

A Digital Notice Board (Campus Connect)

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Abstract— In educational institutions, information such as notices, timetables, announcements, and circulars are commonly displayed using traditional notice boards. These methods are time-consuming, difficult to maintain, and fail to ensure timely delivery of information to all students. To overcome these limitations, this paper presents Campus Connect, a Digital Notice Board system that provides a centralized platform for multiple departments including Computer, Mechanical, Electrical, Electronics, and Civil. The system allows administrators to upload notices and timetables digitally, ensuring quick, organized, and eco-friendly communication within a campus.

Index Terms— Digital Notice Board, Campus Connect, Centralized Platform, Departmental Communication, Web-Based System

1. Introduction

Traditional notice boards are widely used in educational institutions to display notices, announcements, and timetables. However, they require manual updating, consume paper, and students may miss important updates. To address these issues, the Campus Connect Digital Notice Board system is proposed. Campus Connect is a centralized platform that allows administrators to upload notices and timetables online. Students from departments such as Computer, Mechanical, Electrical, Electronics, and Civil can easily access information in real time. The system improves transparency, communication speed, and accessibility.

2. Problem Statement

The traditional notice board system suffers from several drawbacks including manual updating, lack of centralized management across departments, the possibility of students missing important updates, and excessive paper usage.

3. Objectives of the System

- Create a centralized platform for all departments.
- Provide separate sections for Computer, Mechanical, Electrical, Electronics, and Civil departments.
- Enable quick uploading of notices and timetables.
- Reduce paper usage and manual work.
- Ensure real-time access to information for students and staff.

4. Literature Review

Various researchers have proposed digital notice board systems to improve communication in educational institutions. Systems based on Raspberry Pi, embedded systems, web technologies, and IoT have been developed to automate notice display and enable remote access. These studies show that digital notice boards significantly improve the efficiency and reliability of information dissemination compared to traditional methods.

5. Comparative Analysis

Author & Year	Technology	Key Features	Advantages	Limitations
Thakur et al. (2016)	Raspberry Pi	Real-time display	Low power	Limited scalability
Sinha & Singh (2015)	Embedded	Scheduled automation	Less manual work	No web control
Islam et al. (2018)	Web-based	Online upload	Remote access	No dept segregation
Sumon et al. (2017)	Web multi-user	Simultaneous access	Scalable	No SMS/Email
Prasad et al. (2018)	IoT system	Smart updates	Automation	High cost

6. Research Gap

Existing systems lack centralized multi-department management, role-based authentication, integrated notification systems, and cost-effective implementation. Some systems also lack mobile accessibility.

7. Proposed Concept: Campus Connect

Campus Connect is a web-based centralized digital notice board system designed for multiple departments. Key features include centralized notice management, department-wise access, real-time updates, secure admin authentication, and reduced paper usage.

8. Advantages

- Faster communication
- Centralized information management
- Reduced administrative workload
- Eco-friendly paperless system
- Improved transparency and accessibility

9. Applications

Colleges and Universities, Schools and Training Institutes, Corporate Offices, Libraries and Hostels, and Public Information Systems.

10. Future Scope

Future improvements include mobile application development, role-based access control, SMS/email notifications, IoT-based display boards, and cloud-based storage for better scalability.

11. Conclusion

Digital notice board systems provide a modern and efficient alternative to traditional communication methods. The proposed Campus Connect system offers a structured, scalable, and user-friendly solution for smart campus communication.

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