EXP-3:

Develop an admin dashboard with CSS Grid layout and dynamic theme switching:

```html
<!DOCTYPE html>
<!-- Default theme is light -->
<html lang="en" class="light">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Admin Dashboard</title>
  <script src="https://cdn.tailwindcss.com"></script>
  <link href="https://fonts.googleapis.com/css2?family=Inter:wght@400;500;600;700&display=swap" rel="stylesheet">
  <!-- Lucide icons for a modern look -->
  <script src="https://unpkg.com/lucide@latest"></script>
  <style>
    body {
      font-family: 'Inter', sans-serif;
    }
    /* Custom scrollbar for better aesthetics, especially in dark mode */
    ::-webkit-scrollbar {
      width: 8px;
    }
    ::-webkit-scrollbar-track {
      background-color: transparent;
    }
    ::-webkit-scrollbar-thumb {
      background-color: #a0aec0; /* gray-400 */
      border-radius: 10px;
      border: 2px solid transparent;
```

```
        background-clip: content-box;

      }

      html.dark ::-webkit-scrollbar-thumb {

        background-color: #4a5568; /* gray-600 */

      }

    </style>

    <script>

      // Configure Tailwind CSS for dark mode toggling via a class

      tailwind.config = {

        darkMode: 'class',

      }

    </script>

  </head>

  <body class="bg-gray-100 dark:bg-gray-900 text-gray-900 dark:text-gray-200 transition-colors
  duration-300">


    <!-- Main container using CSS Grid for the layout -->

    <div class="grid min-h-screen grid-cols-1 lg:grid-cols-[260px_1fr]">


      <!-- === Sidebar Navigation === -->

      <aside class="bg-white dark:bg-gray-800 shadow-lg hidden lg:flex lg:flex-col">

        <!-- Logo/Header -->

        <div class="p-6 flex items-center gap--3">

          <div class="p-2 bg-blue-600 rounded-lg">

            <i data-lucide="command" class="text-white"></i>

          </div>

          <h1 class="text-xl font-bold">Dashboard</h1>

        </div>


        <!-- Navigation Links -->

        <nav class="flex-1 px-4 py-2">
```

```html
        <a href="#" class="flex items-center gap-3 px-4 py-3 text-gray-700 dark:text-gray-300 bg-blue-50 dark:bg-gray-700 rounded-lg font-semibold">
            <i data-lucide="layout-grid" class="w-5 h-5"></i> Overview
        </a>
        <a href="#" class="flex items-center gap-3 px-4 py-3 mt-2 text-gray-600 dark:text-gray-400 hover:bg-gray-100 dark:hover:bg-gray-700 rounded-lg">
            <i data-lucide="users" class="w-5 h-5"></i> Customers
        </a>
        <a href="#" class="flex items-center gap-3 px-4 py-3 mt-2 text-gray-600 dark:text-gray-400 hover:bg-gray-100 dark:hover:bg-gray-700 rounded-lg">
            <i data-lucide="shopping-cart" class="w-5 h-5"></i> Orders
        </a>
        <a href="#" class="flex items-center gap-3 px-4 py-3 mt-2 text-gray-600 dark:text-gray-400 hover:bg-gray-100 dark:hover:bg-gray-700 rounded-lg">
            <i data-lucide="bar-chart-3" class="w-5 h-5"></i> Analytics
        </a>
    </nav>


    <!-- Sidebar Footer -->
    <div class="p-4 border-t dark:border-gray-700">
        <a href="#" class="flex items-center gap-3 px-4 py-3 text-gray-600 dark:text-gray-400 hover:bg-gray-100 dark:hover:bg-gray-700 rounded-lg">
            <i data-lucide="settings" class="w-5 h-5"></i> Settings
        </a>
    </div>
</aside>


<!-- === Main Content Area === -->
<main class="flex flex-col">
    <!-- Header -->
    <header class="flex items-center justify-between p-4 bg-white dark:bg-gray-800 shadow-md border-b dark:border-gray-700">
        <h2 class="text-2xl font-bold">Dashboard Overview</h2>
```

```html
      <div class="flex items-center gap-4">

        <!-- Theme Switcher Button -->

          <button id="theme-toggle" class="p-2 rounded-full text-gray-500 dark:text-gray-400
hover:bg-gray-100 dark:hover:bg-gray-700 focus:outline-none focus:ring-2 focus:ring-blue-500">

            <i id="theme-icon-light" data-lucide="sun" class="hidden"></i>

            <i id="theme-icon-dark" data-lucide="moon" class="hidden"></i>

            <span class="sr-only">Toggle theme</span>

          </button>

          <!-- User Profile -->

            <div class="w-10 h-10 bg-gradient-to-br from-blue-400 to-indigo-500 rounded-full flex
items-center justify-center text-white font-bold">

            A

          </div>

        </div>

      </header>


      <!-- Page Content -->
      <div class="flex-1 p-6 lg:p-8 bg-gray-50 dark:bg-gray-800/50">
        <!-- Stat Cards -->
        <div class="grid grid-cols-1 sm:grid-cols-2 xl:grid-cols-4 gap-6 mb-8">
          <div class="bg-white dark:bg-gray-800 p-6 rounded-xl shadow-sm">
            <h3 class="text-sm font-medium text-gray-500 dark:text-gray-400">Total Revenue</h3>
            <p class="text-3xl font-bold mt-2">$58,392.41</p>
          </div>
          <div class="bg-white dark:bg-gray-800 p-6 rounded-xl shadow-sm">
            <h3 class="text-sm font-medium text-gray-500 dark:text-gray-400">New Users</h3>
            <p class="text-3xl font-bold mt-2">+1,204</p>
          </div>
          <div class="bg-white dark:bg-gray-800 p-6 rounded-xl shadow-sm">
            <h3 class="text-sm font-medium text-gray-500 dark:text-gray-400">Conversion Rate</h3>
            <p class="text-3xl font-bold mt-2">12.5%</p>
          </div>
```

```html
        <div class="bg-white dark:bg-gray-800 p-6 rounded-xl shadow-sm">

            <h3 class="text-sm font-medium text-gray-500 dark:text-gray-400">Support Tickets</h3>

            <p class="text-3xl font-bold mt-2">27</p>

        </div>

    </div>


    <!-- Main Content Grid -->

    <div class="grid grid-cols-1 xl:grid-cols-3 gap-6">

        <!-- Sales Chart -->

        <div class="xl:col-span-2 bg-white dark:bg-gray-800 p-6 rounded-xl shadow-sm">

            <h3 class="font-semibold text-lg mb-4">Sales Performance</h3>

                <div class="h-80 bg-gray-100 dark:bg-gray-700 rounded-lg flex items-center justify-
center">

                    <p class="text-gray-400">[Chart Data Would Go Here]</p>

                </div>

        </div>

        <!-- Recent Activity -->

        <div class="bg-white dark:bg-gray-800 p-6 rounded-xl shadow-sm">

            <h3 class="font-semibold text-lg mb-4">Recent Activity</h3>

            <ul class="space-y-5">

                <li class="flex items-center gap-4">

                    <div class="w-10 h-10 bg-green-100 dark:bg-green-900 text-green-600 dark:text-
green-400 rounded-full flex items-center justify-center"><i data-lucide="dollar-sign" class="w-5 h-
5"></i></div>

                    <p class="flex-1 text-sm">New order #8124 placed by J. Doe.</p>

                </li>

                <li class="flex items-center gap-4">

                    <div class="w-10 h-10 bg-blue-100 dark:bg-blue-900 text-blue-600 dark:text-blue-
400 rounded-full flex items-center justify-center"><i data-lucide="user-plus" class="w-5 h-
5"></i></div>

                    <p class="flex-1 text-sm">A new user, Alex R., has registered.</p>

                </li>

                <li class="flex items-center gap-4">
```

```html
                    <div class="w-10 h-10 bg-red-100 dark:bg-red-900 text-red-600 dark:text-red-400
rounded-full flex items-center justify-center"><i data-lucide="alert-circle" class="w-5 h-5"></i></div>

                    <p class="flex-1 text-sm">Server #3 is reporting high CPU usage.</p>

                </li>

              </ul>

            </div>

          </div>

        </div>

      </main>

   </div>


   <script>

      // --- Initialize Lucide Icons ---

      lucide.createIcons();


      // --- Theme Switching Logic ---

      const themeToggleBtn = document.getElementById('theme-toggle');

      const lightIcon = document.getElementById('theme-icon-light');

      const darkIcon = document.getElementById('theme-icon-dark');

      const htmlEl = document.documentElement;


      // Function to set the theme and update the icon

      function setTheme(theme) {

        if (theme === 'dark') {

          htmlEl.classList.add('dark');

          lightIcon.classList.add('hidden');

          darkIcon.classList.remove('hidden');

        } else {

          htmlEl.classList.remove('dark');

          darkIcon.classList.add('hidden');

          lightIcon.classList.remove('hidden');
```

```
        }

    }


    // Toggle theme on button click

    themeToggleBtn.addEventListener('click', () => {

        const currentTheme = htmlEl.classList.contains('dark') ? 'dark' : 'light';

        const newTheme = currentTheme === 'dark' ? 'light' : 'dark';

        localStorage.setItem('theme', newTheme);

        setTheme(newTheme);

    });


    // Apply theme on initial load

    document.addEventListener('DOMContentLoaded', () => {

        const savedTheme = localStorage.getItem('theme');

        const prefersDark = window.matchMedia('(prefers-color-scheme: dark)').matches;


        if (savedTheme) {

            setTheme(savedTheme);

        } else if (prefersDark) {

            setTheme('dark');

        } else {

            setTheme('light');

        }

    });
  </script>
</body>
</html>
```
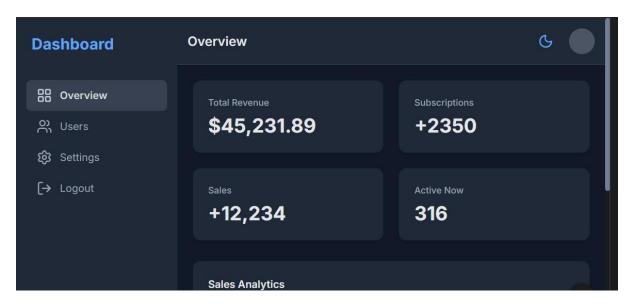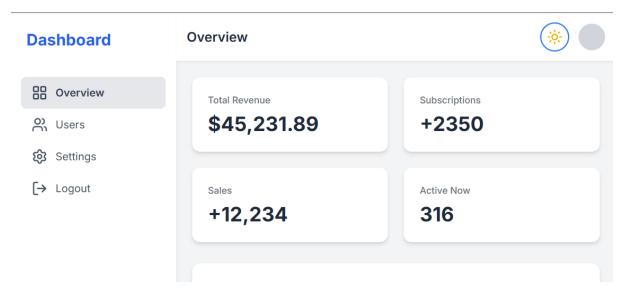
OUTPUTS:

EXP-3:

Figure 1 Dark Mode Dashboard

Figure 2 Light Mode Dashboard