In React, Link and NavLink are components provided by the React Router library for navigation. Here's a detailed explanation of both and their differences:

**Link**

The Link component is used to create navigational links in your application. It allows you to navigate to different routes defined in your React Router configuration without reloading the page.

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

function Navigation() {

return (

<nav>

<ul>

<li><Link to="/">Home</Link></li>

<li><Link to="/about">About</Link></li>

<li><Link to="/contact">Contact</Link></li>

</ul>

</nav>

);

}

**NavLink**

The NavLink component is a special type of Link that can apply an active class to the link when it matches the current URL. This is useful for styling the currently active link to give users a visual indication of their current location within the app.

import { NavLink } from 'react-router-dom';

function Navigation() {

return (

<nav>

<ul>

<li><NavLink to="/" activeClassName="active" exact>Home</NavLink></li>

<li><NavLink to="/about" activeClassName="active">About</NavLink></li>

<li><NavLink to="/contact" activeClassName="active">Contact</NavLink></li>

</ul>

</nav>

);

}

Differences

**Active Styling**

* Link does not provide any built-in mechanism to indicate the active link.
* NavLink automatically adds an active class (or another specified class) when the link's destination matches the current URL.

**Props**

* NavLink accepts all the same props as Link, plus additional props for controlling the active state, such as activeClassName, activeStyle, isActive, and exact.

**Use Case**

* Use Link for simple navigation where active state indication is not required.
* Use NavLink when you need to visually indicate the currently active link.

import { NavLink } from 'react-router-dom';

function Navigation() {

return (

<nav>

<ul>

<li>

<NavLink

to="/"

activeClassName="active"

isActive={(match, location) => {

// Custom logic to determine if the link is active

return match;

}}

exact

>

Home

</NavLink>

</li>

<li><NavLink to="/about" activeClassName="active">About</NavLink></li>

<li><NavLink to="/contact" activeClassName="active">Contact</NavLink></li>

</ul>

</nav>

);

}