📝 Internship Report

Week 7 | Day 1
Internship Company: ProSensia
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Topic: React Router (Pages, Navigation)

📌 What I Learned Today

Today, I learned about **React Router**, a powerful library used in React applications to manage client-side routing. It helps in building **single-page applications (SPA)** by allowing navigation between different views without full page reloads.

📚 Key Concepts Covered

1. **React Router Setup**

   o Installed using:

bash

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```
npm install react-router-dom
```

   o Imported necessary components from react-router-dom.

2. **Creating Pages**

   o Made separate files/components like Home.jsx, About.jsx, and Contact.jsx to represent different pages.

3. **Routes Setup**

   o Used <BrowserRouter>, <Routes>, and <Route> to define routing logic.

   o Example:

jsx

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

```jsx
<Route path="/about" element={<About />} />

<Route path="/contact" element={<Contact />} />
```

```
</Routes>
```

4. **Navigation Between Pages**
   - Used \<Link\> or \<NavLink\> for navigation without page reload.
   - Example:

jsx

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```jsx
<NavLink to="/about">About</NavLink>
```

5. **Active Class Styling with NavLink**
   - Automatically applies a class when a link is active.

🧠 **Key Takeaways**

- React Router helps build dynamic, fast-loading SPAs.

- It improves user experience by preventing full-page refresh.

- Components like \<Routes\> and \<NavLink\> are essential for navigation.

- It's important to wrap the main component with \<BrowserRouter\> at the top level.