



ReactJs Router Setup

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Introduction to React Router

What is React Router?

- A library for routing in React applications.
- Helps to create single-page applications with navigation.

Installing React Router

Using npm:

- *npm install react-router-dom*

Using yarn:

- *yarn add react-router-dom*

Setting Up the Router

Import BrowserRouter and other components:

- `import { BrowserRouter as Router, Route, Switch } from 'react-router-dom';`

Example:

```
import React from "react";
import ReactDOM from "react-dom/client";
import { BrowserRouter, Routes, Route } from "react-router-dom";
function Home() {
    return <h1>Welcome to the Home Page</h1>; }
```

Creating Routes

Basic Route Setup:

```
<Router>
  <Switch>
    <Route path="/" exact component={Home} />
    <Route path="/about" component={About} />
    <Route path="/contact" component={Contact} />
  </Switch>
</Router>
```

Demo

```
import React from "react";
import { BrowserRouter as Router, Switch, Route } from "react-router-dom";
import Home from "./Home";
import About from "./About";
import Contact from "./Contact";
function App() {
  return (
    <Router>
      {/* Switch ensures only one Route is rendered at a time */}
      <Switch>
        {/* Route for the Home page */}
        <Route path="/" exact component={Home} />

        {/* Route for the About page */}
        <Route path="/about" component={About} />

        {/* Route for the Contact page */}
        <Route path="/contact" component={Contact} />
      </Switch>
    </Router>
  );
}
export default App;
```

Linking Between Routes

Using Link component:

```
import { Link } from 'react-router-dom';

<nav>
  <ul>
    <li><Link to="/">Home</Link></li>
    <li><Link to="/about">About</Link></li>
    <li><Link to="/contact">Contact</Link>
    </li>
  </ul>
</nav>
```

Route Parameters

Dynamic Routes:

```
<Route path="/user/:id" component={UserProfile} />
```