

COLLEGE EVENT MANAGEMENT SYSTEM

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Abstract

Event management within colleges involves multiple tasks such as registration, communication, logistics coordination, and feedback collection. Manual handling of these activities often leads to inefficiencies and miscommunication. This paper presents a digital **College Event Management System (CEMS)** that automates and streamlines event planning, registration, scheduling, and management. The proposed system is web-based, user-friendly, and supports both students and faculty in creating, organizing, and managing college-level events efficiently.

Keywords: Event Management, College ERP, Web Application, Event Registration, Digital Coordination, Campus Event Planning

1. Introduction

Colleges frequently organize events like technical fests, cultural programs, workshops, and seminars. However, organizing such events manually can lead to resource mismanagement, poor communication, and scheduling conflicts. To mitigate these issues, we propose a **College Event Management System (CEMS)** — a centralized digital platform that facilitates event creation, registration, coordination, and reporting.

2. Objectives of the System

- Automate event creation and participant registration
- Facilitate communication between organizers and participants
- Maintain event history and performance records
- Enable feedback collection for event improvement
- Allow role-based access (students, faculty, admin)

3. System Architecture

3.1 Architectural Overview

- **Frontend:** HTML5, CSS3, JavaScript (or React/Angular)
- **Backend:** PHP (Laravel), Node.js, or Python (Django)
- **Database:** MySQL or Firebase
- **Cloud Hosting:** AWS/GCP/Heroku

3.2 Core Modules

- **User Management:** Roles for student, faculty, and admin
- **Event Creation and Listing**
- **Event Registration & Confirmation**
- **Email/SMS Notifications**
- **Feedback & Analytics Dashboard**

4. Implementation Details

- **Frontend Tools:** Bootstrap, Vue.js for responsive UI
- **Backend Tools:** REST APIs with Node.js Express
- **Authentication:** JWT-based login system
- **Data Storage:** Relational DB (MySQL) with proper schema for users, events, and logs
- **Security:** Encrypted credentials, input validation, role-based access control

5. Features of the Event Management System

Feature	Description
Event Dashboard	Lists ongoing/upcoming events with filters
Online Registration	Attendees can register through a simple form
Admin Panel	Manage events, approve/reject requests, track analytics
Notifications	Email updates about events and schedule changes
Feedback Form	Collect feedback and ratings post-event
QR Code Check-in	Quick verification of attendees using QR code scanning

6. Benefits and Impact

- **Efficiency:** Reduces manual work and improves coordination
- **Transparency:** Real-time tracking and participant visibility
- **Scalability:** Can handle multiple events and large student volumes
- **Data Insights:** Event feedback and analytics help improve future planning
- **Accessibility:** 24/7 access via mobile or desktop browsers

7. Challenges and Limitations

- Internet dependency during event days
- Requires user training for non-tech-savvy staff
- Managing last-minute registrations or cancellations
- Integration with college ERP or attendance systems requires APIs

8. Future Scope

- Integration with college calendar and LMS (Learning Management System)
- AI-based event popularity prediction
- Gamification for increasing student participation
- Mobile app version with push notifications
- Voice assistant for real-time event info access

9. Conclusion

The College Event Management System is a practical solution to streamline the end-to-end process of campus event planning and execution. It empowers colleges to improve coordination, communication, and data tracking while offering a better user experience to students and faculty. With further enhancements, the system can evolve into a comprehensive event ecosystem for educational institutions.

References

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