Single-page app using React Router

Exp. No.: 10

Name: Akash M

Roll No.: 19CSR006

Code:

App.js:

```
import "./App.css";

import Index from "./url/Index";

import About from "./About/About";

import Page404 from "./Page404/Main";

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

import routes from "./Routes";


function App() {
  return (
    <div className="app">
      <Router>
        <Index />
        <Routes>
          {routes.map((route) => {
            return (
              <Route key={route.id} path={route.path} element={route.element} />
            );
          })}
          <Route index path="/" exact element={<About />} />
          <Route path="*" element={<Page404 />} />
```

```jsx
        </Routes>
      </Router>
    </div>
  );
}

export default App;
```

Routes.js:

```jsx
import Exp1 from "./exp-1/Main";

import Exp2 from "./exp-2/Main";

import Exp3 from "./exp-3/Main";

import Exp4 from "./exp-4/Card";

import Api from "./api/Api";

import Validation from "./validation/Main";

import Rest from "./rest";

import Calculator from "./Calculator";

import Toggle from "./ToggleButton/Toggle";

import Props from "./propsExp/Main";

const routes = [
  {
    id: 1,
    path: "/exp-1",
    element: <Exp1 />,
    title: "Experiment-1",
    to: "/exp-1",
  },
  {
    id: 2,
    path: "/exp-2",
    element: <Exp2 />,
```

```
    title: "Experiment-2",
    to: "/exp-2",
  },
  {
    id: 3,
    path: "/exp-3",
    element: <Exp3 />,
    title: "Experiment-3",
    to: "/exp-3",
  },
  {
    id: 4,
    path: "/exp-4",
    element: <Exp4 />,
    title: "Experiment-4",
    to: "/exp-4",
  },
  {
    id: 5,
    path: "/api-example",
    element: <Api />,
    title: "API Example",
    to: "/api-example",
  },
  {
    id: 6,
    path: "/validation",
    element: <Validation />,
    title: "Validation",
    to: "/validation",
  },
```

```
  {
    id: 7,
    path: "/rest/*",
    element: <Rest />,
    title: "REST API",
    to: "/rest",
  },
  {
    id: 8,
    path: "/calculator",
    element: <Calculator />,
    title: "Calculator",
    to: "/calculator",
  },
  {
    id: 10,
    path: "/toggle",
    element: <Toggle />,
    title: "Toggle Button",
    to: "/toggle",
  },
  {
    id: 11,
    path: "/props",
    element: <Props />,
    title: "Props",
    to: "/props",
  },
];

export default routes;
```

Index.js:

```javascript
import { Link } from "react-router-dom";
import "./Index.css";
import routes from "../Routes";

function Index() {
  return (
    <ul>
      <li>
        <Link to="/">Home</Link>
      </li>
      {routes.map((route) => {
        if (!route.to) return <></>;
        return (
          <li key={route.id}>
            <Link to={route.to}>{route.title}</Link>
          </li>
        );
      })}
    </ul>
  );
}

export default Index;
```

OUTPUT:

Home Experiment-1 Experiment-2 Experiment-3 Experiment-4 API Example Validation REST API Calculator Toggle Button Props

Props Example

First paragraph

Second paragraph

Third paragraph