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Pree Portal for Student Commity Network

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ABSTRACT

Student activities and events play an important role in college life. However, managing these activities manually is time-consuming and creates problems such as data loss, confusion, and poor communication. This paper presents the design and development of Pree Portal for Student Community Network, a web-based system developed to manage student events and participation in a simple and organized way.
The system allows students to register, log in securely, view upcoming events, and register for events online. The admin can manage events, update details, and view participant information. The portal is developed using Flask for backend processing, MySQL for database storage, and HTML, CSS, and Bootstrap for the user interface. The system reduces paperwork and improves communication between students and the institution. Testing results show that the system works smoothly and provides correct data handling. The proposed system offers a simple digital solution for student community and event management.
Keywords:- Student Portal, Event Management, Flask, MySQL, Web Application, Community Network

1. INTRODUCTION

Student communities in colleges organize many academic and non-academic events. Traditionally, event information is shared using notice boards or messages, and registration is done manually. This approach often leads to confusion, missed updates, and difficulty in managing participant data.
Web-based systems provide an effective solution to these problems. Pree Portal for Student Community Network is developed to help students and admin manage events digitally. The system focuses on simplicity and ease of use so that students can easily access event information and register online.

1.1 Background of Pree Portal

With increasing use of digital platforms in education, there is a need for a common system where students can get all event-related information at one place. Existing systems are either manual or use multiple platforms, which is inefficient.
Pree Portal is designed as a centralized student community platform that handles event updates, registrations, and participant management in a structured manner.

1.2 Problem Statement

Students and colleges face the following problems in event management:

- Manual registration process
- Lack of proper participant records
- Time-consuming data handling
- Difficulty in managing event fees
- Poor communication between students and admin

These problems create a need for a simple web-based student community portal.

1.3 Scope of the Study

This study focuses on the development of a web-based student community and event management system. The system includes user registration, event display, online registration, fee calculation, and admin management. Advanced features such as mobile app development and external payment gateway integration are not included.

2. LITERATURE REVIEW

Earlier, student event management was done using paper forms and notice boards. These methods were simple but caused issues like data loss and poor tracking.
Many modern systems provide event management features, but they are often complex and difficult for basic users. After studying existing systems, it was found that a simple and focused web portal is more suitable for student communities.
Therefore, Pree Portal is developed with essential features only, making it easy to understand and use.

2.1 Existing Methods

Traditional methods include:

- Paper-based registration forms

- Manual record keeping
- Notice board announcements
- Spreadsheet-based data storage

These methods lack automation, security, and proper reporting.

2.2 Limitations of Existing Systems

- Manual errors
- No centralized system
- Difficult data access
- No secure login
- Poor data organization

2.3 Need for Proposed System

The proposed system overcomes these limitations by:

- Providing online registration
- Storing data digitally
- Offering secure login
- Simplifying admin tasks
- Improving student communication

3. METHODOLOGY

The system was developed using a structured approach. First, the requirements were identified based on problems faced in manual event management. Then, system architecture was planned and implemented using web technologies.

Flask was used to handle backend logic, MySQL for database storage, and HTML, CSS, and Bootstrap for frontend design. Each module was developed separately and tested for proper functionality.

3.1 Development Approach

The system follows a modular development approach with the following stages:

- Requirement analysis
- System design
- Database creation
- Frontend development
- Backend integration
- System testing

3.2 System Architecture

The system uses a three-layer architecture:

- **Frontend Layer:** User interface for students and admin
- **Backend Layer:** Flask application logic
- **Database Layer:** MySQL database for storing records

3.3 Implementation Modules

- **Student Module:** Registration, login, event view, event registration
- **Admin Module:** Event management, participant view
- **Database Module:** Stores users, events, and participant data

3.4 System Testing

The system was tested for:

- User login validation
- Event registration accuracy
- Data storage correctness
- Admin event management

Testing results showed that the system works correctly and efficiently.

4. SYSTEM IMPLEMENTATION AND RESULTS

In this section, screenshots of the developed **Pree Portal for Student Community Network** are shown. These images explain the actual working of the system.

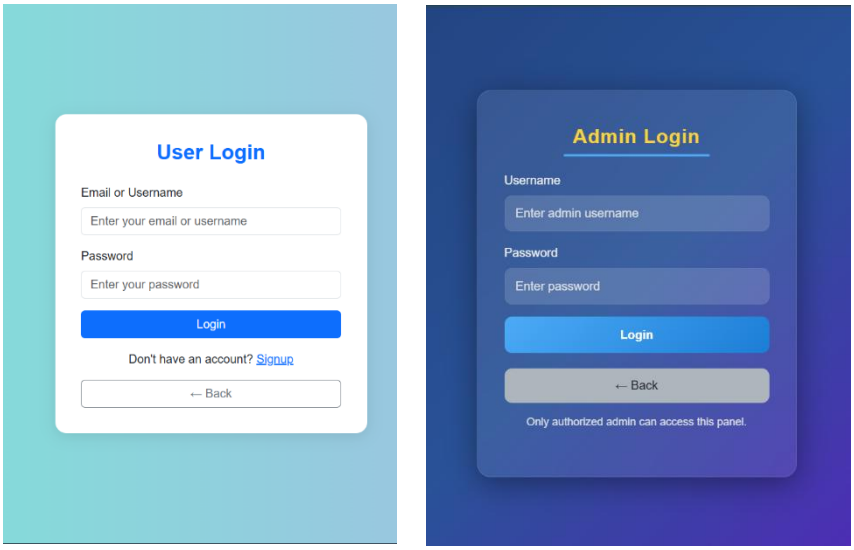


Fig. 1 Login Page of Pree Portal

This page allows students and admin to log in securely using username and password.

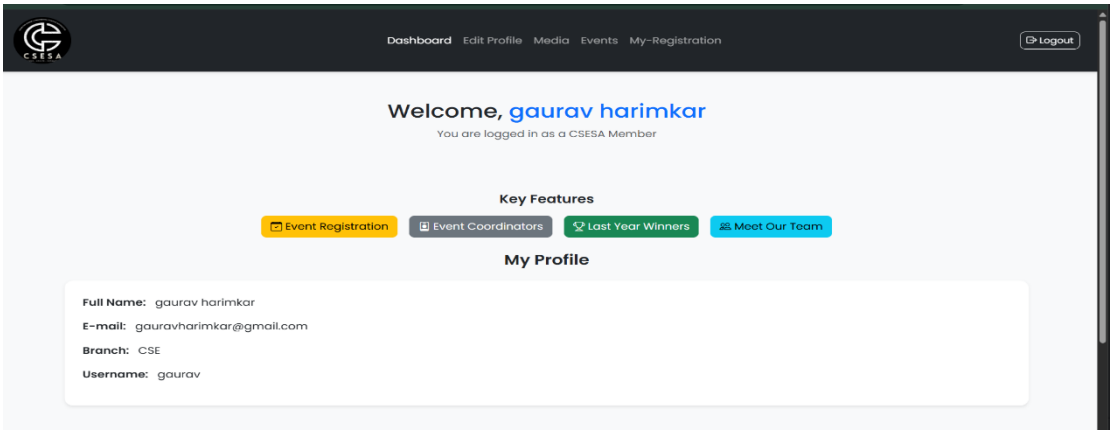


Fig. 2 Student Dashboard Page

This page shows student log in information and upcoming events and allows students to select and register for events.

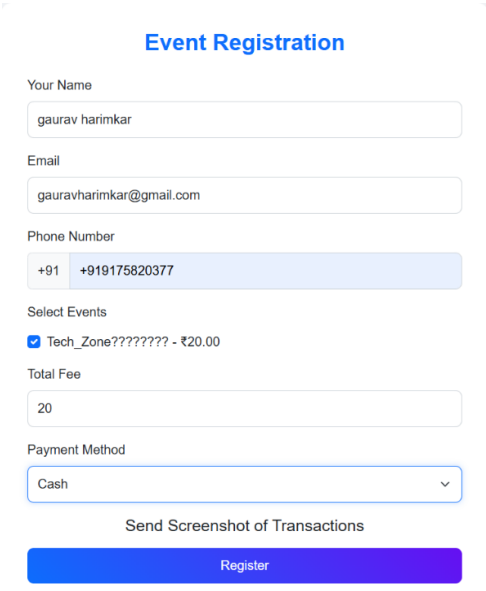


Fig. 3 Event Registration Page

Students can fill their details and register for selected events using this page.

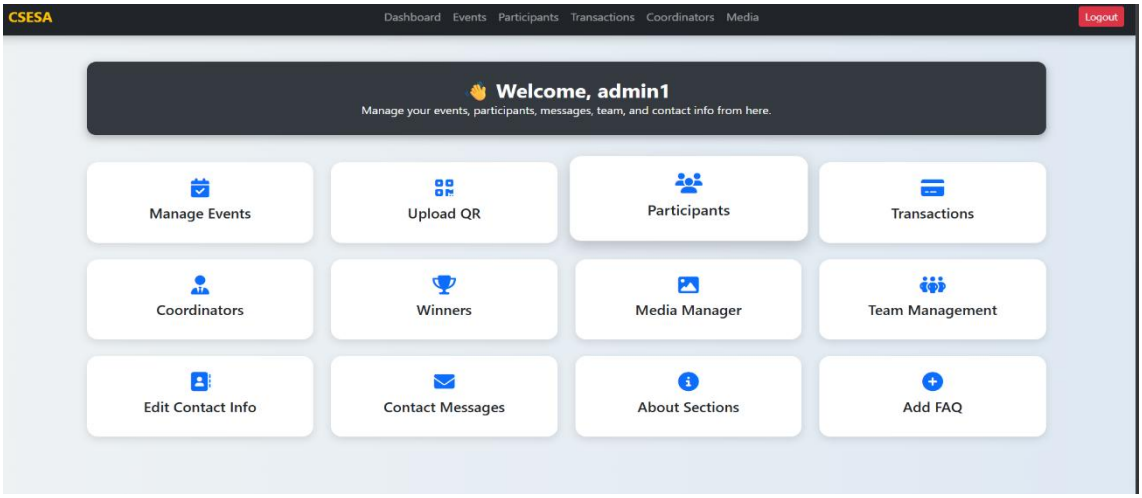


Fig. 4 Admin Dashboard Page
Admin can manage events and view participant details from this dashboard.

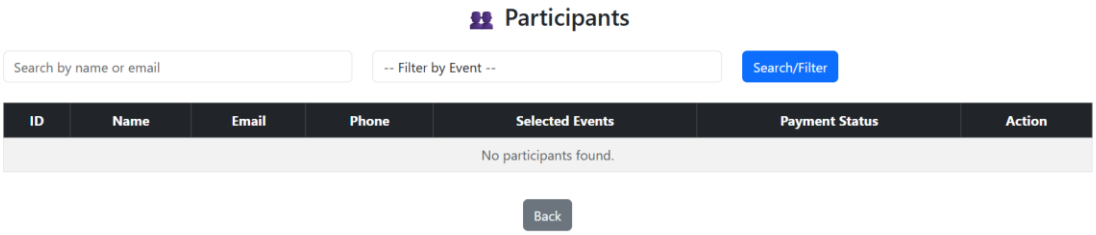


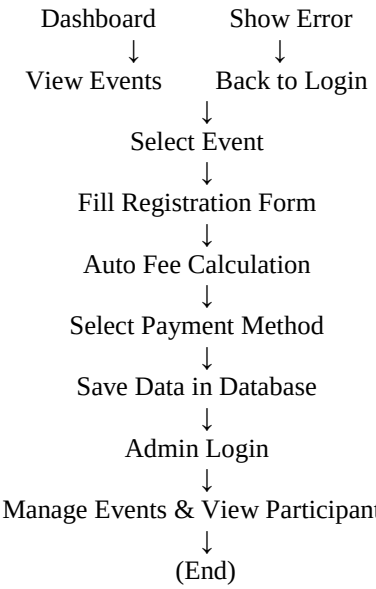
Fig. 5 Participants List Page
This page displays registered students and their event details.

Table: Screenshots Description of Pree Portal for Student Community Network

Sr. No.	**Page Name**	**Description**
1	Login Page	This page allows students and admin to log in securely using their credentials.
2	Student Dashboard	Displays upcoming events and options for students to register for events.
3	Event Registration Page	Used by students to enter details and register for selected events.
4	Admin Dashboard	Allows admin to manage events and view system activities.
5	Event Management Page	Admin can add, edit, or delete event details from this page.
6	Participants List Page	Shows registered students along with selected events and payment details.

Table 1: Description of System Screenshots

Flowchart Steps (Diagram Order)
(Start)
↓
Open Pree Portal Website
↓
Login / Register
↓
Enter Username & Password
↓
[Are details valid?]
↓ Yes ↓ No



5. CONCLUSION

Pree Portal for Student Community Network is a simple and effective web-based system for managing student events. It helps students access event information easily and allows admin to manage events in an organized way.

The system reduces manual work, improves data accuracy, and enhances communication within the student community.

6. FUTURE SCOPE

In future, the system can be improved by:

- Adding email and notification alerts
- Integrating online payment gateway
- Developing a mobile application
- Adding chat feature for students
- Generating participation certificates

7. ACKNOWLEDGEMENT

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8. REFERENCES

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