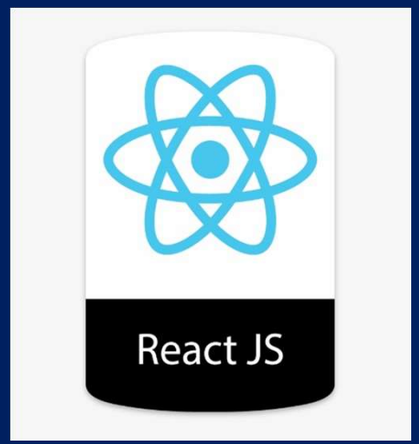
10

Child Routing in React



Child Routing

- Nested routes in React JS are implemented using the outlet in React Router Dom.

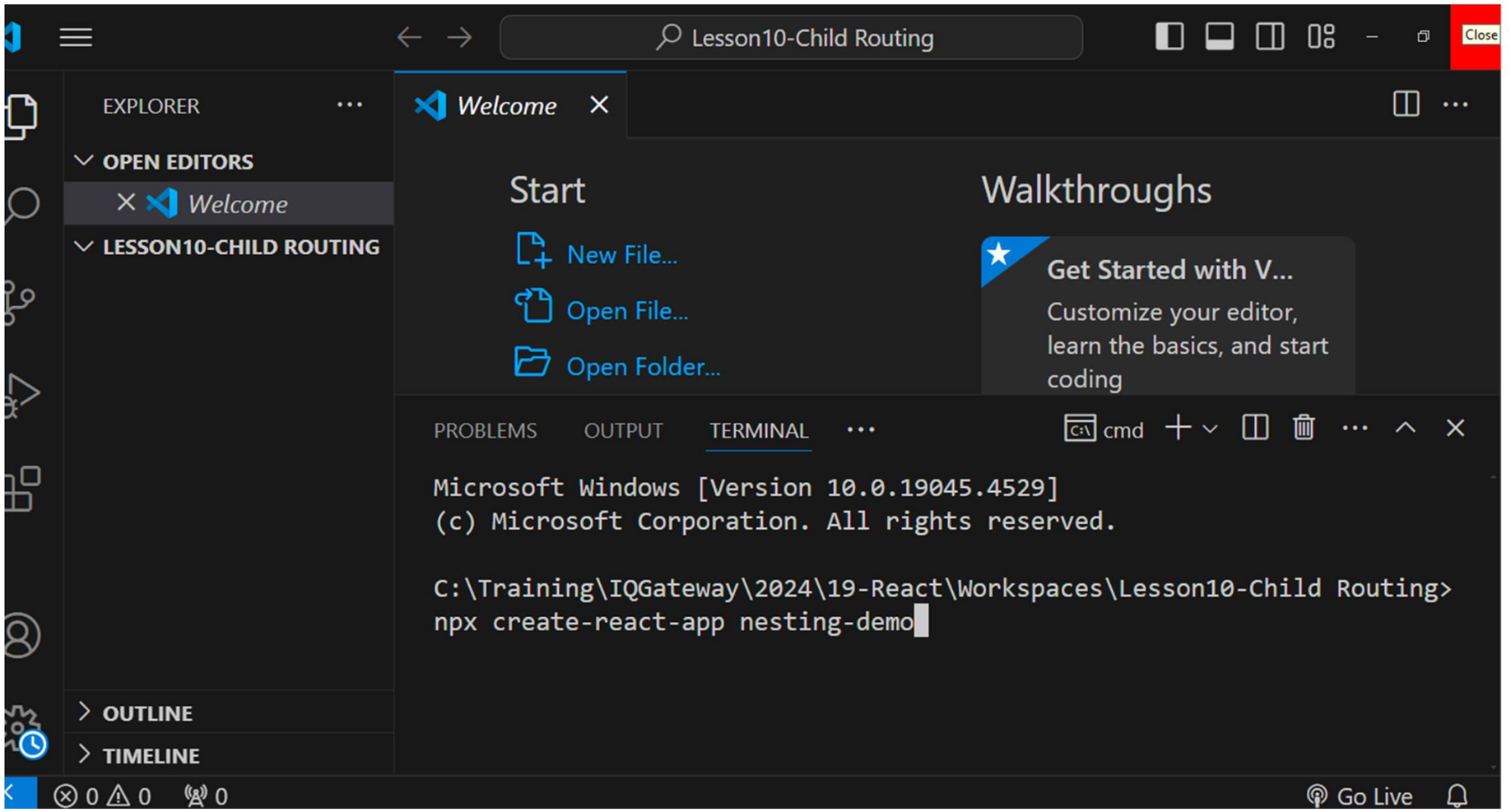
- Routing in React not only provides routing for the pages but also for switching the content inside that page.

- Nested routes implement this by defining Routes for Child components inside parent route components.

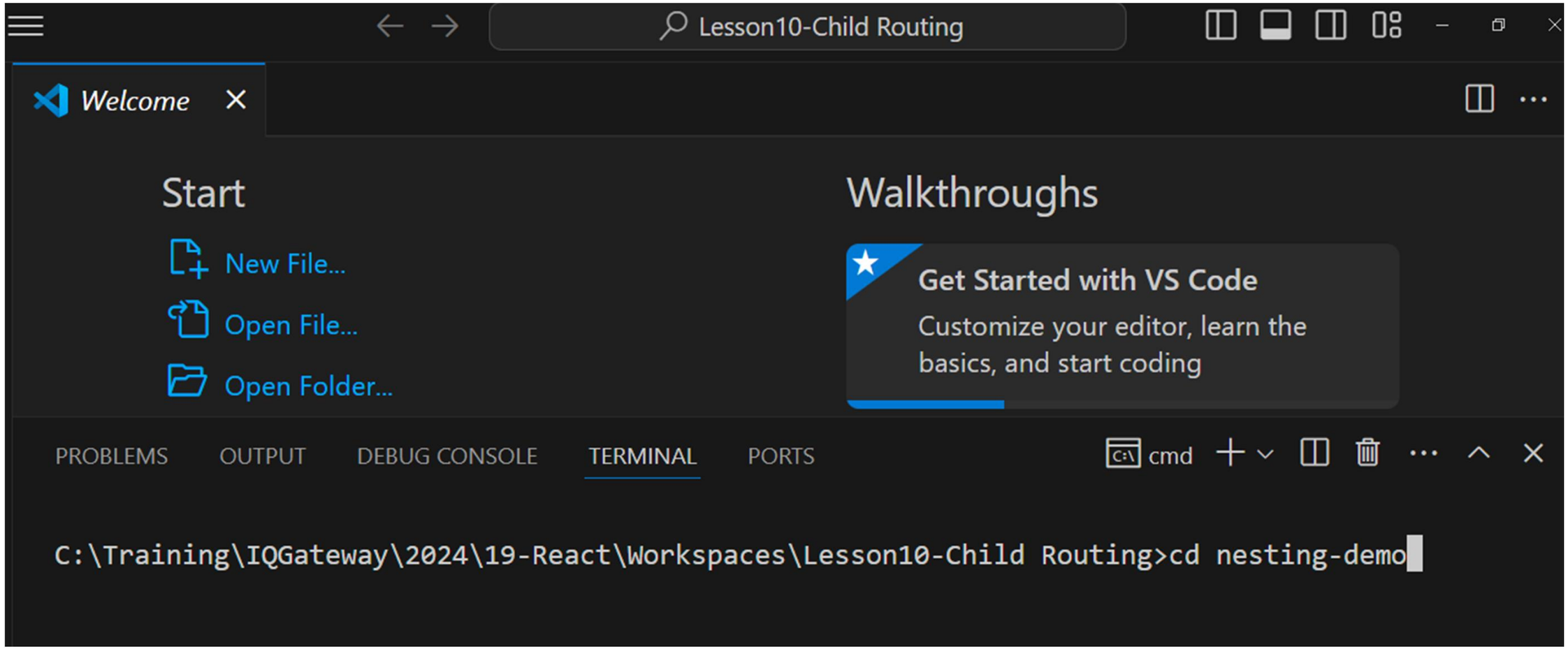
Approach for Nested Route

- For nested routes in React JS Define the children routes inside the Route component of the Parent route.
- In react-router-dom v6 use Route with element and path attribute encapsulated in Routes.
- Inside the parent route use the Outlet component after the links of child components to show the link and switch between the child components rendering in Parent

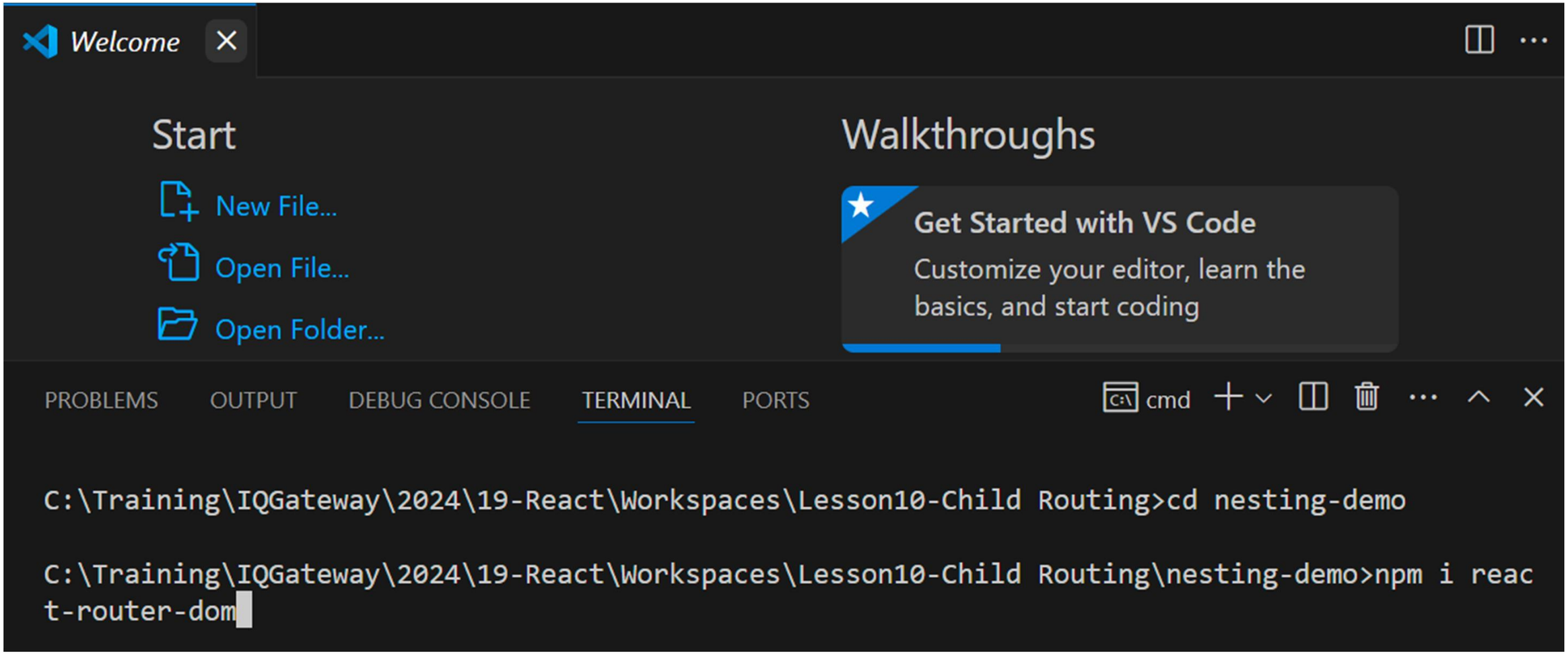
Step 1: Create a React application



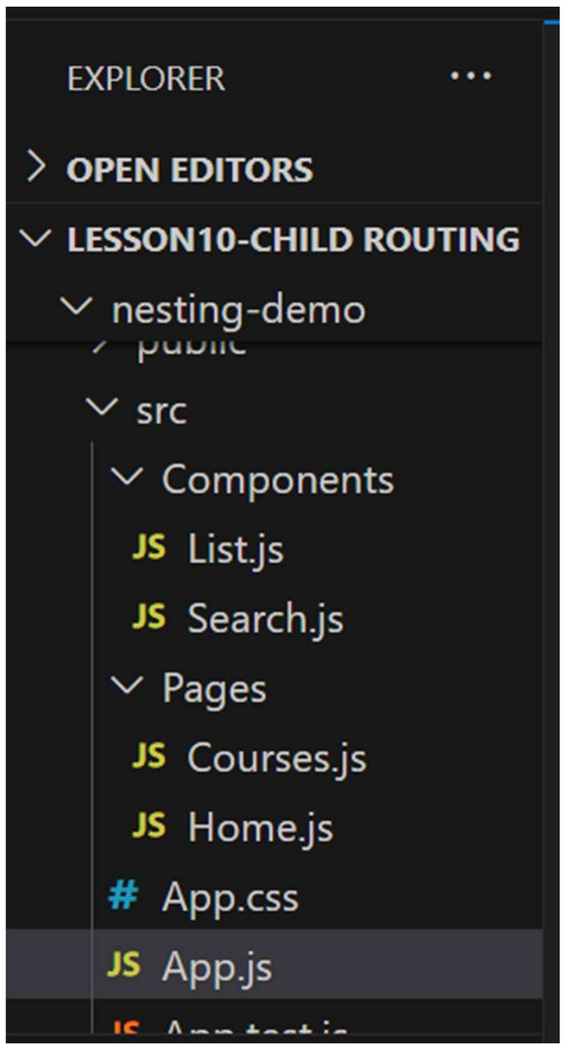
Step 2: Now, go to the project folder



Step 3: Let's install the React Router DOM npm package required for this project



Components Which Make up our Application



JS App.js

nesting-demo > src > JS App.js > App

```
1   import { BrowserRouter as Router,
2            Link,
3            Routes,
4            Route,
5          } from "react-router-dom";
6   import "./App.css";
7   import Home from "./Pages/Home";
8   import Courses from "./Pages/Courses.js";
9   import Search from "./Components/Search";
10  import List from "./Components/List";
11
```

```
function App() {
  return (
    <div className="App">
      <Router>
        <nav>
          <Link to="/">Home</Link>
          <Link to="courses">Courses</Link>
        </nav>
        <Routes>
          <Route path="/" element={<Home />} />
          <Route path="/courses" element={<Courses />} >
            <Route path="search" element={<Search />} />
            <Route path="list" element={<List />} />
          </Route>
        </Routes>
      </Router>
    </div>
  );
}
export default App;
```

App.css

App.css

nesting-demo > src > # App.css > .Search

```
40  .App nav,
41  .courses-nav {
42      background: #f2f2f2;
43      height: 4vh;
44      min-width: 600px;
45      border-radius: 10px;
46      text-align: center;
47      border-bottom: 2px solid #2f8d46;
48  }
49
50  /* Styling for App component nav element anchor
51  tag and Course component nav element anchor tag */
52  .App nav a,
53  .courses-nav a {
54      padding: 20px 20px;
55      font-size: 26px;
56      font-weight: bold;
57      text-transform: uppercase;
58      text-decoration: none;
59      color: #2f8d46;
```

```
/* Styling for Course component
course-nav div anchor tag */
.courses-nav a {
    color: rgb(59, 117, 241);
}

/* Styling for the Home component main div */
.Page {
    width: 100%;
    height: 96vh;
    display: flex;
    flex-direction: column;
    align-items: center;
    gap: 15px;
    background-color: lightgreen;
}
```

```css
/* Styling for the Search & List component main div */
.Search,
.List {
    width: 50%;
    height: 40%;
    padding: 100px;
    background-color: whitesmoke;
}
```

Home.js

Home.js

nesting-demo > src > Pages > Home.js > default

```
1   import React from "react";
2
3   const Home = () => {
4       return (
5           <div className="Page">
6               <h1>You are in the Home page!</h1>
7               <h3>URL: localhost:3000/</h3>
8           </div>
9       );
10  };
11
12  export default Home;
```

Courses.js

nesting-demo > src > Pages > Courses.js > Courses

```
1   import React from "react";
2   import { Link, Outlet } from "react-router-dom";
3
4   const Courses = () => {
5       return (
6           <div className="Page">
7               <h1>You are in the Courses page!</h1>
8               <h3>URL: localhost:3000/courses</h3>
9               <div className="courses-nav">
10                  <Link to="/courses/search">Search</Link>
11                  <Link to="/courses/list">List</Link>
12              </div>
13              <Outlet />
14          </div>
15      );
16  };
17
18  export default Courses;
```

JS List.js

nesting-demo > src > Components > JS List.js > default

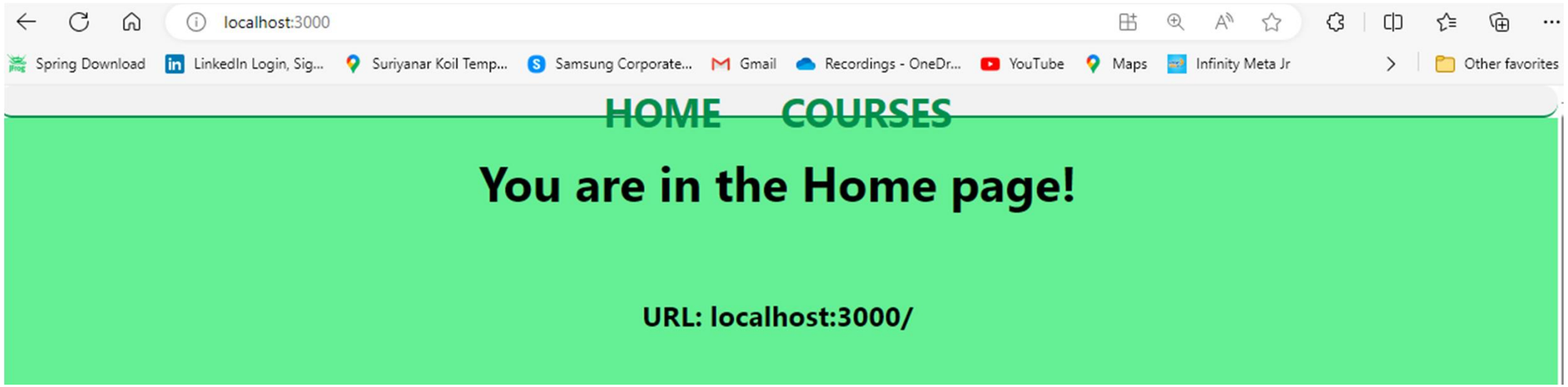
```
1   import React from "react";
2
3   const List = () => {
4       return (
5           <div className="List">
6               <h2>You are inside the List Component</h2>
7               <h4>URL: localhost:3000/courses/list</h4>
8           </div>
9       );
10  };
11
12  export default List;
```

JS Search.js

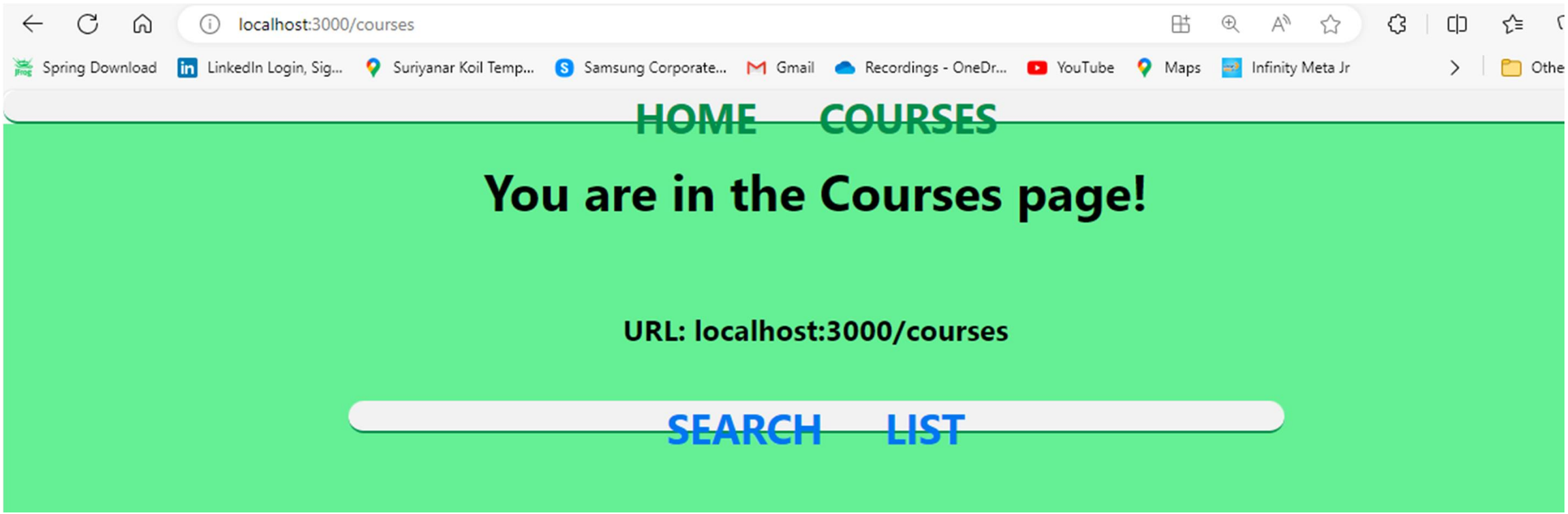
nesting-demo > src > Components > JS Search.js > default

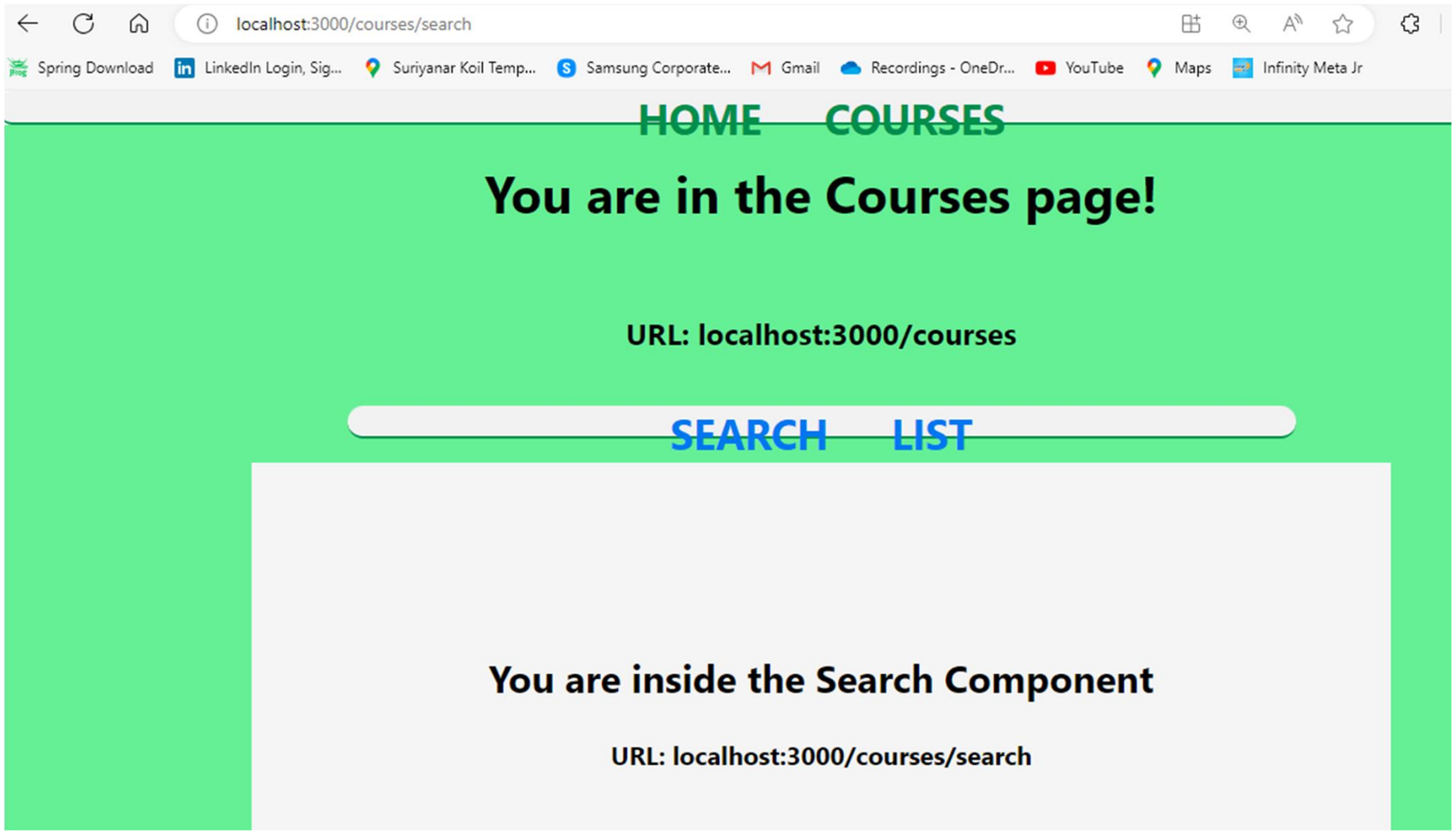
```
1   import React from "react";
2
3   const Search = () => {
4       return (
5           <div className="Search">
6               <h2>You are inside the Search Component</h2>
7               <h4>URL: localhost:3000/courses/search</h4>
8           </div>
9       );
10  };
11
12  export default Search;
```

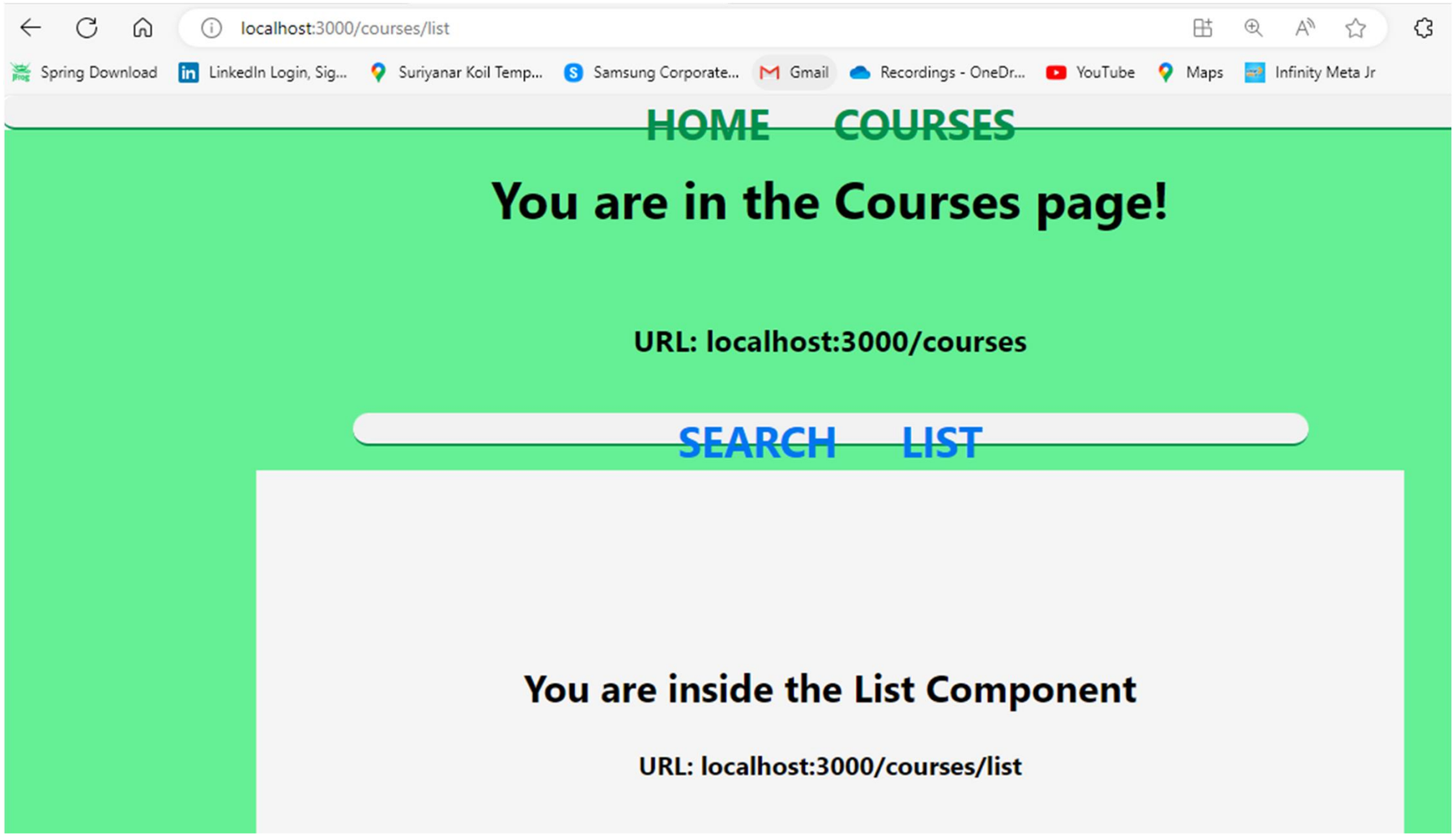
Home


localhost:3000
Spring Download
LinkedIn Login, Sig...
Suriyanar Koil Temp...
Samsung Corporate...
Gmail
Recordings - OneDr...
YouTube
Maps
Infinity Meta Jr
Other favorites
HOME
COURSES
You are in the Home page!
URL: localhost:3000/

Course Component




localhost:3000/courses/search
Spring Download
LinkedIn Login, Sig...
Suriyanar Koil Temp...
Samsung Corporate...
Gmail
Recordings - OneDr...
YouTube
Maps
Infinity Meta Jr
HOME
COURSES
You are in the Courses page!
URL: localhost:3000/courses
SEARCH
LIST
You are inside the Search Component
URL: localhost:3000/courses/search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HOME
COURSES
You are in the Courses page!
URL: localhost:3000/courses
SEARCH
LIST
You are inside the List Component
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