The React Router Cheatsheet

Basic Router Setup

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

export default function App() {
  return (
    <Router>
      {/* routes go here, as children */}
    </Router>
  );
}
```

Route Component

Basic declaration

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

export default function App() {
  return (
    <Router>
      <Route path="/about" component={About} />
    </Router>
  );
}

function About() {
  return <>about</>
}
```

Render prop

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

export default function App() {
  return (
    <Router>
      <Route path="/" render={() => <Home />} />
      <Route path="/about" component={About} />
```

```
    </Router>
  );
}

function Home() {
  return <>home</>;
}

function About() {
  return <>about</>;
}
```

Alternate declaration

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

export default function App() {
  return (
    <Router>
      <Route path="/about">
        <About />
      </Route>
    </Router>
  );
}
```

Visible on all routes

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

export default function App() {
  return (
    <Router>
      <Navbar />
      <Route path="/" component={Home} />
      <Route path="/about" component={About} />
    </Router>
  );
}

function Navbar() {
  // visible on every page
  return <>navbar</>;
}

function Home() {
  return <>home</>;
```

```
}

function About() {
  return <>about</>;
}
```

Switch Component

Exact prop

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

export default function App() {
  return (
    <Router>
      <Navbar />
      <Switch>
        <Route exact path="/" component={Home} />
        <Route path="/about" component={About} />
      </Switch>
    </Router>
  );
}
```

Basic declaration

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

export default function App() {
  return (
    <Router>
      <Navbar />
      <Switch>
        <Route exact path="/" component={Home} />
        <Route path="/about" component={About} />
      </Switch>
    </Router>
  );
}
```

404 Route

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

export default function App() {
  return (
    <Router>
      <Navbar />
      <Switch>
        <Route path="/" component={Home} />
        <Route path="/about" component={About} />
        <Route path="*" component={NotFound} />
      </Switch>
    </Router>
  );
}


function NotFound() {
  return <>You have landed on a page that doesn't exist</>;
}
```

Link Component

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

export default function App() {
  return (
    <Router>
      <Navbar />
      <Switch>
        <Route path="/" component={Home} />
        <Route path="/about" component={About} />
      </Switch>
    </Router>
  );
}

function Navbar() {
  return (
    <nav>
      <Link to="/">Home</Link>
      <Link to="/about">About</Link>
    </nav>
  )
}
```

NavLink Component

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

export default function App() {
  return (
    <Router>
      <Navbar />
      <Switch>
        <Route path="/" component={Home} />
        <Route path="/about" component={About} />
      </Switch>
    </Router>
  );
}

function Navbar() {
  return (
    <nav>
      <NavLink
        activeStyle={{
          fontWeight: "bold",
          color: "red"
        }}
        to="/"
      >
        Home
      </NavLink>
      <NavLink activeClassName="active" to="/about">
        About
      </NavLink>
    </nav>
  );
}
```

Redirect Component

Private Route component

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

```
export default function App() {
  return (
    <Router>
      <Switch>
        <Route exact path="/" component={Home} />
        <PrivateRoute path="/hidden" component={Hidden} />
      </Switch>
    </Router>
  );
}

function PrivateRoute({ component: Component, ...rest }) {
  // useAuth is some custom hook to get the current user's auth state
  const isAuth = useAuth();

  return (
    <Route
      {...rest}
      render={(props) =>
        isAuth ? <Component {...props} /> : <Redirect to="/" />
      }
    />
  );
}

function Home() {
  return <>home</>;
}

function Hidden() {
  return <>hidden</>;
}
```

useHistory Hook

```
import { useHistory } from "react-router-dom";


function About() {
  const history = useHistory();

  console.log(history.location.pathname); // '/about'

  return (
    <>
     <h1>The about page is on: {history.location.pathname}</h1>
     <button onClick={() => history.push('/')}>Go to home page</button>
    </>
```

```
    );
}
```

useLocation Hook

```
import { useLocation } from "react-router-dom";


function About() {
  const location = useLocation();

  console.log(location.pathname); // '/about'

  return (
    <>
     <h1>The about page is on: {location.pathname}</h1>
    </>
  );
}
```

Dynamic Routes

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

export default function App() {
  return (
    <Router>
      <Switch>
        <Route exact path="/" component={Home} />
        <Route path="/blog/:postSlug" component={BlogPost} />
      </Switch>
    </Router>
  );
}

function Home() {
  return <>home</>;
}

function BlogPost() {
  return <>blog post</>;
}
```

useParams Hook

```jsx
import React from "react";
import { BrowserRouter as Router, Switch, Route, useParams } from "react-router-dom";

export default function App() {
  return (
    <Router>
      <Switch>
        <Route exact path="/" component={Home} />
        <Route path="/blog/:postSlug" component={BlogPost} />
      </Switch>
    </Router>
  );
}

function Home() {
  return <>home</>;
}

function BlogPost() {
  const [post, setPost] = React.useState(null);
  const { postSlug } = useParams();

  React.useEffect(() => {
    fetch(`https://jsonplaceholder.typicode.com/posts/${postSlug}`)
      .then((res) => res.json())
      .then((data) => setPost(data));
  }, [postSlug]);

  if (!post) return null;

  return (
    <>
      <h1>{post.title}</h1>
      <p>{post.description}</p>
    </>
  );
}
```

useRouteMatch Hook

```jsx
import { useRouteMatch } from "react-router-dom";

function BlogPost() {
  const isBlogPostRoute = useRouteMatch("/blog/:postSlug");
```

```
    // display, hide content, or do something else
}
```