

## Training Day 15

### TOPICS COVERED

- **React Router – Navigation in React**

React Router is a standard library used for routing in React applications. It allows navigation between components/pages without refreshing the page — ideal for building single-page applications (SPAs).

#### **Key Concepts:**

BrowserRouter: Wraps the entire app to enable routing

Routes: Contains all the route definitions

Route: Defines a path and its corresponding component

Link/NavLink: Used for navigation (instead of <a>)

#### **Basic Example:**

```
import { BrowserRouter, Routes, Route, Link } from 'react-router-dom';
```

```
import Home from './Home';
```

```
import About from './About';
```

```
function App() {  
  return (  
    <BrowserRouter>  
      <nav>  
        <Link to="/">Home</Link>  
        <Link to="/about">About</Link>  
      </nav>  
      <Routes>  
        <Route path="/" element={<Home />} />  
        <Route path="/about" element={<About />} />  
      </Routes>  
    )  
}
```

```
    </BrowserRouter>

  );
}
```

- **Reading Input Data using useState()**

To capture and use input data in a React form, the useState hook is commonly used to create controlled components.

**Steps:**

Create a state variable for the input

Set its value using onChange

Access the value during form submission or dynamically

**Example:**

```
import { useState } from 'react';

function NameForm() {
  const [name, setName] = useState("");

  const handleChange = (e) => {
    setName(e.target.value);
  };

  const handleSubmit = (e) => {
    e.preventDefault();
    alert(`Hello, ${name}!`);
  };

  return (
    <form onSubmit={handleSubmit}>
```

```
    <input type="text" value={name} onChange={handleChange} placeholder="Enter your
name" />

    <button type="submit">Submit</button>

  </form>

);
}
```

## **TOOLS USED**

Visual Studio Code

React Developer Tools Extension

react-router-dom (installed using `npm install react-router-dom`)

Chrome DevTools