Ikoreshwa mu kwerekeza aho ushaka kujya.

**4. Imiterere y’Ububiko (Folder Structure)**

Ngaho uko ushobora gutegura porogaramu yawe:

src/

│

├── App.js # Fichiye ya React nyamukuru

├── components/ # Ibice bisanzwe

│ └── Navigation.js # Navigation bar (menu y'urubuga)

├── pages/ # Ibice by'urubuga

│ ├── Home.js # Igitangira

│ ├── About.js # Ibyerekeye twe

│ └── Contact.js # Aho bahamagara

**5. Urugero rwa Code**

**a. Tanga Components za Pages**

**Home.js**  
*Ikigaragaza urupapuro rw'itangiriro.*

import React from "react";

function Home() {

return (

<div>

<h1>Urupapuro rw'itangiriro</h1>

<p>Ikaze kuri Home Page!</p>

</div>

);

}

export default Home;

**About.js**  
*Ikigaragaza ibyerekeye urubuga.*

import React from "react";

function About() {

return (

<div>

<h1>Ibyerekeye twe</h1>

<p>Iyi ni page ikwereka amakuru kuri twe.</p>

</div>

);

}

export default About;

**Contact.js**  
*Ikigaragaza aho bahamagara.*

import React from "react";

function Contact() {

return (

<div>

<h1>Aho baduhamagara</h1>

<p>Nyandikira hano niba ushaka amakuru.</p>

</div>

);

}

export default Contact;

**b. Gukora Navigation Bar**

***Navigation*** *ni menu ikoreshwa kugira ngo abantu babashe kugenda ku bice bitandukanye by’urubuga.*

**Navigation.js**

import React from "react";

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

function Navigation() {

return (

<nav>

<Link to="/">Itangiriro</Link>

<Link to="/about">Ibyerekeye Twe</Link>

<Link to="/contact">Aho baduhamagara</Link>

</nav>

);

}

export default Navigation;

**c. Tegura App.js**

*Hano ni ho ushira navigation na routes kugira ngo ibyo byose bikore neza.*

**App.js**

import React from "react";

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

import Navigation from "./components/Navigation";

import Home from "./pages/Home";

import About from "./pages/About";

import Contact from "./pages/Contact";

function App() {

return (

<Router>

<Navigation /> {/\* Navigation izagaragara kuri buri page \*/}

<Routes>

<Route path="/" element={<Home />} /> {/\* Iyi ni Home Page \*/}

<Route path="/about" element={<About />} /> {/\* Page y'ibyerekeye twe \*/}

<Route path="/contact" element={<Contact />} /> {/\* Page yo guhamagara \*/}

</Routes>

</Router>

);

}

export default App;

**6. Ibisobanuro**

1. **BrowserRouter**:
   * Itanga context y’aho ibintu byose byo ku rubuga biva.
   * Ugomba kuyikoresha nk’umubyeyi wa project yawe.
2. **Routes na Route**:
   * **Routes** ni igikapu gikubiyemo inzira zose (/about, /contact...).
   * **Route** ihuza inzira imwe n’igice cyo ku rubuga.
3. **Link**:
   * Ikoreshwa nk’umuhanda w’imbere mu kuboneza inzira (navigate) hagati ya pages.

**7. Uko wabitangiza**

Run application yawe ukoresheje:

npm start

Hanyuma ukoreshe izi URLs:

* Home Page: http://localhost:3000/
* About Page: http://localhost:3000/about
* Contact Page: http://localhost:3000/contact