COLLEGE EVENT MANAGEMENT SYSTEM

A CIS Project Report

Submitted to:

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In the partial fulfilment of the degree of

Bachelor of Business Information Systems (BBIS)

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Sincerely,

Arnav Rajbhandari

Shleshma Shrestha

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DECLARATION

We, Arnav Rajbhandari, Shleshma Shrestha and Simran Shrestha, hereby declare that the work reported on this project report entitled "College Event Management System" submitted to Kathmandu University is our original work done in the form of partial fulfillment of the requirements for the Bachelor of Business Information Systems under the guidance and supervision of Mr. Kumar Lohala This is not presented in any other institution for grading. It will only be used for academic purposes.

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EXECUTIVE SUMMARY

The College Event Management System (CEMS) offers a user-friendly interface designed to enhance user experience. The purpose of this report is to highlight the significance of implementing an efficient event management system in the college.

The primary objective of this project is to streamline event planning and execution within the college. To accomplish this, we employed a combination of research methodologies, technological tools, and design principles. It began with a literature review to gain knowledge about Event Management Systems and identify best practices. The system was then developed using Java, MySQL and Swing ensuring a strong and efficient foundation. CEMS offers a user interface that balances simplicity and functionality. Administrators can seamlessly manage events and users, facilitating event planning and coordination. Users, on the other hand, can explore events that align with their interests and preferences. User registration is smooth, while security measures like data backup maintain performance and prevent breaches.

CEMS achieves its objectives by delivering a user-friendly interface for event discovery, efficient event and user management, and seamless user registration. As a result of the project's success, CEMS is recommended for adoption in educational institutions. The system's user-centric design and comprehensive features provide tangible benefits to colleges and event organizers. To further enhance CEMS, future developments could encompass real-time feedback mechanisms. Also, enhancing ticketing features might boost user engagement.

In conclusion, the College Event Management System has the potential to transform event planning and participation, addressing current challenges, boosting engagement, attendance, and cultivating a lively event culture. The report emphasizes the transformative potential of CEMS and encourages its adoption as a strategic step toward modernizing event management practices in educational settings. Hence, the college is encouraged to adopt this system to receive its benefits.

CHAPTER I

INTRODUCTION

1.1 Background of Study

The world has grown digitized due to the development of information technology, encouraging people to work smartly, and enhancing the effectiveness and efficiency of their work. Everything used to be done on paper traditionally, which was laborious and time-consuming. However, with the advancement of information technology, paper-based processes are now obsolete. (McGregor, 2022)

The College Event Management System (CEMS) has emerged as a crucial tool for educational institutions to optimize event planning. The transition from paper-based processes to a digitized system allowed for the creation of personalized event pages and improved decision-making. The colleges can create event schedules as per their preference. CEMS allows for the creation of customized event pages with details such as date, location, and additional information about the event. (Chandrasekharan & Venkat, 2012). This streamlines the planning process and ensures that everyone involved is on the same page.

With the College Event Management System, colleges can create events such as Sports Events, Social Events, Cultural presentation, Farewell Programs, Freshers, etc. Overall, investing in college event management system can be a wise decision for educational institutions seeking to enhance their event planning capabilities.

1.2 Statement of Problem

Traditional documentation could be time-consuming (Breitmeyer, 2015). The College Event Management System addressed this issue by effectively and efficiently tracking participants and activities. Moreover, it employed a secure database system with access control features, ensuring data accuracy, consistency, and protection against unauthorized access or manipulation of data and helps protect against data breaches.

1.3 Objectives of study

The main objective of this project is to manage the details of college events and the system's users. The specific objectives of the project are:

a) To develop a user-friendly interface that allows users to easily view and search for upcoming events, enhancing user experience and engagement.
b) To implement an event creation module for admins, enabling them to efficiently create, modify, and manage event details with relevant information such as date, location, and event description.
c) To incorporate a comprehensive search functionality that enables users to filter events based on specific criteria, such as event genre and event name.
d) To comply with data security standards and implement data backup mechanisms, ensuring data integrity and minimizing the risk of data loss.

By achieving these objectives, institutions implementing CEMS will allow its users to view and search events, filter them. Also, the admin can create and manage event details. The data are backed up thus minimizing risk of data loss.

1.4 Scope of Study

The College Event Management System may help collect perfect management in detail. In a very short period, the collection will be simple and sensible. It helps a person to know the management of the past year perfectly and vividly, along with current work relative to the College Event Management System. It also reduces the cost of collecting the management & collection procedure will go on smoothly. Due to the features of the system, it can be adapted into any institution.

1.5 Delimitations

The College Event Management System is only accessible through a laptop, PC, or a mobile device that supports Java. It is important to note that this system is restricted to registered users only and does not offer guest mode access. This feature ensures that all interactions within the system are secure and confidential, with access limited to authorized personnel only. Since only Java-compatible devices may presently access the system, some prospective users may be limited. Future system reach might be increased by extending compatibility to more platforms and gadgets. Future upgrades and improvements may be guided by ongoing user input and monitoring to make sure the system stays effective and relevant.

CHAPTER II

REVIEW OF LITERATURES

2.1 Empirical Review

According to Verma and Srivastava's (2017) research 'Study on Event Management Applications,' mobile applications are essential when companies market their products or services. The proposed system helps to bridge the gap between vendors and users by providing a platform for interaction and event management. The proposed system is considered successful when it provides a proper channel for event organisers to effectively manage their event and provide high-quality service to customers in real time. (Verma & Srivastava, 2017)

According to Ranjani and Kumari, the College Event Management System lessens the burden, effortlessly retrieves the data, keeps all records easily and gives fast access to any information in their research “College Event Management System”. (T., Ranjani, & Kumari, 2020)

We studied " University Event Management System" by Balu and Krishnan. The project will help in managing event data and automate report generation. It will definitely reduce human effort and will make it easier for universities to shift from traditional databases. (Balu & Krishnan, 2019)

2.2 Use Case Diagram

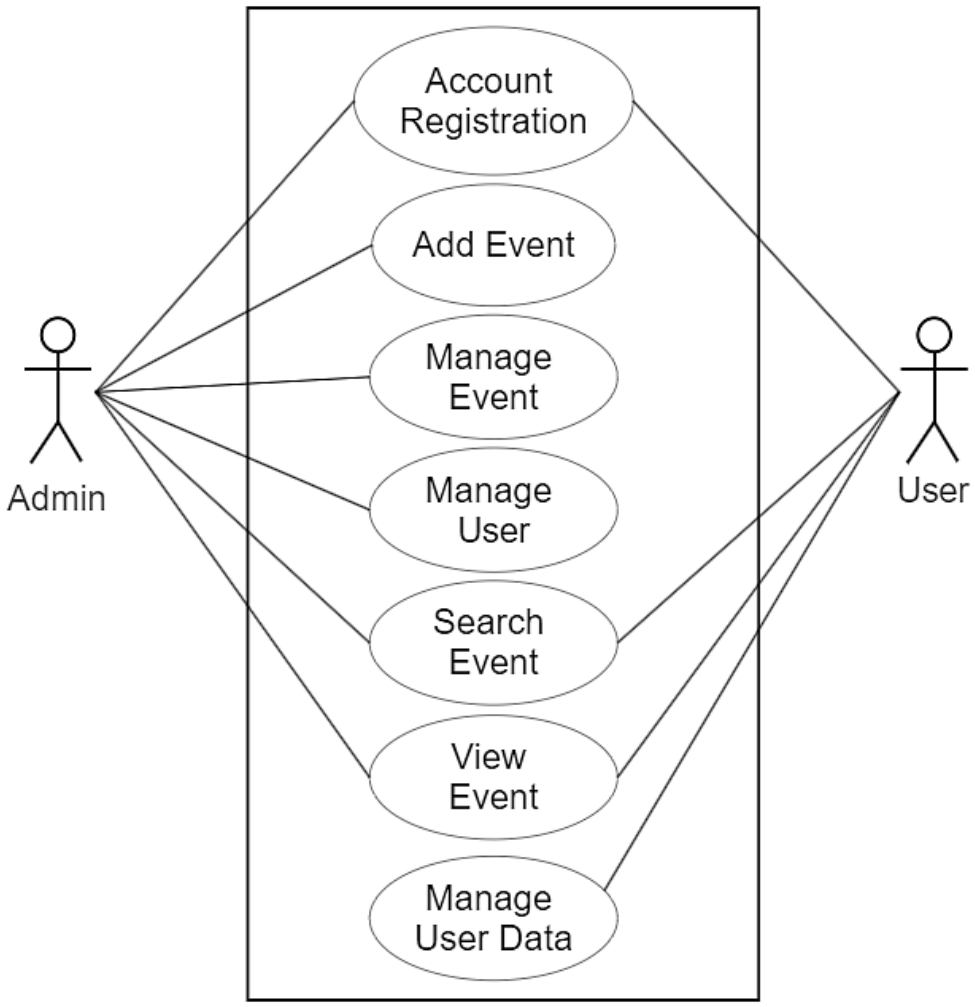

Figure 1: Use Case Diagram

Here in figure 1, the use case diagram of CEMS illustrates the various functions accessible to both our valued admin and esteemed users. The primary functionality is account registration, which includes signing in, logging in, and logging out. Our users have the privilege to perform all these account registration functions, ensuring a personalized experience within the system.

In contrast, the admin is granted exclusive access to log in to the system. Through the admin account, they can execute essential functions like adding events, viewing and managing them, and effectively managing the users. This delineation of roles ensures that event management remains under their supervision.

Furthermore, users have the privilege to view and search for events, which are added by the admin. This feature allows attendees to easily discover upcoming events of their interest.

In conclusion, the use case diagram of the College Event Management System illustrates a well-structured framework where administrators and users collaboratively interact with the system to ensure the smooth execution of our college events.

2.3 ER Diagram

The figure has been placed in appendix (Pg. 25).

Here in figure 11, the ER diagram features three entities: Admin, Event, and User. The admin entity has the capability to manage events and users, while the users are granted access to view events. Each of these entities possesses distinct attributes that underscore their significance within the system architecture.

In specific, the admin entity is characterized by attributes including admin_id, admin_name, and admin_password, where admin_id is designated as the primary key. The event entity is distinguished by attributes such as event_id, event_date, event_address, event_name, college_name, and event_genre, with event_id serving as the primary key. Similarly, the User entity has attributes encompassing user_id, user_name, user_password, user_email, user_address, and user_phone, with user_id designated as the primary key.

One-to-many relationship exists between the admin entity and the user entity, indicating the dynamic interaction between admin and users within the system. Furthermore, the admin entity shares a similar one-to-many relationship with the event entity, signifying the administrative control over event management. Simultaneously, a many-to-many relationship is established between the user entity and the event entity, highlighting the versatile engagement of users with multiple events.

The ER Diagram of CEMS helps us see how all the different parts are connected and work together to make our system run smoothly.

CHAPTER III

SYSTEM SPECIFICATIONS

3.1 Introduction of System

The College Event Management System is developed to override the problems prevailing in the practice manual system. This system reduces the hardships faced by the existing system. It provides real-time data to application admin, which helps them to make informed decisions about their events.

The application is made so that anyone using a computer to perform routine tasks can quickly comprehend how it works. To use this system, the user does not need any professional experience. The system delivers a reliable and user-friendly platform for all users. Thus, it will help the organization in better utilization of resources.

The College Event Management System saves time and eliminates manual paperwork and reduces frustration, leading to a more enjoyable event experience overall.

3.2 System Requirements

The minimum system requirements necessary for the functionality of the CEMS application are mentioned below:

a. Processor: 2 core CPU
b. Hard disk: At least 800MB
c. RAM: 2GB
d. Java JDK: Version 8

3.3 System Description

The College Event Management System provides most of the basic functionality required for an event. This software's functionality is divided into two parts: the admin part and the user part. Only admins can access the admin features, allowing them to add, update, and remove the required details from the software. The system allows only registered users to login, and new users may sign up on the application to view the events.

CHAPTER IV

FINAL PRODUCT

4.1 Home Page

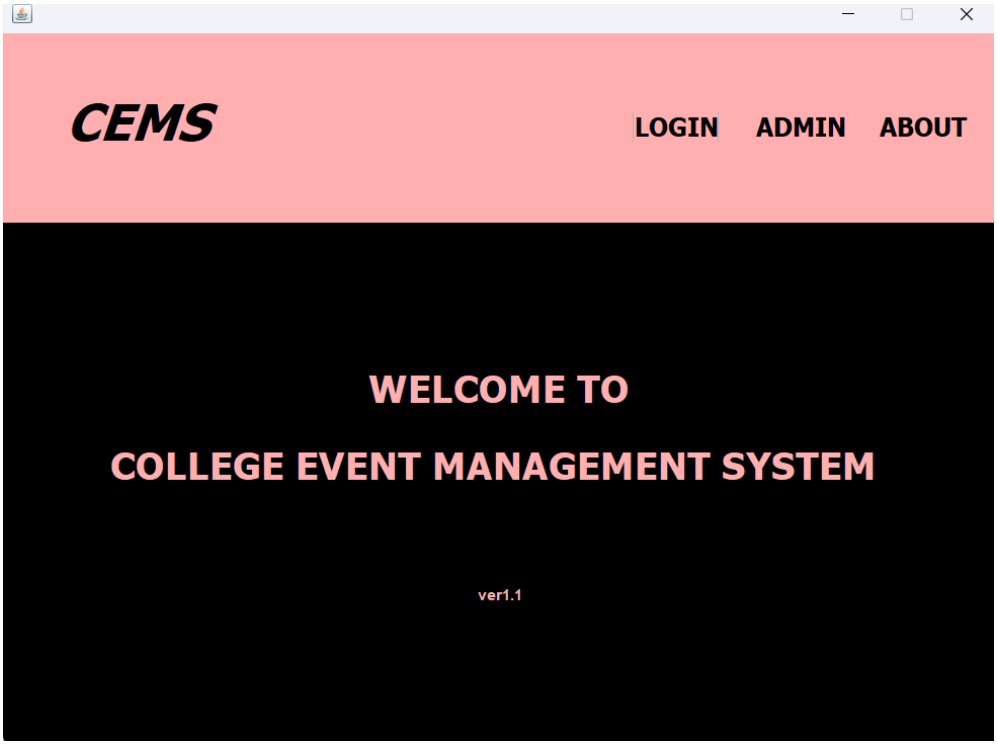

Figure 2: Home Page Interface

The home page of the College Event Management System (CEMS) serves as the initial point of entry upon accessing the system, providing users with a warm and cordial welcome message.

The home page serves as the gateway to access key functionalities of the system. It offers three essential options i.e., Login, Admin and About. These distinct options on the home page cater to the unique roles and functionalities of users and the administrator, ensuring a user-friendly and efficient experience within the College Event Management System.

4.2 About Page

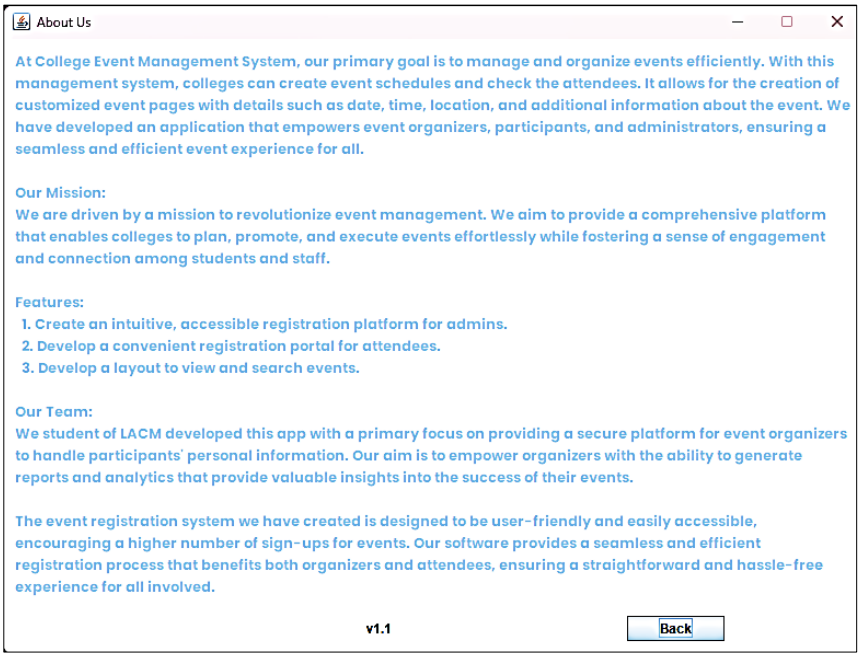

Figure 3: About Page Interface

This is an “About Us” section which provides comprehensive information about our team, the CEMS project, including its purpose, objectives, and key features, fostering a deeper understanding of the system's capabilities.

4.3 Admin Login

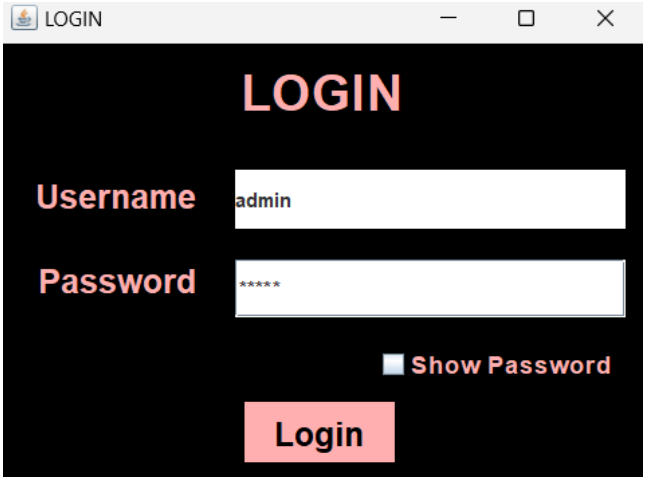

Figure 4: Admin Log in Interface

The administrator can utilize this feature to log in to the system, gaining exclusive access to manage event-related tasks, such as event creation, management, and user supervision.

4.4 Admin Panel: Manage Events

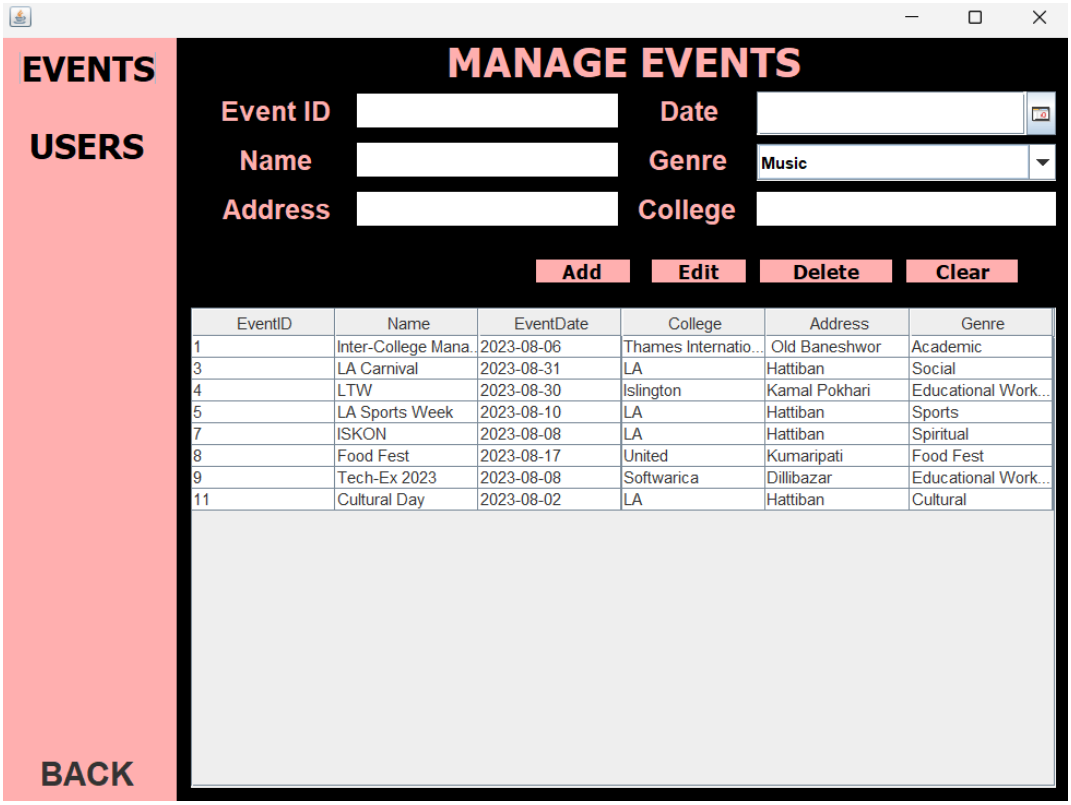

Figure 5: Admin Panel: Manage Events Interface

Within the admin panel, three options are available: "Manage Events", "Manage Users", and "Back". Under "Manage Events," the admin holds the authority to add new events by providing comprehensive details, including event ID, event name, address, college name, date, and event genre. Along with it, the admin can delete and edit the event details as per necessity.

4.5 Admin Panel: Manage Users

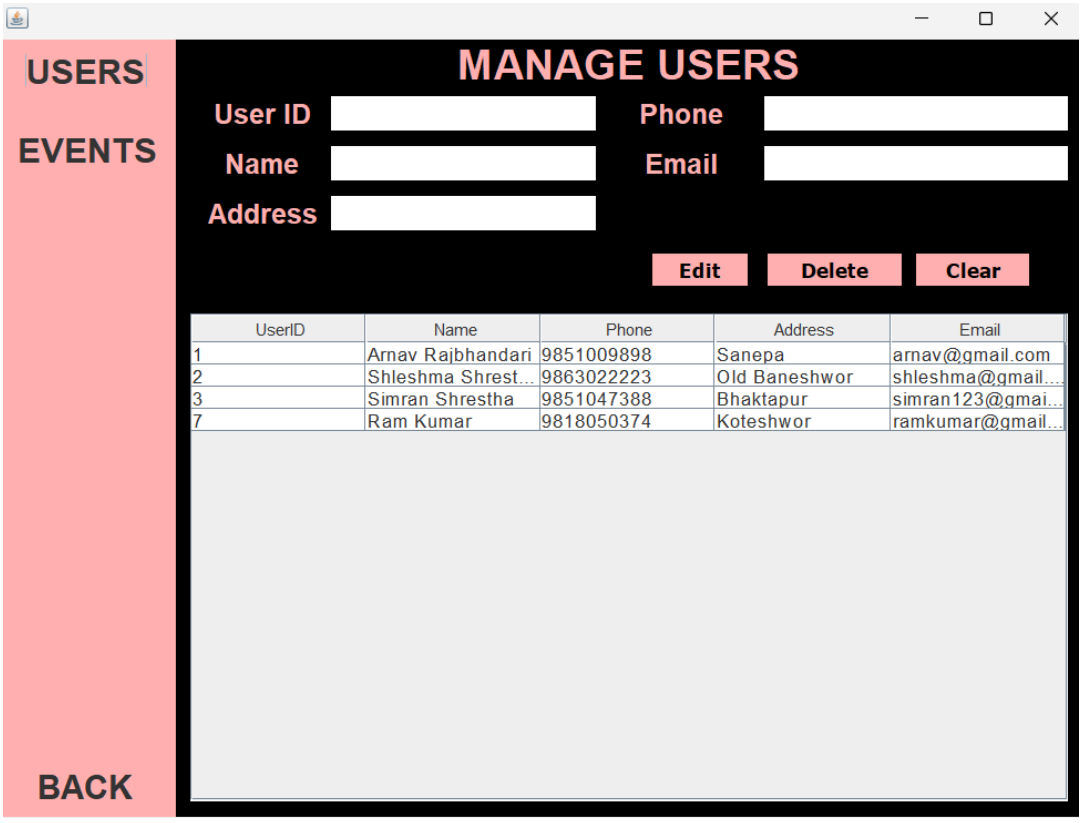

Figure 6: Admin Panel: Manage Users Interface

The "Manage Users" option empowers the admin to oversee user details, enabling modifications and deletion as necessary to ensure data accuracy and relevance. However, for enhanced security, the admin does not have access to view or change the password of users.

4.6 User Log in/ Sign Up

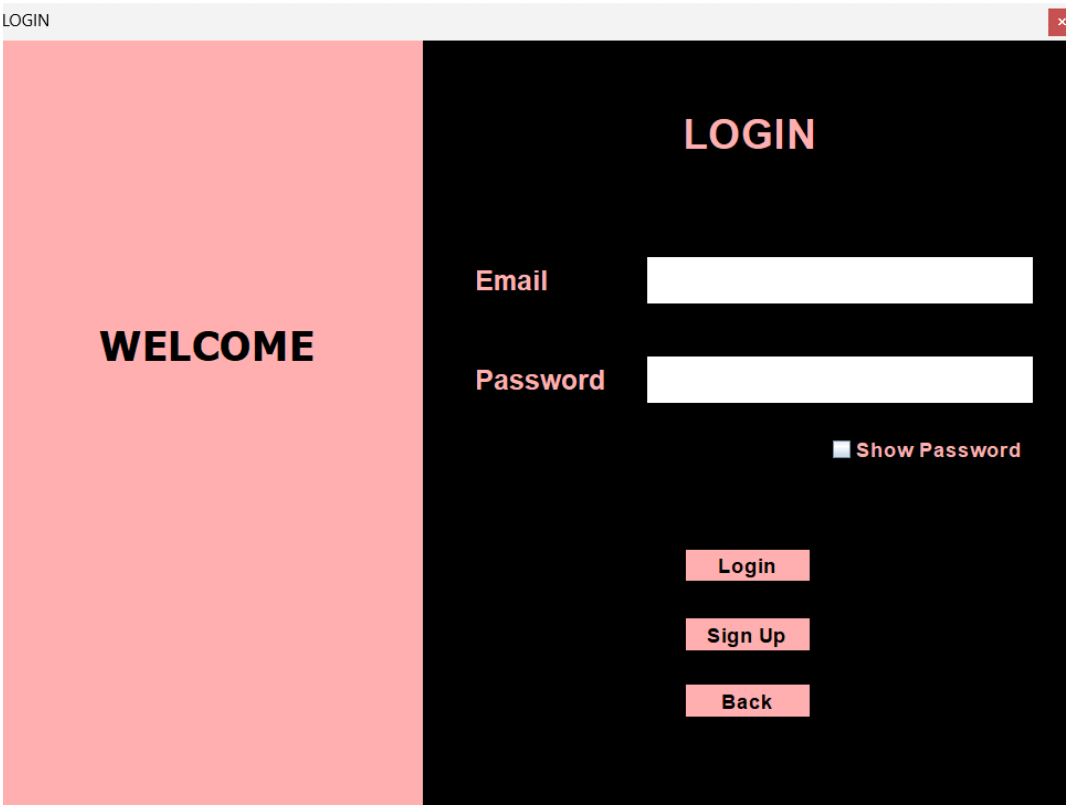

Figure 7: User Login Interface

For those who already possess an account, effortless access to their personalized profiles is facilitated through the "Login" option. On the other hand, for new users who have not yet registered, the "Sign Up" option warmly welcomes them to create an account.

This thoughtful design of the User Log in/ Sign Up page ensures that both existing and new users can effortlessly navigate and engage with our system.

4.7 User Sign Up

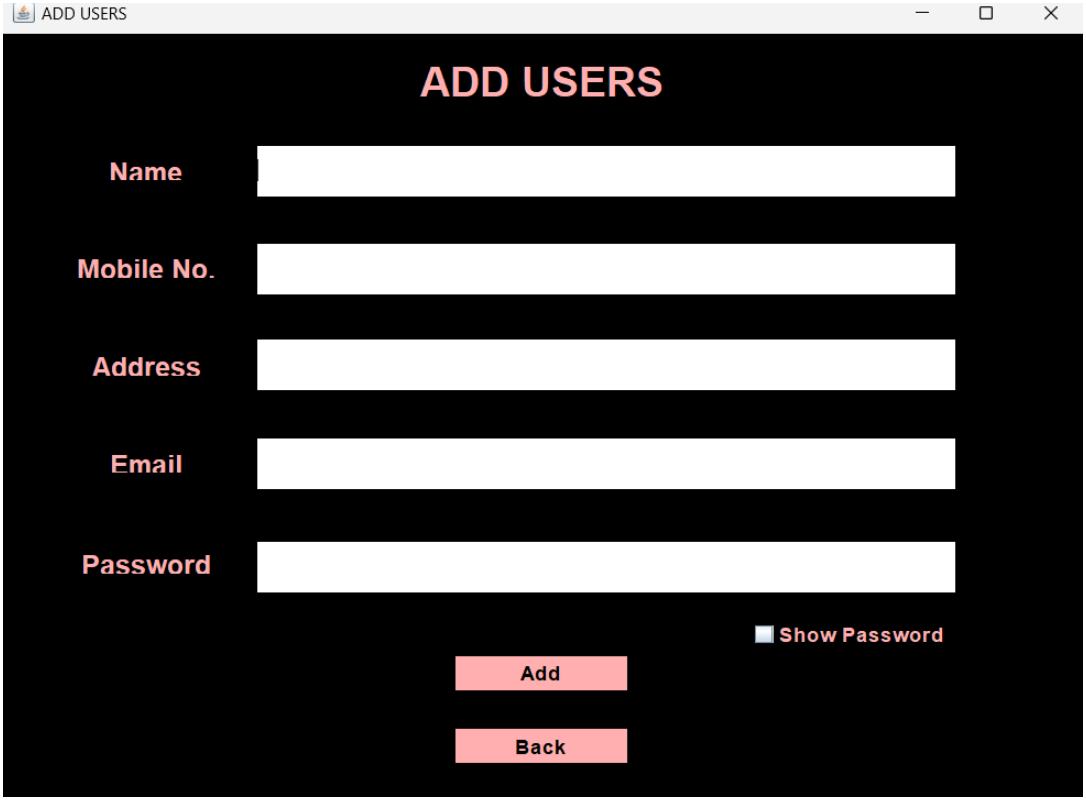

Figure 8: User Signup Interface

To sign up, users are required to provide their name, phone number, address, email, and a secure password. These details create their personalized account, granting access to engaging event opportunities and features while ensuring data security and confidentiality.

4.8 User Panel

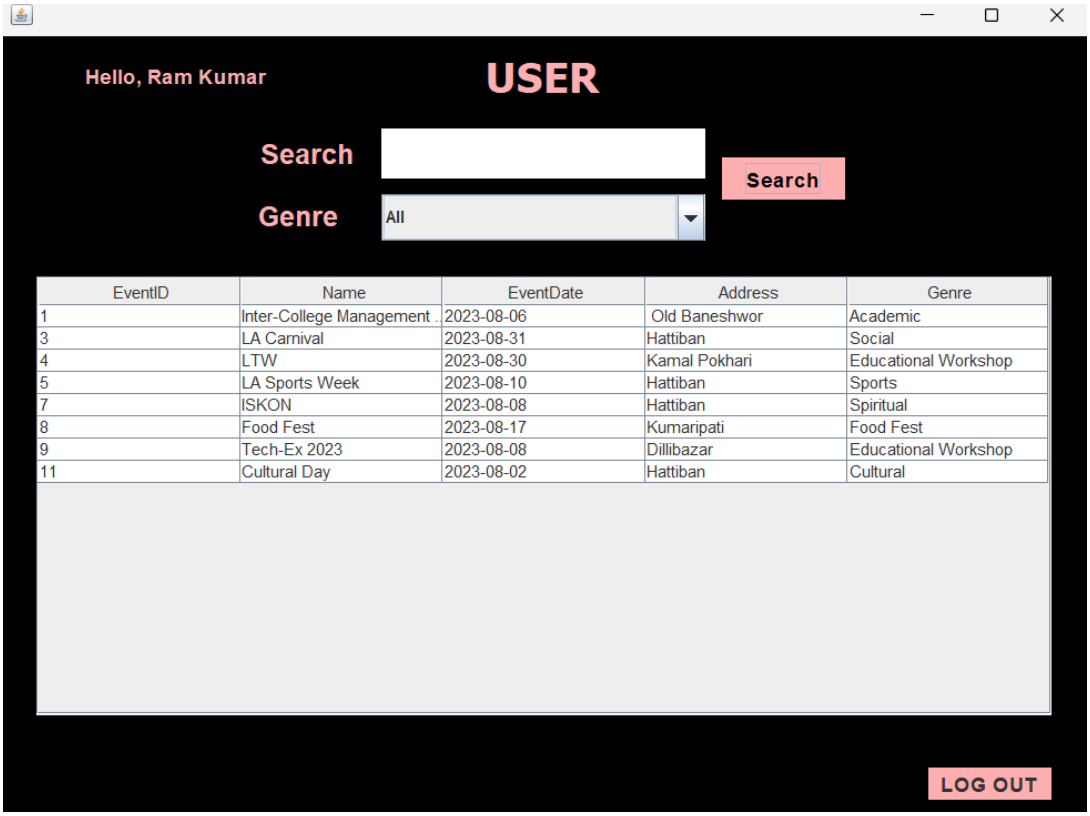

Figure 9: User Panel: Dashboard Interface

Within the user panel, a warm greeting awaits users on the top left, displaying "Hello, __ (user's name)." This personalized touch enhances the user experience and fosters a sense of belonging.

In this panel, users are empowered to explore and discover events that align with their preferences. With the option to search events and view them, users can easily identify events that captivate their interest. Moreover, the user panel streamlines the process by allowing users to search for events of a specific genre. Finally, the user can log out of their profile after completing their tasks.

4.9 User Panel: Update Profile

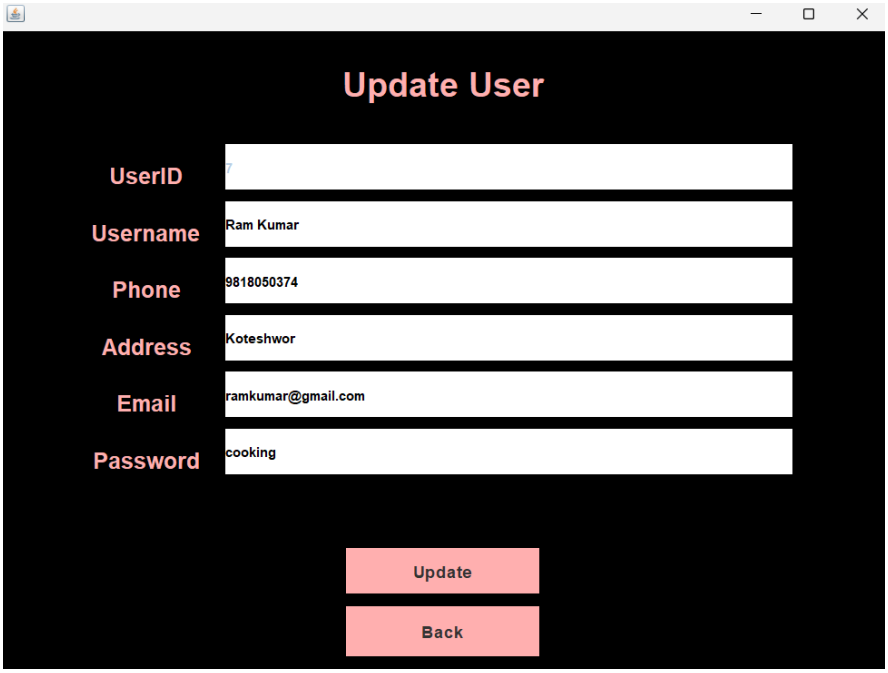

Figure 10: User Panel: Update User Interface

By clicking on the "Hello, __ (user's name)" greeting at the top left, users gain access to update their profile details. This convenient feature allows users to effortlessly manage and modify their personal information, ensuring that their account remains accurate and up to date.

By providing users with the autonomy to update their profile details at their convenience, we prioritize a user-centric approach, fostering a sense of ownership and customization within our College Event Management System.

CHAPTER V

COMPARISON AND ANALYSIS

5.1 Comparison with Similar Products

5.1.1 Comparison of CEMS with Event Management System (Ahmmed, 2016)

	College Event Management System	Event Management System
User Audience	Students and faculty members of colleges.	General event organizers and attendees.
Purpose	Optimize event planning in colleges.	Manage events and notification system.
User Registration	Requires user registration for personalized access.	May or may not require user registration.
Internet Access Requirement	Does not require internet access.	Requires internet access.

Table 1: Comparison of CEMS with Event Management System

5.1.2 Comparison of CEMS with College Event Management System (freeproject, 2018)

	CEMS	College Event Management System
Technology used	Developed using Java and MySQL.	Developed using HTML, CSS, JavaScript, Java, JSP, Tomcat and MySQL.
User Typ	Admin and users.	Admin and students.
Registration for Event	Users cannot register for the event; they can only view and search events.	Users can register for events and cancel the registration in case they change their mind.
Access Method	It is not a web-based application.	It is a web-based application.

Table 2: Comparison of CEMS with College Event Management System

5.2 SWOT Analysis

SWOT Analysis of College Event Management System (CEMS):

5.2.1 Strengths

a) User-friendly Interface: CEMS features an intuitive and user-friendly interface, facilitating easy navigation for users.
b) Comprehensive Event Management: The system allows administrators to efficiently manage event and user details.
c) Personalized User Profiles: Users can create personalized profiles, enhancing their event experience and engagement within the platform.
d) Diverse Event Genres: The system offers a wide array of event genres, catering to diverse interests and preferences of users.

5.2.2 Weaknesses

a) Lack of Real-Time Feedback: CEMS lacks a real-time feedback mechanism, hindering immediate responses to user queries or issues during events.
b) Inconsistent Event Updates: If event information is not updated promptly, users may face confusion or attend outdated events. Ensuring event organizers regularly update event details can enhance user trust and experience.
c) Language Support: CEMS lacks support for multiple languages, limiting its accessibility to a diverse user base. Incorporating language options can cater to non-English speaking users, promoting inclusivity.

5.2.3 Opportunities

a) Collaborative Partnerships: Forming partnerships with colleges and event organizers can broaden the range of events and attract a larger user base.
b) Mobile Application Development: Developing a mobile app for CEMS can extend accessibility to users and enhance their engagement on-the-go.

5.2.4 Threats

a) Market Competition: The event management industry is highly competitive, with the presence of established platforms that may pose challenges for user acquisition.
b) Data Security Risks: The increasing prevalence of cybersecurity threats may expose CEMS to potential data breaches and unauthorized access.

By conducting this SWOT analysis, we can gain knowledge about CEMS's strengths, weaknesses, opportunities, and threats, which will inform our strategies for future improvements and growth.

CHAPTER VI

DISCUSSION AND CONCLUSION

In this section, we delve into the key findings and outcomes of the College Event Management System (CEMS) project. The discussion focuses on the evaluation of the system's design, usability, and effectiveness in meeting its objectives.

6.1 User Interface and Experience

The user interface plays a critical role in the success of any software system. The interfaces for CEMS were created with an emphasis on simplicity, usability, and intuitiveness. Users are greeted warmly on the home page, which sets the stage for strong user involvement. The use of clear and distinct options for "Login," "Admin," and "About" ensures users can easily navigate and access the functionalities they require.

The panels for both administrators and users provide comprehensive dashboards that facilitate effortless event discovery and management Users can streamline their search for events by genre, shortening the process and ensuring that they only see activities that appeal to them. The "Update User" option empowers users to maintain accurate and up-to-date profile details, contributing to a personalized and tailored user experience.

6.2 Administrator Functionality

The CEMS admin panel offers administrators the necessary tools to effectively manage events and users. Admins can add, edit, and delete events, providing comprehensive event details to enhance event planning and coordination through the “Manage Events” section. Additionally, the “Manage Users” section allows administrators to oversee user details, ensuring data accuracy and security.

The admin login interface and security measures employed in the system contribute to a safe and confidential environment for authorized administrators. The separation of admin and user roles ensures that only designated personnel have access to critical administrative functions, promoting data integrity and privacy.

6.3 User Registration and Engagement

The user registration process is straightforward and user-friendly, enabling new users to create accounts effortlessly. By providing essential details for account creation, users can instantly access events and services within the system. The "Logout" option adds an extra layer of security, ensuring that users can log out securely after completing their tasks.

6.4 System Performance and Efficiency

Throughout the development process, special attention was given to the system's performance and efficiency. The implementation of secure database systems with encryption and access control features ensures data accuracy and consistency. Additionally, data backup mechanisms safeguard against data loss and protect the system from potential breaches.

6.5 Achievement of Objectives

The College Event Management System has successfully met its primary objectives. It provides a user-friendly interface for easy navigation and event discovery. Administrators can efficiently manage events and users, enhancing event planning and coordination. Users can create accounts, explore events, and update their profiles with ease, contributing to a personalized and engaging user experience.

6.6 Limitations and Future Improvements

While the CEMS project has achieved its primary goals, certain limitations were encountered during the development process. The system's accessibility is currently limited to devices supporting Java, which may restrict some potential users. In the future, expanding compatibility to various platforms and devices could enhance the system's reach.

Additionally, further improvements to the user interface, such as incorporating more intuitive features for event search and filtering and as well as event selection or ticketing, could enhance user engagement and satisfaction. Continuous monitoring and feedback from users can guide future updates and enhancements to ensure the system remains relevant and efficient.

6.7 Conclusion

In conclusion, the College Event Management System (CEMS) project has successfully developed an intuitive, user-friendly, and efficient platform for event planning and management. The system's interfaces and functionalities have been thoughtfully designed to cater to the needs of administrators and users alike. By meeting its objectives and addressing various challenges, CEMS presents a promising solution for educational institutions seeking to optimize their event planning capabilities.

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CONTRIBUTION

Here, group members and their work contribution in this project has been shown:

a. Arnav Rajbhandari: Coding, idea, and layout design.
b. Shleshma Shrestha: Documentation, research, and testing.
c. Simran Shrestha: Research and analysis.

APPENDIX

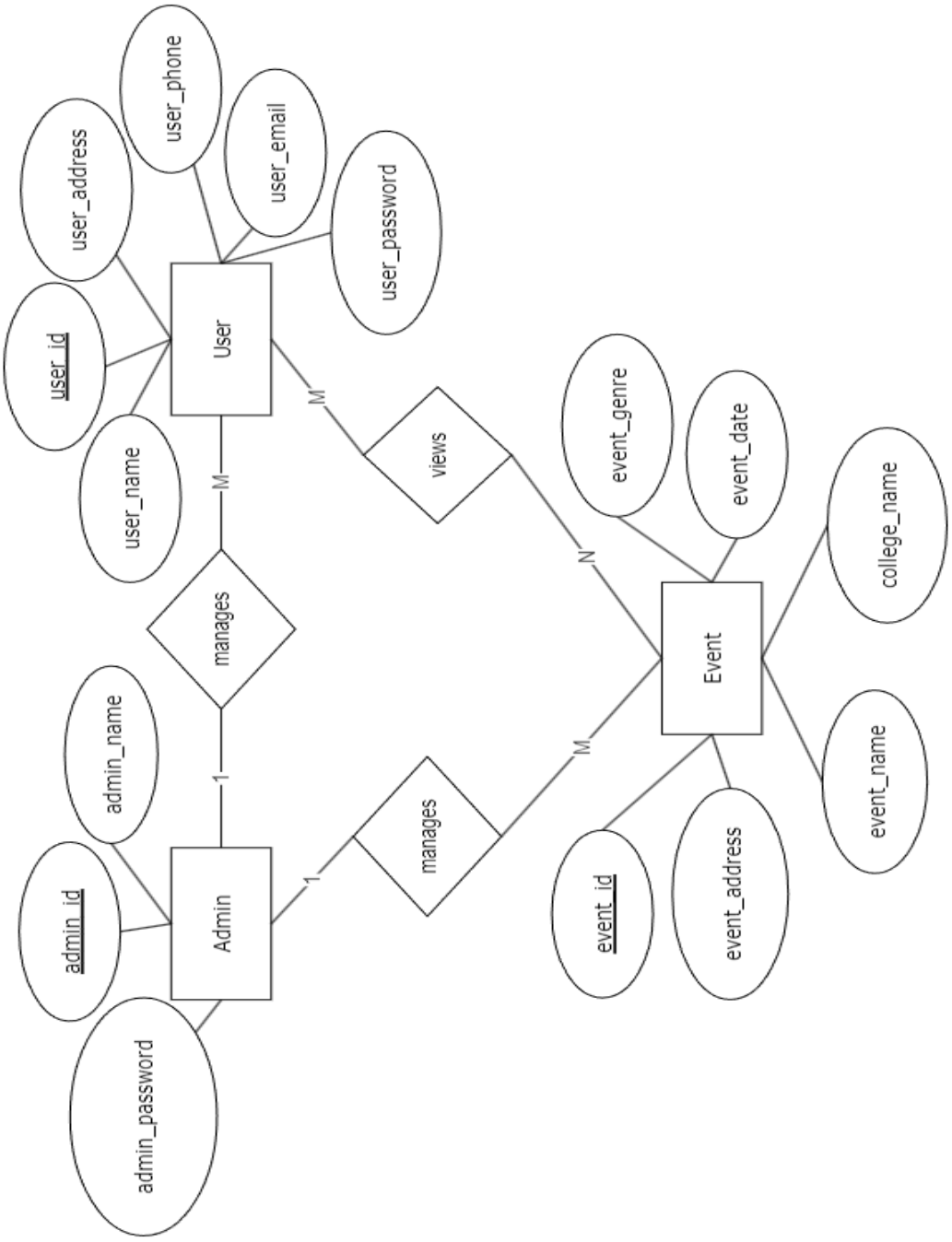

Figure 11: ER Diagram