

## Lab Experiment:8

**Aim:** Create React Sidebar Navigation Menu for a webpage. Implement the concept of React Hooks for backward compatibility and faster user experience.

### App.js

```
import React from "react";
import { BrowserRouter as Router, Route, Switch } from 'react-router-dom';
import Navbar from "./components/Navbar";
import Home from "./pages/home";
import Reports from "./pages/report";
import Products from "./pages/product";
import "./App.css"

function App() {
  return (
    <div>
      <Router>
        <Navbar />
        <Routes>
          <Route path="/" element={ <Home /> } />
          <Route path="/reports" element={ <Reports /> } />
          <Route path="/products" element={ <Products /> } />
        </Routes>
      </Router>
    </div>
  );
}

export default App;
```

### app.css

```
.App {
  text-align: center;
}

.App-logo {
  height: 40vmin;
  pointer-events: none;
}

@media (prefers-reduced-motion: no-preference) {
  .App-logo {
    animation: App-logo-spin infinite 20s linear;
  }
}
```

```
.App-header {
  background-color: #282c34;
  min-height: 100vh;
  display: flex;
  flex-direction: column;
  align-items: center;
  justify-content: center;
  font-size: calc(10px + 2vmin);
  color: white;
}
.App-link {
  color: #61dafb;
}
@keyframes App-logo-spin {
  from {
    transform: rotate(0deg);
  }
  to {
    transform: rotate(360deg);
  }
}
```

### components/sidebarData.js

```
import React from "react";
import * as FaIcons from "react-icons/fa";
import * as AiIcons from "react-icons/ai";
import * as IoIcons from "react-icons/io";
export const SidebarData = [
  {
    title: "Home",
    path: "/",
    icon: <AiIcons.AiFillHome />,
    cName: "nav-text",
  },
  {
    title: "Reports",
    path: "/reports",
    icon: <IoIcons.IoIosPaper />,
    cName: "nav-text",
  },
  {
    title: "Products",
    path: "/products",
    icon: <FaIcons.FaCartPlus />,
    cName: "nav-text",
  },
  {
    title: "Team",
    path: "/team",
```

```

    icon: <IoIcons.IoMdPeople />,
    cName: "nav-text",
  },
  {
    title: "Messages",
    path: "/messages",
    icon: <FaIcons.FaEnvelopeOpenText />,
    cName: "nav-text",
  },
];

```

### components/Navbar.js

```

import React, { useState } from "react";
import * as FaIcons from "react-icons/fa";
import * as AiIcons from "react-icons/ai";
import { Link } from "react-router-dom";
import { SidebarData } from "../SidebarData.js";
import "../Nav.css";
import { IconContext } from "react-icons";

function Navbar() {
  const [sidebar, setSidebar] = useState(false);
  const showSidebar = () => setSidebar(!sidebar);
  return (
    <div>
      <IconContext.Provider value={{ color: "#fff" }}>
        <div className="navbar">
          <Link to="#" className="menu-bars">
            <FaIcons.FaBars onClick={showSidebar} />
          </Link>
          <span class="rollnumber">21BIT005 : React Sidebar</span>
        </div>
        <nav className={sidebar ? "nav-menu active" : "nav-menu"}>
          <ul className="nav-menu-items" onClick={showSidebar}>
            <li className="navbar-toggle">
              <Link to="#" className="menu-bars">
                <AiIcons.AiOutlineClose />
              </Link>
            </li>
            {SidebarData.map((item, index) => {
              return (
                <li key={index} className={item.cName}>
                  <Link to={item.path}>
                    {item.icon}
                  <span>{item.title}</span>
                </Link>
              )
            })}
          </ul>
        </nav>
      </IconContext.Provider>
    </div>
  );
}

```

```
    );  
  })  
</ul>  
</nav>  
</IconContext.Provider>  
</>  
);  
}  
export default Navbar;
```

### components/Nav.css

```
.navbar {  
  background-color: #060b26;  
  height: 80px;  
  display: flex;  
  justify-content: start;  
  align-items: center;  
}  
.menu-bars {  
  margin-left: 2rem;  
  font-size: 2rem;  
  background: none;  
}  
.nav-menu {  
  background-color: #060b26;  
  width: 250px;  
  height: 100vh;  
  display: flex;  
  justify-content: center;  
  position: fixed;  
  top: 0;  
  left: -100%;  
  transition: 850ms;  
}  
.nav-menu.active {  
  left: 0;  
  transition: 350ms;  
}  
.nav-text {  
  display: flex;  
  justify-content: start;  
  align-items: center;  
  padding: 8px 0px 8px 16px;  
  list-style: none;
```

```
height: 60px;
}

.nav-text a {
  text-decoration: none;
  color: #f5f5f5;
  font-size: 18px;
  width: 95%;
  height: 100%;
  display: flex;
  align-items: center;
  padding: 0 16px;
  border-radius: 4px;
}

.nav-text a:hover {
  background-color: #1a83ff;
}

.nav-menu-items {
  width: 100%;
}

.navbar-toggle {
  background-color: #060b26;
  width: 100%;
  height: 80px;
  display: flex;
  justify-content: start;
  align-items: center;
}

span {
  margin-left: 16px;
}

.rollnumber{
  padding-left: 450px;
  color: white;
  font-weight: bold;
  font-size: x-large;
}
```

### Pages/Home.js

```
import React from "react";

const Home = () => {
  return (
    <div style={{ textAlign: 'center' }}>
      <h1>This is the Home page 🏠</h1>
    </div>
  )
}
```

```
);  
};  
  
export default Home;
```

### pages/products.js

```
import React from "react";  
const Products = () => {  
  return (  
    <div style={{ textAlign: 'center' }}>  
      <h1>This is the Products page 📦</h1>  
    </div>  
  );  
};  
  
export default Products;
```

### pages/report.js

```
import React from "react";  
const Reports = () => {  
  return (  
    <div style={{ textAlign: 'center' }}>  
      <h1>This is the Reports page 📄</h1>  
    </div>  
  );  
};  
  
export default Reports;
```

### output:

