

Experiment 8

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

1) In components folder, make *Navbar.js*, and design the Navbar

```
src > Components > Navbar > JS Navbar.js > ...
1  import React, { useState } from "react";
2  import * as FaIcons from "react-icons/fa";
3  import * as AiIcons from "react-icons/ai";
4  import { Link } from "react-router-dom";
5  import { SidebarData } from "../SidebarData.js";
6  import "../css/Nav.css";
7  import { IconContext } from "react-icons";
8
9  function Navbar() {
10     const [sidebar, setSidebar] = useState(false);
11     const showSidebar = () => setSidebar(!sidebar);
12     return (
13         <>
14         <IconContext.Provider value={{ color: "#fff" }}>
15         <div className="navbar">
16             <Link to="#" className="menu-bars">
17                 <FaIcons.FaBars onClick={showSidebar} />
18             </Link>
19             <span class="rollnumber">21BIT005 : React Sidebar</span>
20         </div>
21         <nav className={sidebar ? "nav-menu active" : "nav-menu"}>
22             <ul className="nav-menu-items" onClick={showSidebar}>
23                 <li className="navbar-toggle">
24                     <Link to="#" className="menu-bars">
25                         <AiIcons.AiOutlineClose />
26                     </Link>
27                 </li>
28                 {SidebarData.map((item, index) => {
29                     return (
30                         <li key={index} className={item.cName}>
31                             <Link to={item.path}>
32                                 {item.icon}
33                                 <span>{item.title}</span>
34                             </Link>
35                         </li>
36                     );
37                 })}
38             </ul>
39         </nav>
40         </IconContext.Provider>
41     </>
42 );
43 }
44 export default Navbar;
45
```

2) Give CSS to Navbar

```

1  .navbar {
2      background-color: #060b26;
3      height: 80px;
4      display: flex;
5      justify-content: start;
6      align-items: center;
7  }
8  .menu-bars {
9      margin-left: 2rem;
10     font-size: 2rem;
11     background: none;
12 }
13
14 .nav-menu {
15     background-color: #060b26;
16     width: 250px;
17     height: 100vh;
18     display: flex;
19     justify-content: center;
20     position: fixed;
21     top: 0;
22     left: -100%;
23     transition: 850ms;
24 }
25
26 .nav-menu.active {
27     left: 0;
28     transition: 350ms;
29 }
30
31 .nav-text {
32     display: flex;
33     justify-content: start;
34     align-items: center;
35     padding: 8px 0px 8px 16px;
36     list-style: none;
37     height: 60px;
38 }
39
40 .nav-text a {
41     text-decoration: none;
42     color: #f5f5f5;
43     font-size: 18px;
44     width: 95%;
45     height: 100%;
46     display: flex;
47     align-items: center;
48     padding: 0 16px;
49     border-radius: 4px;
50 }
51
52 .nav-text a:hover {
53     background-color: #1a88e8;
54 }
55 .nav-menu-items {
56     width: 100%;
57 }
58 .navbar-toggle {
59     background-color: #060b26;
60     width: 100%;
61     height: 80px;
62     display: flex;
63     justify-content: start;
64     align-items: center;
65 }
66
67 span {
68     margin-left: 16px;
69 }
70
71 .rollnumber {
72     padding-left: 450px;
73     color: white;
74     font-weight: bold;
75     font-size: x-large;
76 }

```

3) Make a *Sidebar.js* in components folder, to design the sidebar

```
src > Components > Sidebar > JS Sidebar.js > ...
1  import React from "react";
2  import * as FaIcons from "react-icons/fa";
3  import * as AiIcons from "react-icons/ai";
4  import * as IoIcons from "react-icons/io";
5  export const SidebarData = [
6  {
7    title: "Home",
8    path: "/",
9    icon: <AiIcons.AiFillHome />,
10   cName: "nav-text",
11 },
12 {
13   title: "Reports",
14   path: "/reports",
15   icon: <IoIcons.IoIosPaper />,
16   cName: "nav-text",
17 },
18 {
19   title: "Products",
20   path: "/products",
21   icon: <FaIcons.FaCartPlus />,
22   cName: "nav-text",
23 },
24 {
25   title: "Team",
26   path: "/team",
27   icon: <IoIcons.IoMdPeople />,
28   cName: "nav-text",
29 },
30 {
31   title: "Messages",
32   path: "/messages",
33   icon: <FaIcons.FaEnvelopeOpenText />,
34   cName: "nav-text",
35 },
36 ];
37
```

4) Make a pages folder, and add the pages of the sidebar

<pre>src > pages > JS home.js > ... 1 import React from "react"; 2 3 const Home = () => { 4 return (5 <div style={{ textAlign: 'center' }}> 6 <h1>This is the Home page 🏠</h1> 7 </div> 8); 9 }; 10 11 export default Home; 12</pre>	<pre>src > pages > JS product.js > [⌕] default 1 import React from "react"; 2 const Products = () => { 3 return (4 <div style={{ textAlign: 'center' }}> 5 <h1>This is the Products page 📦</h1> 6 </div> 7); 8 }; 9 10 export default Products;</pre>
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5) Update the *App.js* file

```
// export default App;

import React from "react";
import { BrowserRouter as Router, Route, Routes } from "react-router-dom";
import Navbar from "../Components/Navbar/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;
```

Output



Discussions:

This experiment demonstrated the creation of a React sidebar navigation menu, enhancing webpage accessibility. Utilizing React Hooks ensures faster user interaction and maintains compatibility across different React versions.