Event Management for Campus

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Abstract: *The rapid growth of digital technologies in educational institutions has increased the need for efficient and organized event management systems. Traditional methods of managing campus events are manual, time-consuming, and often lead to miscommunication, data loss, and poor coordination among organizers and participants. This paper proposes a Campus Event Management System that streamlines the process of organizing, managing, and participating in campus events through a digital platform. The system enables administrators to create and manage events, while students can easily register, receive notifications, and provide feedback. A centralized database is used to securely store event details, user information, and participation records, ensuring data accuracy and accessibility. The system also incorporates features such as real-time updates, automated registration, and event tracking to enhance user experience. The proposed solution reduces manual effort, minimizes errors, and improves communication within the campus community. The implementation demonstrates efficient event handling, improved user engagement, and reliable data management. Overall, the system provides a scalable and user-friendly solution for modern educational institutions to manage their events effectively.*

Keywords: Campus Event Management, Event Registration, Android Application, Firebase/Supabase, Digital Event System, Student Engagement, QR entry, feedback, Event Scheduling, Notification System, Data Management, User Authentication.

I. INTRODUCTION

The management of campus events plays a vital role in enhancing student engagement, skill development, and overall academic experience in educational institutions. Traditional event management systems rely on manual processes, physical registrations, and informal communication methods. These approaches are time-consuming, inefficient, and often lead to issues such as miscommunication, data loss, and poor coordination between organizers and participants. With the advancement of digital technologies and mobile applications, automated and centralized event management systems have become increasingly important. These systems provide real-time access to event information, simplify registration processes, and ensure better communication through notifications and updates. By adopting a digital approach, institutions can improve efficiency, reduce manual workload, and enhance user experience. This paper presents a Campus Event Management System that enables efficient event creation, registration, entry management, and feedback collection through a mobile-based platform. The system utilizes a centralized database to securely store and manage event-related data, ensuring accuracy and accessibility. Features such as automated registration, event entry tracking, notifications, and feedback mechanisms are integrated to provide a seamless and organized event management experience.

II. LITERATURE SURVEY

Several researchers have developed digital event management systems to improve the efficiency of organizing events in educational institutions. Studies show that web and mobile-based platforms reduce manual work, improve communication, and provide centralized access to event information.

• Existing research highlights:
• Use of mobile and web applications for event management
• Online event registration and scheduling
• Real-time notifications and updates
• Database management for storing event details

However, many existing systems are complex, web-based, or lack features like event entry tracking and feedback systems.

Therefore, the proposed system focuses on a simple, user-friendly, and cost-effective Campus Event Management System with features such as event registration, entry management, and feedback collection.

III. EXISTING SYSTEM

The current event management process in most educational institutions includes:
• Manual event registration using forms
• Communication through notices or social media
• Maintaining records in spreadsheets or paper

Advantages of existing systems:
• Simple and easy to implement
• No requirement of advanced technology
• Low initial setup cost
• Suitable for small-scale events
• Easy to understand and operate

IV. PROPOSED SYSTEM

The proposed system introduces a mobile-based digital platform for efficient campus event management. Key Features:
• Event creation and management by admin
• Online event registration for students
• Event entry system for tracking participation
• Real-time notifications and updates
• Feedback collection after events
• Centralized database for storing event and user data
• User authentication for secure access

The system allows administrators to manage events easily, while students can register and participate through a simple interface. All event-related data is stored in a centralized database, ensuring accuracy and easy access. The integration of entry tracking and feedback mechanisms improves event organization and enhances overall user experience.

V. SYSTEM ARCHITECTURE

The system consists of three main modules:
1. Admin Module
2. Student Module
3. Event Management Module

Process Flow:
1. Admin creates and manages events
2. Event details are stored in the database
3. Students register/login into the system

4. Students view available events

5. Students register for selected events

6. System stores registration data

7. Event entry is managed during the event

8. Students submit feedback after participation

9. System displays event details, participation records, and feedback

This ensures efficient and organized event management within the campus. The overall working flow of the proposed system is illustrated in Fig. 1.
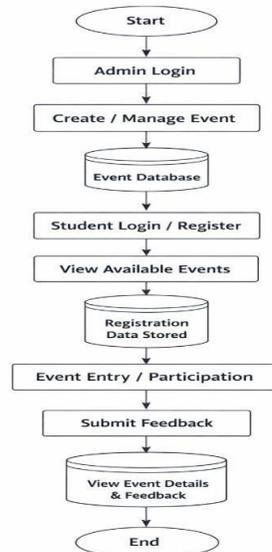

Fig. 1 Event Management System Flow

VI. METHODOLOGY

The system follows the below methodology:

1. Data Collection:

Student information is collected during registration, and event details are entered by the admin.

2. User Authentication:

Users (admin and students) log in securely using authentication mechanisms.

3. Event Creation:

Admin creates and manages events by adding details such as event name, date, time, and description.

4. Event Registration:

Students browse available events and register through the application. Registration data is stored in the database.

5. Event Entry Management:

During the event, student participation is tracked through the event entry system.

6. Feedback Collection:

After the event, students submit feedback which is stored and analysed for improvement.

7. Data Management:

All event, user, registration, and feedback data are stored in a centralized database for easy access and management.

VII. RESULTS

The implemented system successfully:

• Enabled easy event creation and management by admin
• Provided smooth and quick event registration for students
• Managed event entry and participation effectively
• Delivered real-time notifications and updates
• Collected and stored user feedback efficiently
• Reduced manual effort and improved coordination

Testing showed that the system worked efficiently in handling multiple events, registrations, and user interactions. The event entry and feedback feature improved tracking and overall event management within the campus.

VIII. CONCLUSION

The Campus Event Management System provides an efficient and user-friendly solution for managing events within educational institutions. By using a digital platform, the system simplifies event creation, registration, entry management, and feedback collection. It ensures better organization, improved communication, and accurate data handling. The proposed system reduces manual effort, minimizes errors, and enhances overall user experience. Features such as real-time notifications, centralized data storage, and event tracking significantly improve the coordination between organizers and participants. The system offers a scalable and cost-effective solution suitable for modern campuses. Future improvements may include integration of advanced features such as QR-based event entry, online payment systems, and AI-based event recommendations to further enhance functionality.

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