

# S05 REACT -ROUTING

## 1. INSTALLATION, SWITCH AND REDIRECT ROUTING

Step1 , In the terminal , under the path of our app, type “npm install react-router-dom@5”.

```
PS C:\Boot-React-Project\boot-react-project> npm install react-router-dom@5
added 12 packages, and audited 1500 packages in 4s
245 packages are looking for funding
  run `npm fund` for details
6 high severity vulnerabilities
To address all issues (including breaking changes), run:
  npm audit fix --force
Run `npm audit` for details.
PS C:\Boot-React-Project\boot-react-project>
```

Step2, open the index.tsx file. Import “BrowserRouter” in Index.tsx. After input this, we will find an error, we need to use npm install @types/react-router-dom to fix the issue.

```
npm install @types/react-router-dom
```

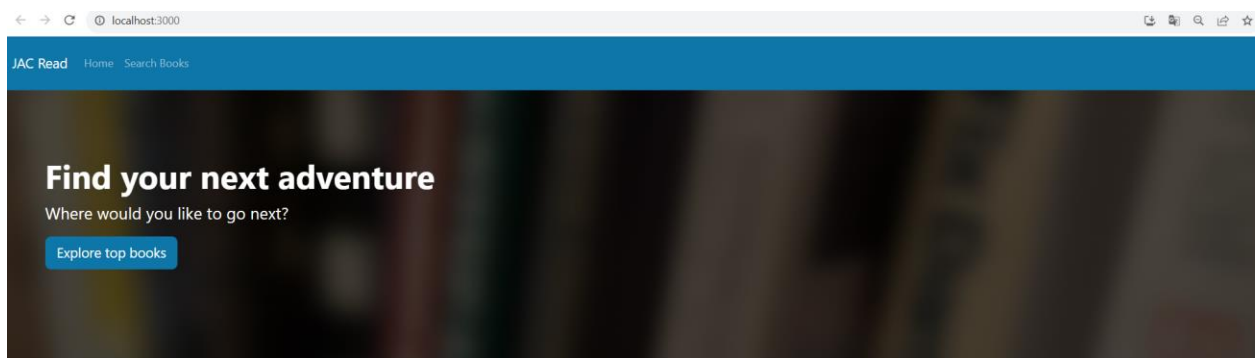
Step 3 , change React.StrictMode to “BrowserRouter”

```
7  ✓ const root = ReactDOM.createRoot(
8    |   document.getElementById("root") as HTMLElement
9    | );
10  ✓ root.render(
11    |   <BrowserRouter>
12    |     <App />
13    |   </BrowserRouter>
14  | );
15
```

Go to App.tsx file. Now, if we uncomment it, and open <http://localhost:3000/>:

```
src > App.tsx > App
You, 6 seconds ago | 1 author (You)
1 import React from "react";
2 import "./App.css";
3 import { Navbar } from "../layouts/NavbarAndFooter/Navbar";
4 import { Footer } from "../layouts/NavbarAndFooter/Footer";
5 import { HomePage } from "../layouts/HomePage/HomePage";
6 import { SearchBooksPage } from "../layouts/SearchBooksPage/SearchBooksPage";
7
8 export const App = () => {
9   // create a bootstrap navbar
10  return (
11    <div>
12      <Navbar />
13      <HomePage />
14      <SearchBooksPage />
15      <Footer />
16    </div>
17  );
}
```

We will get a homePage and SearchPage showing together.



Find your next "I stayed up too late reading" book



book selection possible for our eBook Read students! We are  
book selection and our books are always going to be our top



## Can't find what you are looking for?

If you can't find what you are looking for, send our library admin's a personal message!

[Sign up](#)



Search

Search

Book Category ▾

Number of results: (22)

1 to 5 of 22 items:



Luv, Zofia

### JavaScript Cookbook

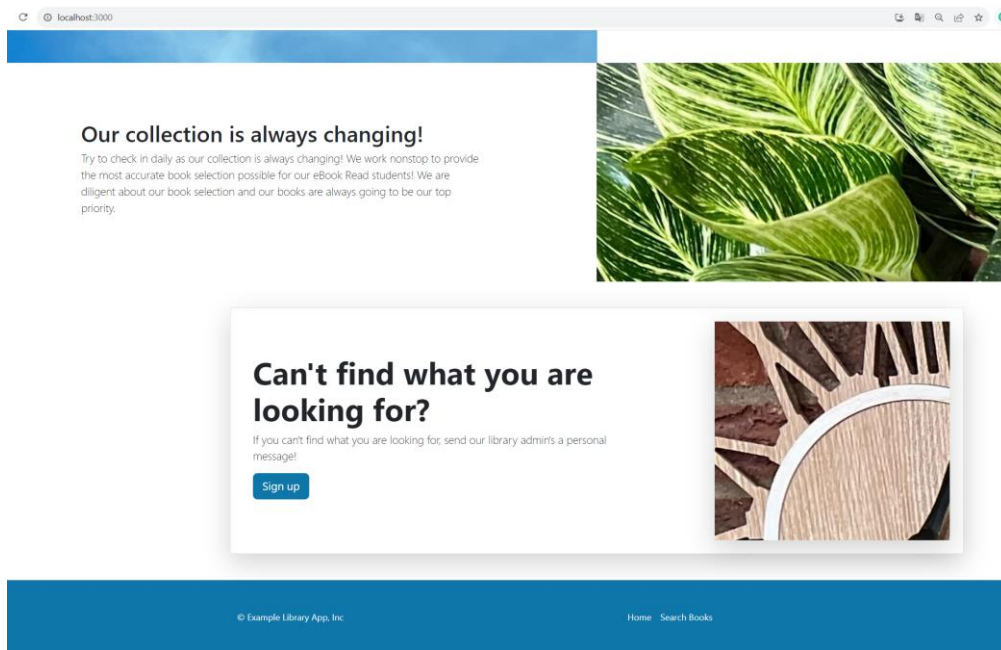
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Proin risus tortor, condimentum eget sapien ac, dapibus varius ligula. Maecenas justo erat, semper sed nunc vel, vulputate eleifend dui. Integer id ipsum vitae nisi malesuada feugiat. Proin sit amet quam laoreet, feugiat mi vitae, vestibulum dui. Aliquam erat volutpat. Etiam

[View Details](#)

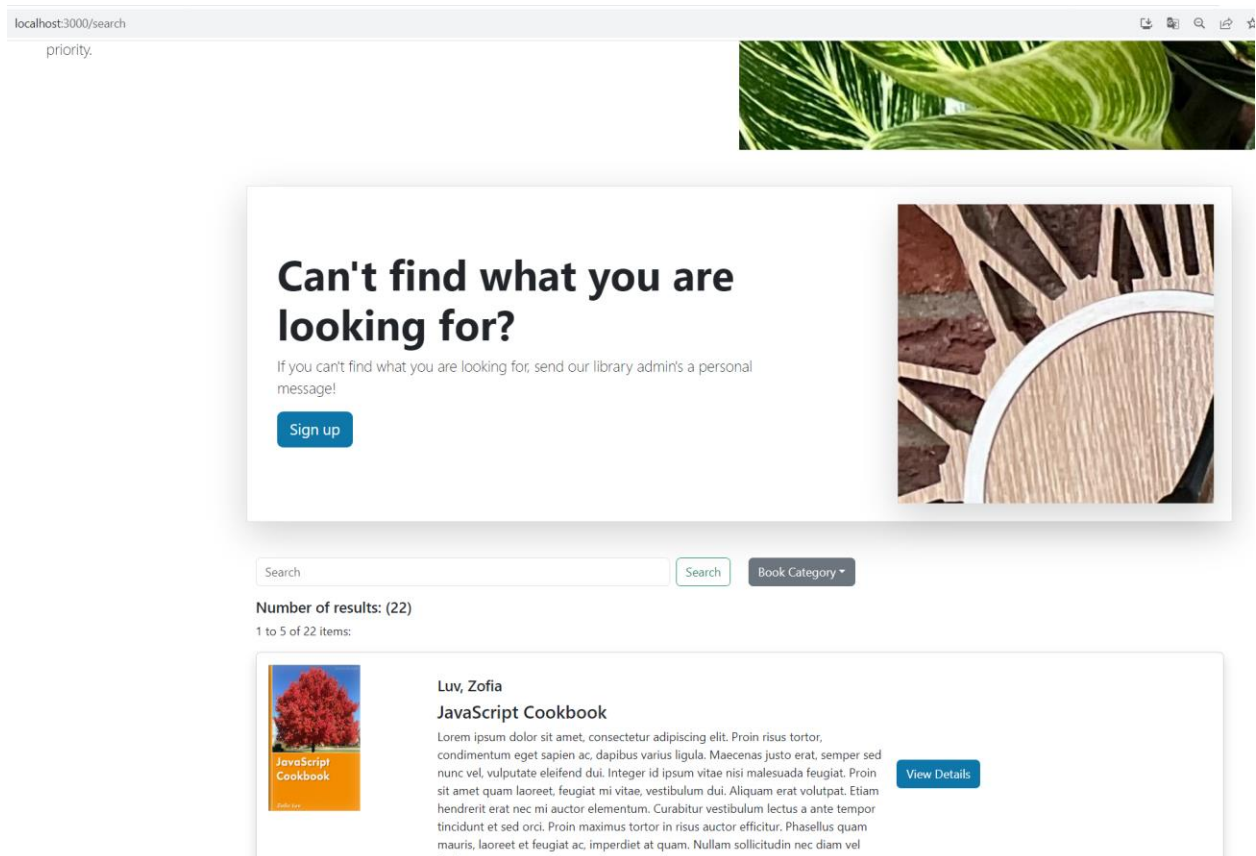
To solve this issue, we go to App.tsx, add "Route" to the homepage and SearchPage component.

```
src > App.tsx > App
7 | import { Route } from "react-router-dom";
8 |
9 | export const App = () => {
10 |   // create a bootstrap navbar
11 |   return (
12 |     <div>
13 |       <Navbar />
14 |       <Route path="/">
15 |         <HomePage />
16 |       </Route>
17 |       <Route path="/search">
18 |         <SearchBooksPage />
19 |       </Route>
20 |       <Footer />
21 |     </div>
22 |   );
23 | };
24 |
```

Open browser again, now, the homepage works well.



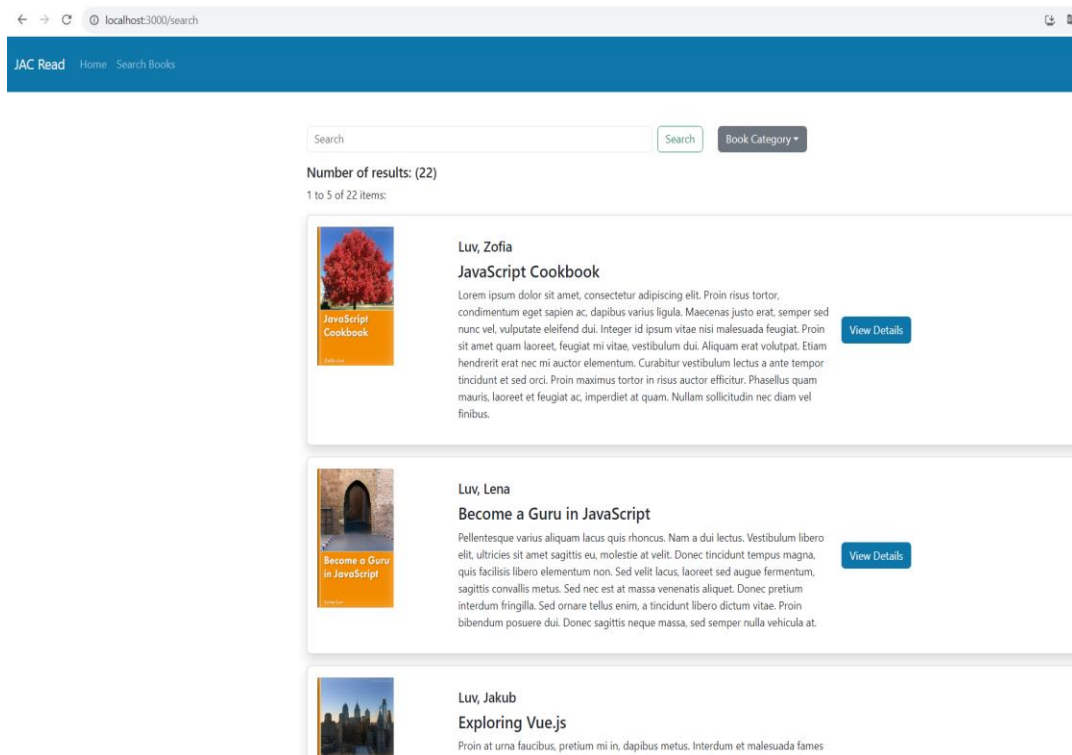
But, when we open search page, it will still show the home page + search page.



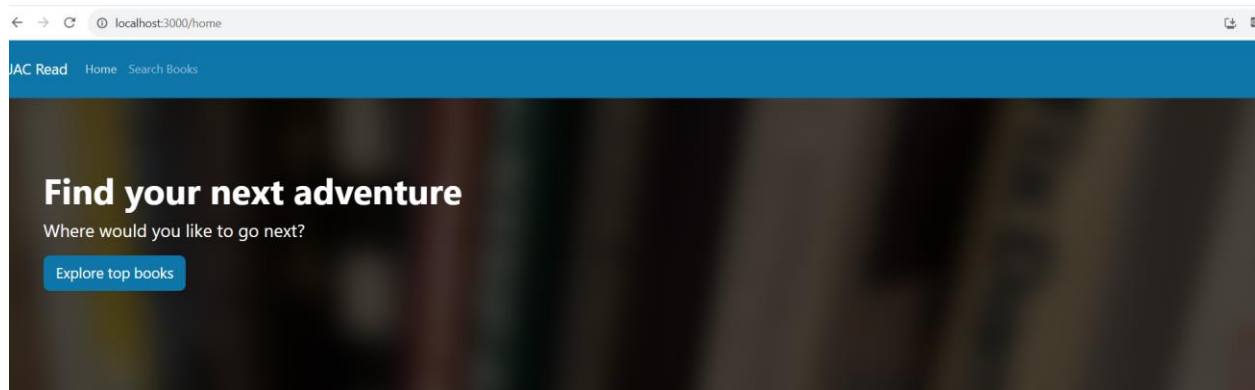
To solve this, we can add Switch and Redirect to wrap HomePage and SearchPage, and give each route a path.

```
src > App.tsx > App
7 | import { Redirect, Route, Switch } from "react-router-dom";
8 |
9 | export const App = () => {
10 |   // create a bootstrap navbar
11 |   return (
12 |     <div>
13 |       <Navbar />
14 |       <Switch>
15 |         <Route path="/" exact>
16 |           <Redirect to="/home" />
17 |         </Route>
18 |         <Route path="/home">
19 |           <HomePage />
20 |         </Route>
21 |         <Route path="/search">
22 |           <SearchBooksPage />
23 |         </Route>
24 |       </Switch>
25 |       <Footer />
26 |     </div>
27 |   );
28 | };
```

If we visit <http://localhost:3000/search>, The search page works now



If we type <http://localhost:3000/>, It will redirect to home page !



Find your next "I stayed up too late reading" book



## 2. NAVLINKS AND LINKS

Step 1 , go to Navbar.tsx, find “home” and “Search Books”, change the “a” to “NavLink”, “href” to “to”, and give them a specified path.

```
21      {/* Navbar links */}
22      <div className="collapse navbar-collapse" id="navbarNavDropdown">
23        <ul className="navbar-nav">
24          <li className="nav-item">
25            <NavLink className="nav-link" to="/home">
26              Home
27            </NavLink>
28          </li>
29          <li className="nav-item">
30            <NavLink className="nav-link" to="/search">
31              Search Books
32            </NavLink>
```

Step 2 , go to ExploreTopBooks.tsx, find “Explore Books” button, change the “a” to “Link”, “href” to “to”, and give it a specified path.

```
src > layouts > HomePage > components > ExploreTopBooks.tsx > ExploreTopBooks
You, 28 seconds ago | 1 author (You)
1  import { Link } from "react-router-dom";
2
3  export const ExploreTopBooks = () => {
4    return (
5      <div className="p-5 mb-4 bg-dark header">
6        <div className="container-fluid py-5 text-white d-flex justify-content-center align-items-center">
7          <div>
8            <h1 className="display-5 fw-bold">Find your next adventure</h1>
9            <p className="col-md-8 fs-4">Where would you like to go next?</p>
10           <Link
11             type="button"
12             className="btn main-color btn-lg text-white"
13             to="/search"
14           >
15             Explore top books
16           </Link>
17         </div>
18       </div>
19     </div>
20   );
21 };
```



Step 3 , go to Carousel.tsx, find “View more” button, change the “a” to “Link”, “href” to “to”, and give it a specified path.

```
src > layouts > HomePage > components > Carousel.tsx > [X] Carousel
116     data-bs-target="#carouselExampleControls"
117     data-bs-slide="next"
118   >
119     <span
120       className="carousel-control-next-icon"
121       aria-hidden="true"
122     ></span>
123     <span className="visually-hidden">Next</span>
124   </button>
125 </div>
126 { /* mobile */ }
127 <div className="d-lg-none mt-3">
128   <div className="row d-flex justify-content-center align-items-center">
129     <ReturnBook book={books[7]} key={books[7].id} />
130   </div>
131 </div>
132 <div className="homepage-carousel-title mt-3">
133   <Link className="btn btn-outline-secondary btn-lg" to="/search"> You, 1 sec
134     | View more
135   </Link>
136 </div>
137 </div>
138 </div>
139 </div>
140 </div>
```

Step 4 , go to Footer.tsx, find “Home” and “Search Books”, change the “a” to “Link”, “href” to “to”, and give them a specified path.

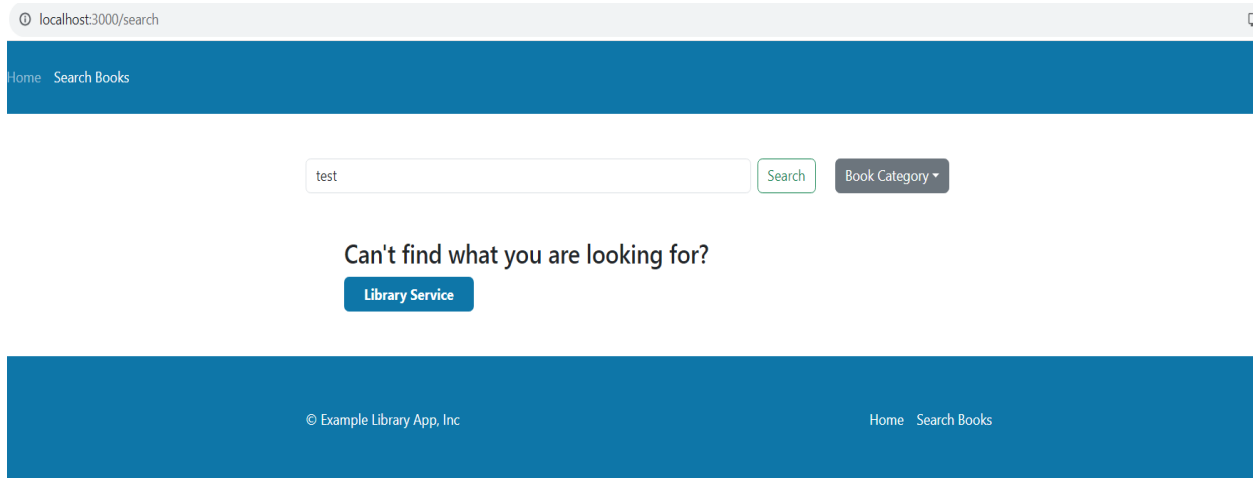
```
src > layouts > NavBarAndFooter > Footer.tsx > [X] Footer
You, 7 seconds ago | 1 author (You)
1 import { Link } from "react-router-dom";
2
3 export const Footer = () => {
4   return (
5     <div className="main-color">
6       <footer className="container d-flex flex-wrap justify-content-between align-items-center py-5 main-color">
7         <p className="col-md-4 mb-0 text-white">© Example Library App, Inc</p>
8         <ul className="nav navbar-dark col-md-4 justify-content-end">
9           <li className="nav-item">
10            <Link to="/home" className="nav-link px-2 text-white">
11              | Home
12            </Link> You, 1 second ago • Uncommitted changes
13          </li>
14          <li className="nav-item">
15            <Link to="/search" className="nav-link px-2 text-white">
16              | Search Books
17            </Link>
18          </li>
19        </ul>
20      </footer>
21    </div>
22  );
23 }
```

Then run the application, and test it. Now all the links work well.



### 3. KEEP FOOTER ON BOTTOM OF PAGE

In the search page, if we don't have any search result , the footer bar will go to the middle of the page.



Go to App.tsx, modify the code.

```
src > App.tsx > App
7 | import { Redirect, Route, Switch } from "react-router-dom";
8 |
9 | export const App = () => {
10 |   // create a bootstrap navbar
11 |   return (
12 |     <div className="d-flex flex-column min-vh-100">
13 |       <Navbar />
14 |       <div className="flex-grow-1"> You, now • Uncommitted change
15 |         <Switch>
16 |           <Route path="/" exact>
17 |             <Redirect to="/home" />
18 |           </Route>
19 |           <Route path="/home">
20 |             <HomePage />
21 |           </Route>
22 |           <Route path="/search">
23 |             <SearchBooksPage />
24 |           </Route>
25 |         </Switch>
26 |       </div>
27 |       <Footer />
28 |     </div>
```

If we go to a no search result page, the footer will not go to the middle again!

