Experiment-3

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Objective

Design and build a professional, responsive admin dashboard interface using HTML, CSS Grid layout, and a theme switching feature (light and dark modes). This task focuses on advanced layout skills and the application of design adaptability through theming.

Task Description

Create a web-based admin dashboard page that includes the following sections:

- Header: Contains the dashboard title and a theme switch (light/dark).

- Sidebar: Includes navigation links such as Home, Users, and Settings.

- Main Content Area: Placeholder for data visualization, reports, or welcome messages.

- Footer: Displays footer text or copyright.

The page should:

- Use CSS Grid to arrange and align these sections into a clean, professional layout.

- Implement theme switching functionality so that the entire dashboard can switch between light mode and dark mode.

- The switch should update background colors, text colors, and other style elements clearly, without requiring page reload.

Input

HTML

```html
1    <!DOCTYPE html>
2    <html lang="en">
3    <head>
4      <meta charset="UTF-8" />
5      <meta name="viewport" content="width=device-width, initial-scale=1.0"/>
6      <title>Admin Dashboard</title>
7      <link rel="stylesheet" href="Experiment_3.css" />
8    </head>
9    <body class="light-theme">
10     <div class="dashboard">
11       <header class="header">
12         <h1>Admin Dashboard</h1>
13         <label>
14           <input type="checkbox" id="themeToggle" />
15           Dark Mode
16         </label>
17       </header>
18       <aside class="sidebar">
19         <ul>
20           <li><a href="#">Home</a></li>
21           <li><a href="#">Users</a></li>
22           <li><a href="#">Settings</a></li>
23         </ul>
24       </aside>
25       <main class="main">
26         <h2>Welcome, Admin!</h2>
27         <p>This is the main content area. Add charts, tables, or reports here.</p>
28       </main>
29       <footer class="footer">
30         &copy; 2025 Admin Panel
31       </footer>
32     </div>
```

```
33    <script>
34      const toggle = document.getElementById('themeToggle');
35      const body = document.body;
36      toggle.addEventListener('change', () => {
37        body.classList.toggle('dark-theme');
38        body.classList.toggle('light-theme');
39      });
40    </script>
41  </body>
42  </html>
43
```

CSS Stylesheet

```css
# Experiment_3.css > ...
1   body {
2     margin: 0;
3     font-family: Arial, sans-serif;
4     transition: background 0.3s, color 0.3s;
5   }
6
7   .dashboard {
8     display: grid;
9     grid-template-areas:
10      "header header"
11      "sidebar main"
12      "footer footer";
13     grid-template-columns: 200px 1fr;
14     grid-template-rows: auto 1fr auto;
15     min-height: 100vh;
16   }
17   .header {
18     grid-area: header;
19     display: flex;
20     justify-content: space-between;
21     align-items: center;
22     padding: 1rem;
23     font-weight: bold;
24   }
25   .sidebar {
26     grid-area: sidebar;
27     padding: 1rem;
28   }
29   .sidebar ul {
30     list-style: none;
31     padding: 0;
32   }
33   .sidebar a {
34     text-decoration: none;
35   }
```

```css
.main {
  grid-area: main;
  padding: 2rem;
}

.footer {
  grid-area: footer;
  text-align: center;
  padding: 1rem;
}


.light-theme {
  --bg: #ffffff;
  --text: #000000;
  --header-bg: #4caf50;
  --sidebar-bg: #f0f0f0;
  --footer-bg: #4caf50;
  --link: purple;
}

.light-theme {
  background-color: var(--bg);
  color: var(--text);
}


.light-theme .header,
.light-theme .footer {
  background-color: var(--header-bg);
  color: white;
}
```

```css
.light-theme .sidebar {
  background-color: var(--sidebar-bg);
}

.light-theme a {
  color: var(--link);
}


.dark-theme {
  --bg: #111;
  --text: #eee;
  --header-bg: #222;
  --sidebar-bg: #333;
  --footer-bg: #222;
  --link: #c084fc;
}

.dark-theme {
  background-color: var(--bg);
  color: var(--text);
}

.dark-theme .header,
.dark-theme .footer {
  background-color: var(--header-bg);
  color: white;
}

.dark-theme .sidebar {
  background-color: var(--sidebar-bg);
}
```
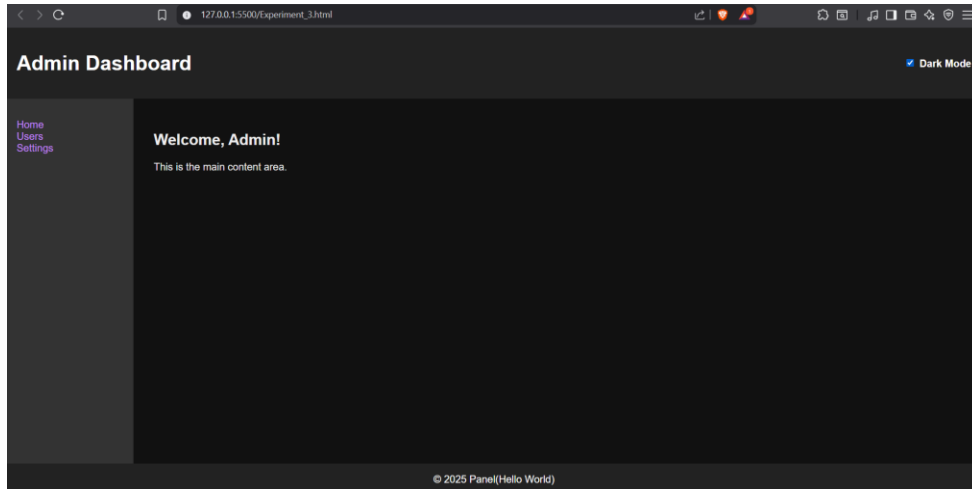
```css
.dark-theme a {
  color: var(--link);
}


@media (max-width: 768px) {
  .dashboard {
    grid-template-areas:
      "header"
      "sidebar"
      "main"
      "footer";
    grid-template-columns: 1fr;
  }
}
```

Output

Dark mode

Light Mode