**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* (

    <>

      <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>

                </li>

              );

            })}

          </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>

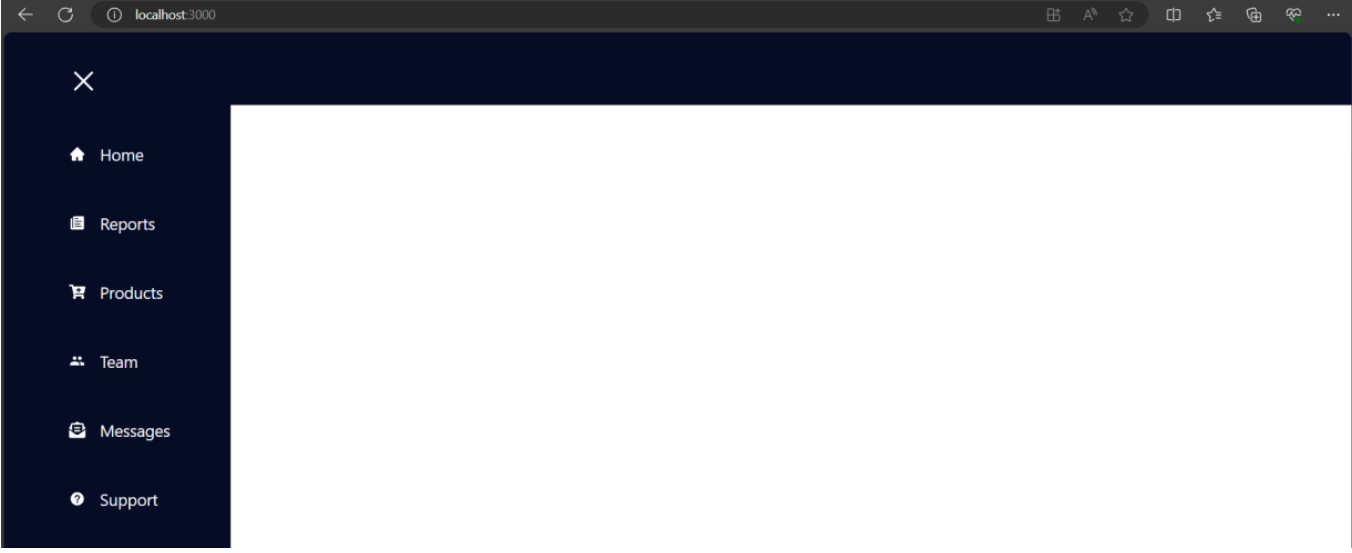
    </div>

  );

};

*export* *default* Reports;

**output:**

****