

Experiment: Admin Dashboard with CSS Grid Layout and Theme Switching

Aim:

To design and build a professional, responsive admin dashboard interface using HTML, CSS Grid layout, and a theme switching feature (light and dark modes).

Tools Used:

1. HTML5
2. CSS3 (CSS Grid, Transitions)
3. JavaScript (for theme switching)
4. Text Editor (e.g., VS Code)
5. Web Browser (for output visualization)

Code:

Combined HTML, CSS, and JavaScript 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>
  <style>
    body {
      margin: 0;
      font-family: Arial, sans-serif;
    }
    .container {
      display: grid;
      grid-template-areas:
        'header header'
        'nav main'
        'footer footer';
      grid-template-columns: 200px 1fr;
      grid-template-rows: auto 1fr auto;
      height: 100vh;
    }
    header {
      grid-area: header;
```

```
background: #4caf50;
color: white;
padding: 1rem;
display: flex;
justify-content: space-between;
align-items: center;
}
nav {
  grid-area: nav;
  background: #eee;
  padding: 1rem;
}
nav ul {
  list-style: none;
  padding: 0;
}
nav ul li {
  margin: 10px 0;
}
nav ul li a {
  text-decoration: none;
  color: #4caf50;
  font-weight: bold;
}
main {
  grid-area: main;
  padding: 2rem;
}
footer {
  grid-area: footer;
  background: #4caf50;
  text-align: center;
  padding: 1rem;
  color: white;
}
.dark-mode {
  background: #121212;
  color: white;
}
.dark-mode header,
.dark-mode footer {
  background: #333;
}
```

```

    .dark-mode nav {
      background: #1e1e1e;
    }
    .dark-mode nav ul li a {
      color: #bbb;
    }
  </style>
</head>
<body class="light-mode">
  <div class="container">
    <header>
      <h1>Admin Dashboard</h1>
      <label><input type="checkbox" id="themeToggle" /> Dark Mode</label>
    </header>
    <nav>
      <ul>
        <li><a href="#">Home</a></li>
        <li><a href="#">Users</a></li>
        <li><a href="#">Settings</a></li>
      </ul>
    </nav>
    <main>
      <h2>Welcome, Admin!</h2>
      <p>This is the main content area. Add charts, tables, or reports here.</p>
    </main>
    <footer>© 2025 Admin Panel</footer>
  </div>
  <script>
    const toggle = document.getElementById('themeToggle');
    toggle.addEventListener('change', () => {
      document.body.classList.toggle('dark-mode');
      document.body.classList.toggle('light-mode');
    });
  </script>
</body>
</html>

```

Procedure:

1. Open VS Code and create a new HTML file named index.html.
2. Copy and paste the provided combined code into the file.
3. Save the file and right-click to open with Live Server (or open directly in the browser).

4. The page will show a light-themed admin dashboard.
5. Use the checkbox in the top-right corner to toggle dark mode dynamically.
6. The layout should remain structured using CSS Grid and update theme styles instantly.

Result:

The admin dashboard was successfully created with a clean layout using CSS Grid and supports light/dark theme switching without reloading the page.

Expected Output:

The expected output includes two visual representations of the Admin Dashboard:

1. Light Mode
2. Dark Mode

