

# **Experiment 1.2**

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**Branch:** BE-AIT-CSE

**Semester:** 5th

**Subject Name:** Full Stack

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**Subject Code:** 23CSP-339

1. **Problem Title:** To build an admin dashboard with dynamic theming using CSS Grid and JavaScript.
2. **Problem Description:**
   1. Create grid-based layout
   2. Implement dark/light mode toggle
   3. Design responsive sidebar
   4. Add data visualization placeholders
   5. Persist theme preference using localStorage
3. **Hardware Requirements:** 
   1. Processor: Intel i3/ Ryzen 3 or higher.
   2. RAM: 4GB minimum.
   3. Display: 1366x768 resolution.
4. **HTML:**

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| **<!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="style.css" />**  **</head>**  **<body>**  **<div class="dashboard">**  **<!-- Sidebar -->**  **<aside class="sidebar">**  **<h2>Admin</h2>**  **<nav>**  **<a href="#">Dashboard</a>**  **<a href="#">Users</a>**  **<a href="#">Analytics</a>**  **<a href="#">Settings</a>**  **</nav>**  **<button id="theme-toggle">Toggle Theme</button>**  **</aside>**  **<!-- Main Content -->**  **<main class="main">**  **<header class="header">**  **<h1>Welcome, Admin</h1>**  **</header>**  **<section class="cards">**  **<div class="card">Metric 1</div>**  **<div class="card">Metric 2</div>**  **<div class="card">Metric 3</div>**  **<div class="card">Metric 4</div>**  **</section>**  **<section class="charts">**  **<div class="chart-placeholder">Chart 1 Placeholder</div>**  **<div class="chart-placeholder">Chart 2 Placeholder</div>**  **</section>**  **</main>**    **</div>**  **<script src="script.js"></script>**  **</body>**  **</html>** |

1. **CSS:**

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| :root {  --bg-color: #f4f4f4;  --text-color: #333;  --card-bg: #fff;  --sidebar-bg: #2f3542;  --sidebar-text: #fff;  }  body.dark {  --bg-color: #1e1e1e;  --text-color: #f4f4f4;  --card-bg: #2c2c2c;  --sidebar-bg: #111;  --sidebar-text: #ccc;  }  \* {  box-sizing: border-box;  margin: 0;  padding: 0;  }  body {  font-family: 'Segoe UI', sans-serif;  background-color: var(--bg-color);  color: var(--text-color);  transition: background-color 0.3s ease;  }  .dashboard {  display: grid;  grid-template-columns: 250px 1fr;  min-height: 100vh;  }  .sidebar {  background-color: var(--sidebar-bg);  color: var(--sidebar-text);  padding: 20px;  }  .sidebar h2 {  margin-bottom: 20px;  }  .sidebar nav a {  display: block;  color: var(--sidebar-text);  text-decoration: none;  margin-bottom: 10px;  }  .sidebar button {  margin-top: 20px;  padding: 10px;  width: 100%;  cursor: pointer;  }  .main {  padding: 20px;  }  .header {  margin-bottom: 20px;  }  .cards {  display: grid;  grid-template-columns: repeat(auto-fit, minmax(150px, 1fr));  gap: 20px;  margin-bottom: 30px;  }  .card {  background-color: var(--card-bg);  padding: 20px;  border-radius: 8px;  box-shadow: 0 2px 6px rgba(0, 0, 0, 0.1);  transition: background-color 0.3s ease;  }  .charts {  display: grid;  grid-template-columns: 1fr 1fr;  gap: 20px;  }  .chart-placeholder {  background-color: var(--card-bg);  height: 200px;  border-radius: 8px;  display: flex;  align-items: center;  justify-content: center;  font-weight: bold;  transition: background-color 0.3s ease;  }  @media (max-width: 768px) {  .dashboard {  grid-template-columns: 1fr;  }  .sidebar {  display: flex;  justify-content: space-between;  align-items: center;  }  .charts {  grid-template-columns: 1fr;  }  } |

1. **JavaScript:**

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| const toggleBtn = document.getElementById("theme-toggle");  document.addEventListener("DOMContentLoaded", () => {  const theme = localStorage.getItem("theme");  if (theme === "dark") {  document.body.classList.add("dark");  }  });  toggleBtn.addEventListener("click", () => {  document.body.classList.toggle("dark");  const currentTheme = document.body.classList.contains("dark") ? "dark" : "light";  localStorage.setItem("theme", currentTheme);  }); |

1. **Learning Outcome:** 
   1. I learnt how to save data in local storage and retrieve it.
   2. I learnt how to handle the eventlistners in js.
   3. I learnt how to work with DOM object model in js.