Experiment 3

Aim:

To build a responsive admin dashboard using CSS Grid and implement theme switching using HTML and CSS.

Objective:

The objective of this experiment is to design a professional-looking admin dashboard with clearly separated sections (header, sidebar, content, and footer) using CSS Grid layout. Additionally, the interface supports light/dark theme switching using only CSS, enabling practice in advanced layout and adaptive design principles.

HTML Code:

```
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8" />

    <meta name="viewport" content="width=device-width, initial-scale=1.0"/>

    <title>Admin Dashboard</title>

    <link rel="stylesheet" href="styles.css">

</head>

<body>

    <div class="dashboard">

        <header class="header">

            <h1>Admin Dashboard</h1>

            <label class="theme-switch">

                <input type="checkbox" id="toggle-theme">

                <span class="slider"></span>

            </label>

        </header>


        <aside class="sidebar">

            <nav>

                <ul>
```

```html
            <li><a href="#">Home</a></li>
            <li><a href="#">Users</a></li>
            <li><a href="#">Settings</a></li>
          </ul>
        </nav>
      </aside>

      <main class="main">
        <h2>Welcome to the Admin Panel</h2>
        <p>This area can be used for data visualizations, reports, or messages.</p>
      </main>

      <footer class="footer">
        <p>&copy; 2025 Dashboard Inc.</p>
      </footer>
    </div>
</body>
</html>
<script>
  const toggle = document.getElementById('toggle-theme');
  toggle.addEventListener('change', () => {
    document.body.classList.toggle('dark');
  });
</script>
```

CSS Code:

css

```css
:root {
  --bg-color: #ffffff;
  --text-color: #000000;
```

```css
    --sidebar-bg: #f4f4f4;

    --header-footer-bg: #e0e0e0;

}


body.dark {

    --bg-color: #121212;

    --text-color: #ffffff;

    --sidebar-bg: #1e1e1e;

    --header-footer-bg: #2c2c2c;

}


body {

    margin: 0;

    font-family: Arial, sans-serif;

    background-color: var(--bg-color);

    color: var(--text-color);

    transition: background-color 0.3s ease, color 0.3s ease;

}


.dashboard {

    display: grid;

    grid-template-areas:

        "header header"

        "sidebar main"

        "footer footer";

    grid-template-columns: 200px 1fr;

    grid-template-rows: auto 1fr auto;

    min-height: 100vh;

}


.header {

    grid-area: header;
```

```css
    background: var(--header-footer-bg);

    display: flex;

    justify-content: space-between;

    align-items: center;

    padding: 1rem 2rem;

}


.theme-switch {

    position: relative;

    display: inline-block;

    width: 50px;

    height: 24px;

}


.theme-switch input {

    opacity: 0;

    width: 0;

    height: 0;

}


.slider {

    position: absolute;

    cursor: pointer;

    top: 0;

    left: 0;

    right: 0;

    bottom: 0;

    background-color: #888;

    border-radius: 24px;

    transition: 0.4s;

}
```

```css
.slider:before {

    content: "";

    position: absolute;

    height: 18px;

    width: 18px;

    left: 3px;

    bottom: 3px;

    background-color: white;

    border-radius: 50%;

    transition: 0.4s;

}


input:checked + .slider {

    background-color: #4caf50;

}


input:checked + .slider:before {

    transform: translateX(26px);

}


.sidebar {

    grid-area: sidebar;

    background: var(--sidebar-bg);

    padding: 1.5rem;

}


.sidebar ul {

    list-style: none;

    padding: 0;

}


.sidebar a {
```

```css
    text-decoration: none;

    color: var(--text-color);

    display: block;

    margin: 1rem 0;

}


.main {

    grid-area: main;

    padding: 2rem;

}


.footer {

    grid-area: footer;

    background: var(--header-footer-bg);

    text-align: center;

    padding: 1rem;

}


/* Theme toggle logic */

#toggle-theme:checked ~ .dashboard {

    background-color: var(--bg-color);

}


#toggle-theme:checked ~ body {

    background-color: var(--bg-color);

}
```
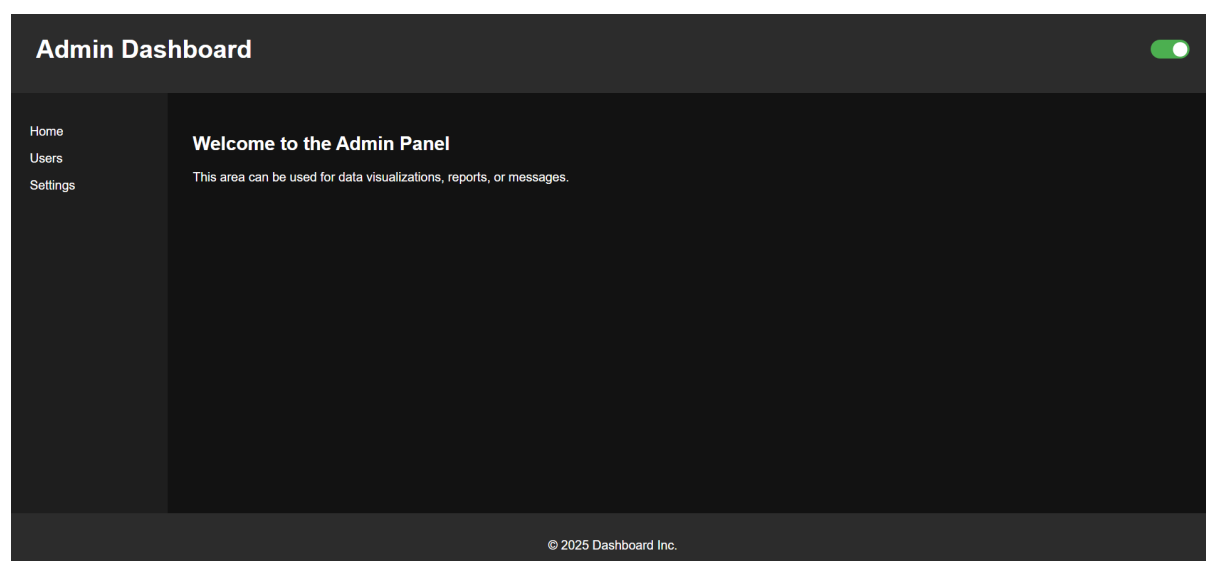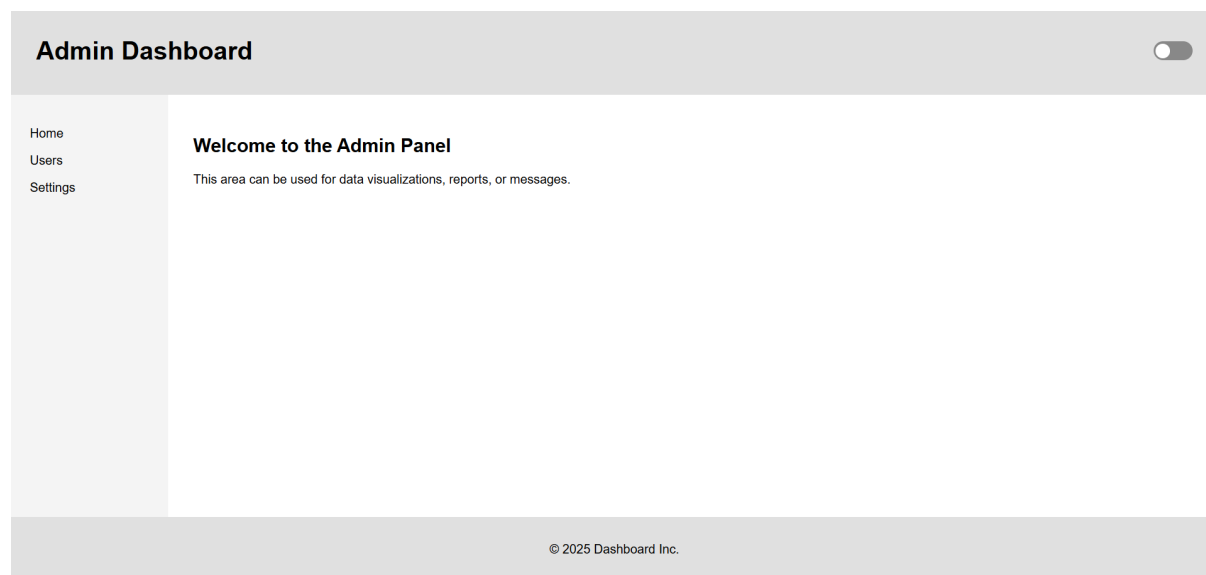

Output:

- A complete, responsive admin dashboard layout
- Theme toggle switch in the header to switch between light and dark modes
- Sidebar with working nav layout, and content + footer aligned using CSS Grid
- Clean layout with section separation and responsiveness

Admin Dashboard

Home
Users
Settings

Welcome to the Admin Panel

This area can be used for data visualizations, reports, or messages.

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