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Club Event Management System

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Abstract: *The College Event Management System (CEMS) is an innovative platform that has been carefully designed to enhance organization and participation at college events. This ensures a smooth and engaging university experience. This system facilitates effective program announcements and informs students and club members of upcoming events. It has a complex voting mechanism that allows participants to vote for their favorite clubs. CEMS also has a dual registration process catering to students and club members separately. It provides a customized user experience for each segment. while club members You can easily manage your events and registrations. The platform's user-friendly interface and robust functionality ensure effective communication and collaboration. Prevent missed updates or events By centralizing all job-related information, CEMS promotes greater participation and fosters a vibrant college community. Support timely communication Promote active participation in college life. and guarantee the smooth operation of activities. which ultimately contributes to a cohesive and vibrant university environment.*

Keywords: Management Club, HTML, CSS, JavaScript, node.js and MongoDB

I. INTRODUCTION

Clubs play an important role in a student's life, as it offers opportunities for active involvement in various skill developments/skill improvement, building and improving leadership qualities, and active participation in various activities. However, managing clubs effectively is still a difficult task due to old and outdated methods that are prone to errors and mistakes. And takes a lot of time and energy. Understanding how critical it is to set out these procedures and recognizing the importance of improvising this process, we came up with a digital solution that would meet the demands of club members, organizers, and students (participants).

The idea behind this project came up from the realization that important information from the clubs, i.e. club activities and different events. is usually disorganized. many times the important club updates get buried down due to unimportant messages. To address this we aimed to create a web application that makes the management of clubs digital, For easy access it stores structured data in a systematic format, in a database.

A web application is a platform that takes client requests and provides us with desired output through a smooth interaction between client and server. An HTTPS request is initiated by the user's browser to retrieve some information from the web server. The data is retrieved through a URL and is delivered to a client web browser in the form of an HTML response. For efficient data handling and dynamic content delivery, web applications are generally built on server-side processing and multilayered designs. The club Management uses these principles to do club operations. It allows students to register for the events held by Clubs directly through a centralized dashboard.

Additionally, the platform offers tools for career development, such as job postings, mentorship opportunities, and professional networking. It also tracks alumni involvement in community initiatives, allowing them to participate in volunteering and charitable activities. For administrators, the system provides a dashboard to manage members, monitor engagement, and generate reports for event success and alumni participation. With a focus on improving communication and fostering a strong, active alumni community, this platform enhances the connection between MIT alumni and supports their professional and personal growth. The system is designed to be intuitive, secure, and scalable, ensuring a seamless experience for all users.

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II. METHODOLOGY

1) Requirements:

a) Functional

Students can safely register, log in, and view upcoming events organized by the club. They can register to participate in events. Manage profile and vote for your favorite club This is to ensure that important activity information is timely. For club Members, This system facilitates efficient management of club activities. Administrators can manage the club by adding or removing members as needed. They can create new events with required details and manage existing events. Gain insights into participation and feedback while effectively communicating with students and club members. An easy way to comply with the Journal paper formatting requirements is to use this document as a template and simply type your text into it.

b) Non-functional

For Students, Non-functional requirements focus on usability. This ensures a user-friendly interface for students. The system should work efficiently. Handle multiple requests without delay. Security is important And secure authentication and data encryption are required to protect personal information. Additionally, the system should be accessible on a variety of devices. It enhances the overall user experience.

For Members, Non-functional requirements focus on scalability. This allows the system to grow with more clubs and activities. Reliability ensures consistent access with no downtime. The system must be maintainable so that it can be easily updated. And data integrity is essential for accurate information about activities and members. Supports the needs of various users.

2) System Design:

Figure 1 shows The illustration that provides a comprehensive visual representation of the sequence of actions needed for the successful completion of the User registration and login system within a system

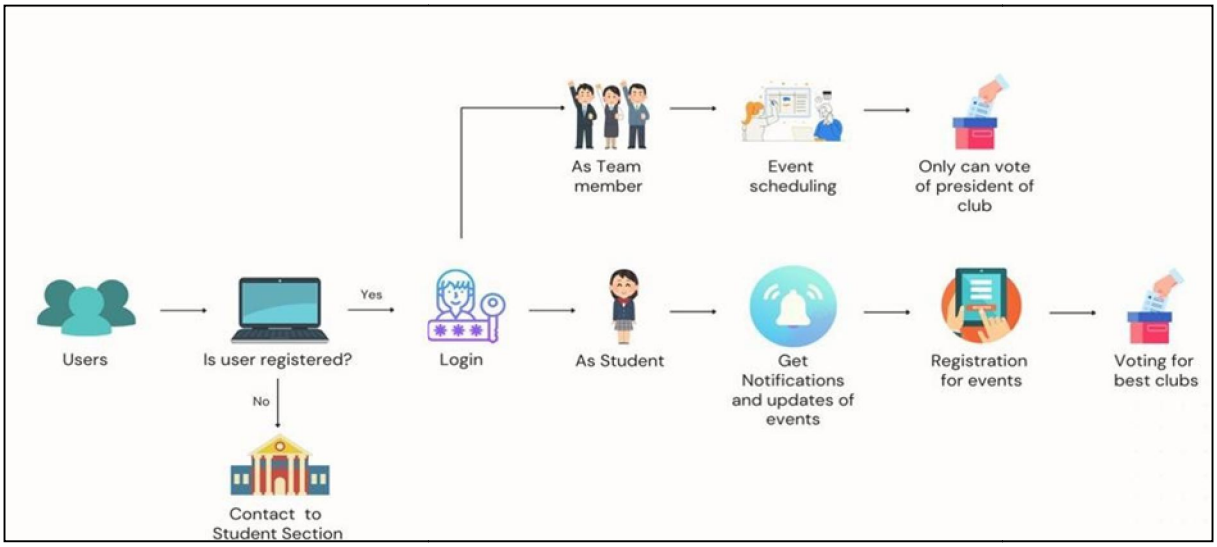

Figure 1: Architecture

a) Frontend:

The system's front-end design uses HTML for content, CSS for formatting, and JavaScript for interactivity. Create dynamic and attractive web interfaces. Each page has been precisely drafted to meet the unique needs of students and club members. This ensures a smooth and intuitive user experience. The home page serves as the center. Provides quick access to essential features such as upcoming events, announcements, and links to other sections. The student dashboard provides personal information Including class schedules, scores and notifications. Designed like this so that

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it can be easily accessible and convenient for users. The Events page contains a calendar of all upcoming events and activities organized by the clubs. It includes interactive elements such as event registration forms. and detailed explanations to encourage participation.

b) Backend:

For the system backend, Node.js and MongoDB were chosen due to their Expandability flexibility and suitability for managing dynamic web applications. Nodejs is a server-side javascript runtime. It allows for the development of fast and efficient APIs for handling multiple Customer requests simultaneously. This is beneficial because it ensures real-time data processing and response. MongoDB a NoSQL database, was chosen for its ability to store and manage large amounts of unstructured or semi-structured Information such as user profiles, event information, and communication records. It does allow for easy database restructuring. the unit structure includes a RESTful API powered away nodejs to work related to user authenticatio. Account management Activity scheduling and real-time updates. the combination of nodejs and MongoDB ensures a robust, scalable and prompt backend.

3) Features:

a) Authentication System:

The authentication system is a key component designed to differentiate between the two main user roles: student user and club member. (Administrator) A secure login mechanism is used to verify the identity of users attempting to access the system. When logging in The system will verify the credentials provided. You will be required to login (username and password) to the data stored in the backend (MongoDB) and allow only authorized users to access it. This ensures that sensitive information and administrative features are only accessible to club members. While students have access to more restricted functionality, for example, because participating in activities and communicating helps maintain the integrity and protect the privacy of users.

b) Member Management:

In the member management department, This system allows club members The administrator (administrator) can perform a number of essential tasks that help ensure the smooth running of the club. A key feature is the ability to create new events for members. Administrators can specify event details such as event name, description, date, time, and location through a form-based interface. Once the activity is created activity will be automatically added to the system. and relevant details will be displayed on the home page for students and other club members, keeping all users informed of upcoming actions.

c) Registration:

The registration system allows students to register for events organized by the club. With a simple and easy-to-use interface. Students can browse available activities listed on the home page of the system. and choose the activities they want to participate in Event details such as name, date, and description are clearly displayed. Help students make informed decisions before registering. When students choose an activity You can complete your registration in just a few clicks. By submitting details such as name, contact information, and other required information.

4) Methods:

This web application is built using various techniques in HTML, CSS, JavaScript, MongoDB, and Node.js. The structural layout of a web page is assigned to HTML, whereas the styling and designing modules will cater to making a web page responsive and user-friendly using CSS. JavaScript or any of its frameworks, such as Node.js, runs the interactivity on the client side, and there's communication between the two. This runtime environment executes JavaScript on the server, which basically allows API development for interaction with the database. Use No-SQL databases, including MongoDB, to store and retrieve data. There might be some occasions when a combination of these two may easily pull off APIs, as it is often handled by an ODM, i.e. an object-data modeling library such as Mongoose. With great integration, the complete combination could build great dynamic, data-driven web applications that serve users with great experiences.

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III. RESULT

Figure 2: Login Page

Image shows the login page for Club Event Management System. The page design consists of a white background and a title that displays the university logo, name, and slogan. The title also includes a link to the page. "Login" and "Contact" The main content of the page is centered and has a gradient colored box with two buttons. These buttons allow the user to choose between "Log in as student" and "Log in as member" Log in button designs suggest a user-friendly interface and intuitive navigation

Figure 3: Student Home Page of Club Event Management System

Figure 2 shows the home page of our system with of MIT-ADT University in Pune, India. It is a lively and easy-to-use portal. Dashboard navigation links, about us, and contact are easily accessible. The left side shows amazing images of university life, such as people carving busts and students at a waterfall. Emphasis is placed on hands-on learning and activities from various courses. These scenes offer a fascinating glimpse into the university's vibrant community. Located under the 'Events' section, activities organized by clubs in this club are named 'Club 1'. A simple name such as 'Event 1' reflects the regular and varied nature of Events happening. With a clean layout and a bright color scheme dominated by

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purples and oranges. This reflects the university's forward-thinking approach and attracts students who are looking for an active and supportive educational environment.

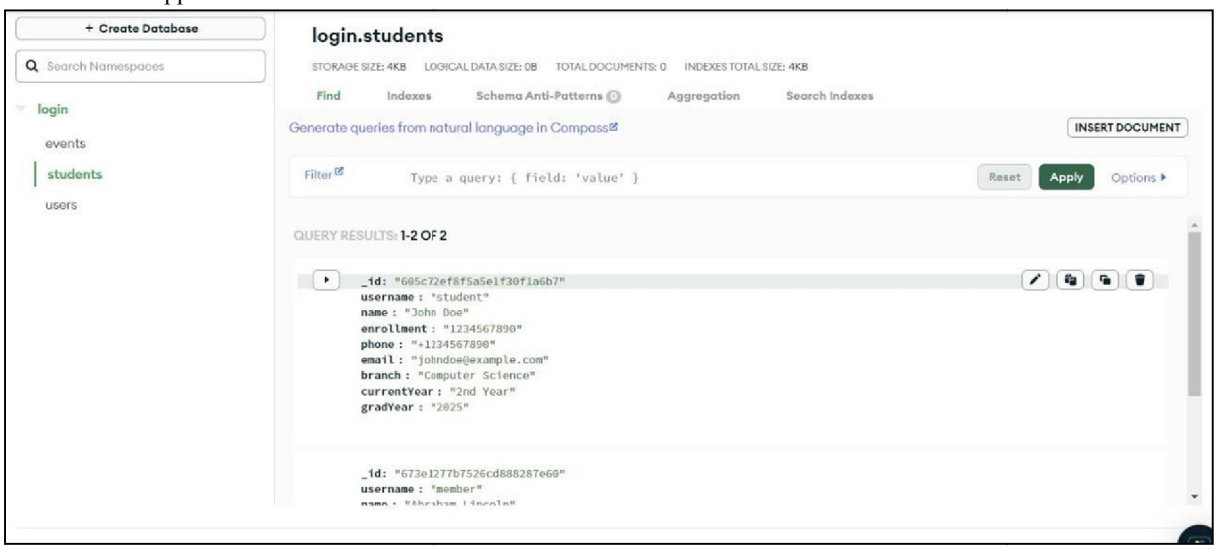

Figure 4: Backend of Club Event Management System

The MIT-ADT University database backend shown in the Figure 3, MongoDB Compass screenshot is designed to efficiently manage and organize student data. The database named "login" has multiple collections such as "Students", "Events", "Users". The "Students" collection stores detailed documents about each student. Includes unique identifier (_id), username, name, enrollment number, contact information, field of study, current academic year. and expected year of graduation.

IV. CONCLUSION

The conclusions of the research report highlight the success in developing the College Event Management System (CEMS), which has helped increase organization and participation in College activities. This platform addresses the challenges students and club administrators face in managing events. This ensures a smooth university experience. Key features include secure user registration and login for students and club members. Make it accessible privately Event management functionality allows administrators to create and manage events with required details. Meanwhile, students can browse upcoming events to register. Manage profiles and vote for your favorite clubs. CEMS promotes centralized communications. Additionally, using MongoDB as a structured database allows for efficient data management and recovery. Increase system performance Ultimately, CEMS contributes to a cohesive and vibrant college community by promoting timely communication. Active participation is encouraged. and makes managing club activities easier. This increases the overall college experience for all users.

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We would like to express our gratitude to all those who contributed to the development of the College Event Management System. Special thanks go to the students, faculty, and club members who provided valuable feedback and insights, ensuring that the platform meets the needs of the entire college community.

REFERENCES

[1] M. T. Student, “International Research Club Management System using Laravel Framework.” [Online]. Available: www.ijtsrd.com
[2] Z. Wang and Y. Gao, “Research on the Intelligent Management Model of Sports Clubs in the Information Age,” Applied Mathematics and Nonlinear Sciences, vol. 9, no. 1, Jan. 2024, doi: 10.2478/amns-2024-3195.
[3] “Актуальні проблеми сучасної медицини EXPERIENCE IN ORGANIZING STUDENT RESEARCH CLUB FOR UNDERGRADUATE STUDENTS IN HIGHER EDUCATIONAL INSTITUTION

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[4] M. N. S, C. K. G, and A. Professor, "Campus Club Management System Application." [Online]. Available: www.ijert.org
[5] Z. Lin and P. Maharkan, "Development Strategy Management Model for Tennis Club in Guangzhou City, the People's Republic of China," International Journal of Sociologies and Anthropologies Science Reviews, vol. 4, no. 5, pp. 383–402, Sep. 2024, doi: 10.60027/ijsasr.2024.4825.
[6] "MIT CLUB MANAGEMENT Presented By : Vidhi Nimje Sanjana Patil Tejas Admane Vedika Nalkar."
[7] P. Utsav, P. Parth, P. Kirtesh, and A. T. Shah, "Club Management", [Online]. Available: www.ijsart.com
[8] P. Joshi, "Fear of exclusion: the dynamics of club formation," Theory Decis, Nov. 2024, doi: 10.1007/s11238-024-10010-2.
[9] S. Sahasrabuddhe, "The Database System for the Sports Club Management: Data Modelling, Management and Governance", doi: 10.13140/RG.2.2.32106.12489.
[10] M. S. Ibrahim et al., "INFORMATION TECHNOLOGY CLUB MANAGEMENT SYSTEM," Acta Electronica Malaysia, vol. 1, no. 2, pp. 01–05, Jan. 2018, doi: 10.26480/aem.02.2018.01.05.
[11] M. Al-Asadi and S. Tasdemir, "An Online İnformation System For Football Club Management," 2019. [Online]. Available: https://www.researchgate.net/publication/337656094