Topic : Programmatic Navigation

Assignment: Simple Navigation App

Scenario:

You are tasked with building a simple app where users can navigate between different pages programmatically. The application will have two pages: a "Home" page and a "Profile" page.

Users will be able to navigate from the Home page to the Profile page by clicking a button, and the navigation will happen programmatically using React Router.

This assignment will help you practice programmatic navigation in React with TypeScript.

Requirements:

- ➢ Project Setup:
- Create a new React project with a TypeScript template and name it NavigationApp.
- Install react-router-dom for routing in the app:

  npm install react-router-dom

- ➢ Component Structure:
- o Home Component:
- This component will be the main page of the app.
- It will display a welcome message and a button labeled "Go to Profile."
- When the button is clicked, the app should programmatically navigate to the Profile page.
- o Profile Component:
- This component will display the user profile information (just a static message like "Welcome to your profile" is enough for this assignment).

- It will also have a button labeled "Go back to Home" that, when clicked, navigates the user back to the Home page programmatically.
  - ○ App Component:
- This component will define the routes using react-router-dom and render the appropriate component based on the current route.

Tasks:

1. Routing:
- Use react-router-dom to define two routes: / for the Home page and /profile for the Profile page.
2. Programmatic Navigation:
- Use the useNavigate hook from react-router-dom to navigate from the Home page to the Profile page and vice versa, when the buttons are clicked.
- ➢ Expected Outcome:
- The application should display the Home page by default.
- Clicking the "Go to Profile" button should programmatically navigate the user to the Profile page.
- On the Profile page, clicking the "Go back to Home" button should programmatically navigate the user back to the Home page.