

What is the difference between a link and NavLink

Links are also known as hyperlinks. They are references to data that the user can follow by clicking or tapping. They can be used to view resources on the web.

Resources can be we

NavLink: This is used when you want to highlight the current or active link. This is used with the activeClassName attribute, which enables it. See the example below

```
</NavLink to="/home" activeClassName="active" >Home</NavLink><br>
```

Link: This is used when there is no special style or highlighting of your link. See the example below

```
</Link to="/not-active">Not Active </Link><br>
```

The useNavigate hook is part of the react-router-dom package that allows programmatic routing inside a React application. The method returns a function that can be invoked with a URI to redirect the client to the respective page. However, the hook can only be executed inside a functional component nested inside a Router instance

:The Need for Protected Routes

As modern web applications handle sensitive user data, it becomes crucial to restrict access to certain routes based on user authentication. Protected routes ensure that only authenticated users can access specific pages or components. This is particularly important for features like user profiles, dashboards, or admin panels. By implementing protected routes, you can enhance the security of your application and prevent unauthorized access to sensitive information

:Understanding Authentication

Authentication is the process of verifying the identity of a user. It involves collecting user credentials (such as username and password) and validating them against stored user data. Once authenticated, the user receives an authentication token or session identifier, which can be stored in browser cookies or local storage for subsequent requests. This token is then used to identify the user and grant access to protected routes