

**PROJECT TITLE**

E-LEARNING DASHBOARD

**DEVELOPERS**

TEAM A

## **Abstract**

The E-Learning Dashboard is a web-based interface designed to improve online learning experiences by providing users with a clean, responsive dashboard. It allows students to track courses, assignments, and progress in one organized view. The project focuses on front-end development using HTML, CSS, and JavaScript, showcasing effective UI design, interactivity, and live deployment using GitHub and Vercel.

## 1. Introduction:

E-learning systems are essential in modern education, especially for distance and online programs. However, many platforms have complex interfaces. The E-Learning Dashboard aims to create a simpler, more user-friendly layout that focuses on accessibility, progress visualization, and responsive design.

## 2. Objectives:

- ◆ To create a responsive and accessible dashboard for learners.
- ◆ To display ongoing courses, lessons, and progress updates.
- ◆ To design a visually appealing layout that improves usability.
- ◆ To demonstrate the use of modern front-end technologies.
- ◆ To implement hosting and version control using GitHub and Vercel.

## 3. Scope of the Project:

The dashboard targets both students and instructors. It allows users to access:

- ◆ Ongoing courses
- ◆ Upcoming deadlines
- ◆ Recent activities
- ◆ Personalized progress reports

Currently, it functions as a static demo hosted online, but it can be extended with a backend system in future versions.

## 4. System Design:

The dashboard consists of three major sections:

1. **Sidebar Navigation:** For switching between dashboard features.
2. **Main Content Area:** Displays user progress, courses, and activities.
3. **Right Panel:** Shows upcoming deadlines, recommendations, and charts.

It uses **CSS Grid** and **Flexbox** for responsive design and **CSS variables** for theme management (light/dark mode).

## 5. Technologies Used:

### Component Technology

Frontend     HTML5, CSS3, JavaScript

Design       Google Fonts (Inter), Gradient themes

Layout       Flexbox, CSS Grid

Interactivity    Vanilla JavaScript (toggle menu, theme switcher)

Hosting        GitHub (Version Control), Vercel (Deployment)

## 6. Features of the System:

- ◆ User-friendly and responsive interface
- ◆ Dark and light theme modes
- ◆ Course and progress visualization
- ◆ Upcoming deadline tracker
- ◆ Activity log
- ◆ Recommended courses list
- ◆ Live hosting via Vercel for public access

## 7. Implementation:

The project was implemented using a single-page layout combining HTML, CSS, and JavaScript. The interface dynamically responds to different screen sizes. JavaScript handles sidebar toggling, theme switching, and minor user interactions.

After development, the project files were uploaded to **GitHub** for version control and source management. The site was then **deployed on Vercel**, providing an accessible

live link to the dashboard. This setup ensures easy updates, public access, and professional hosting.

## **8. Results:**

The final output is a fully responsive e-learning dashboard with smooth transitions, modern design, and organized structure. The interface effectively simulates a real-world LMS dashboard.

The successful hosting on **Vercel** demonstrates the project's deployment capabilities, making it available online for testing and presentation. GitHub ensures version tracking and collaboration support.

## **9. Challenges Encountered:**

- ◆ Designing for both mobile and desktop required careful layout adjustments.
- ◆ Managing color themes dynamically.
- ◆ Keeping the design clean and minimal without external libraries.
- ◆ Configuring deployment and repository management for smooth hosting.

## **10. Future Enhancements:**

- ◆ Add database and API integration (Firebase or REST API).
- ◆ Implement authentication (Login/Signup).
- ◆ Enable user data saving and analytics tracking.
- ◆ Create an instructor version for course management.
- ◆ Connect GitHub CI/CD pipeline for automated deployment.

## **11. Conclusion:**

The E-Learning Dashboard successfully demonstrates a modern approach to front-end design for educational platforms. It simplifies the user experience while offering essential features like progress tracking and responsive design.

Through GitHub integration and Vercel deployment, the project achieves real-world usability by making the dashboard live and accessible. With future backend integration, it can evolve into a complete and dynamic Learning Management System (LMS).

## **12. References:**

- ◆ Mozilla Developer Network (MDN) Documentation
- ◆ W3Schools HTML/CSS Tutorials
- ◆ Google Fonts API Documentation
- ◆ CSS-Tricks Responsive Design Guides
- ◆ Vercel Deployment Documentation
- ◆ GitHub Docs (Version Control and Repository Hosting)