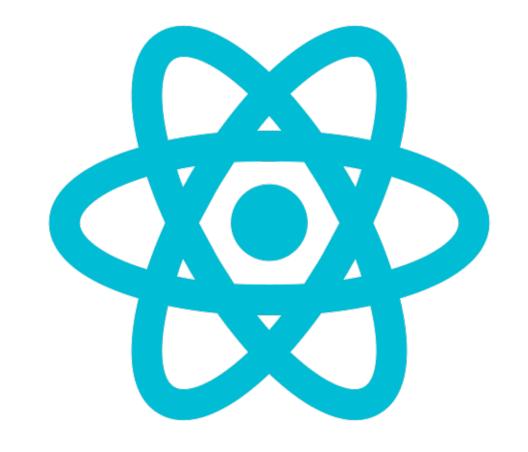


REACT ROUTER



React Router

• React Router is a collection of **navigational components** that compose declaratively with your application. Whether you want to have **bookmarkable URLs** for your web app or a composable way to navigate in **React Native.**

Browser Router

- <BrowserRouter>
- A <<u>Router></u> that uses the HTML5 history API to keep your UI in sync with the URL.
- Wrap your component with this tag

```
<BrowserRouter
  basename={optionalString}
  forceRefresh={optionalBool}
  getUserConfirmation={optionalFunc}
  keyLength={optionalNumber}
>
  <App />
  </BrowserRouter>
```

Route

- <Route>
- The Route component is perhaps the most important component in React Router. Its most basic responsibility is to render some UI when its path matches the current URL.
- Route render methods
 - component
 - <u>render</u>
 - children

Route - component

- When you use component (instead of render or children, below) the router uses React.createElement to create a new React element from the given component.
- That means if you provide an inline function to the component prop, you would create a new component every render. This results in the existing component unmounting and the new component mounting instead of just updating the existing component.
- When using an inline function for inline rendering, use the render or the children prop (below).

render: func children: func

Route Props

- Route props
- All three <u>render methods</u> will be passed the same three route props
- match
- location
- history

match

 A match object contains information about how a <Route path> matched the URL. match objects contain the following properties:

- params (object) Key/value pairs parsed from the URL corresponding to the dynamic segments of the path → FullPost.js line:37
- isExact (boolean) true if the entire URL was matched (no trailing characters)
- path (string) The path pattern used to match. Useful for building nested <Route>s Posts.js line:134
- url (string) The matched portion of the URL. Useful for building nested <Link>s Posts.js line:103

location

 Locations represent where the app is now, where you want it to go, or even where it was. It looks like this:

```
Link to={{{
      pathname: '/new-post',
      hash: '#submit',
      search: '?quick-submit=true'
    }}>New Post</Link>
```

history

- The term "history" and "history object" in this documentation refers to the-history package, which is one of only 2 major dependencies of React Router (besides React itself), and which provides several different implementations for managing session history in JavaScript in various environments.
- The following terms are also used:
 - "browser history" A DOM-specific implementation, useful in web browsers that support the HTML5 history API
 - "hash history" A DOM-specific implementation for legacy web browsers
 - "memory history" An in-memory history implementation, useful in testing and non-DOM environments like React Native

https://reactrouter.com/web/api/history

Link

- <<u>Link></u>
- Provides declarative, accessible navigation around your application.
 - to: string
 - A string representation of the Link location, created by concatenating the location's pathname, search, and hash properties.
 - to: object
 - An object that can have any of the following properties:
 - pathname: A string representing the path to link to.
 - search: A string representation of query parameters.
 - hash: A hash to put in the URL, e.g. #a-hash.
 - state: State to persist to the location.

Redirect

- <Redirect>
- Rendering a <Redirect> will navigate to a new location. The new location will override the current location in the history stack, like server-side redirects (HTTP 3xx) do.

Switch

- <Switch>
- Renders the first child <<u>Route></u> or <<u>Redirect></u> that matches the location.
- How is this different than just using a bunch of <Route>s?
- <Switch> is unique in that it renders a route *exclusively*. In contrast, every <Route> that matches the location renders *inclusively*.