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Alast Circle: A Centralized Student and Alumni Interaction System

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Abstract: Alast circle is a centralized school and university community platform designed to maintain continuous interaction between administrators, staff members, students, and alumni. In many institutions, communication with students becomes limited after graduation, and important announcements or events are often shared through scattered channels. The proposed system addresses this issue by providing a single web-based platform where current students and former students can remain connected with their institution. Alast circle enables users to receive announcements, participate in events, and communicate with one another within an organized environment. The platform also allows administrators and staff to manage updates, publish event details, and maintain institutional engagement. By integrating communication, event participation, and user interaction into one system, Alast circle strengthens long-term relationships within the academic community and improves information accessibility for all users.

Keywords— Alumni Network, School Management System, University Portal, Student-Alumni Interaction, Event Management, Community Platform, Web Application, Institutional Communication, Academic Networking, Announcement System

I. INTRODUCTION

In many schools and universities, maintaining communication between the institution and students becomes difficult once students graduate. Alumni often lose touch with their school or university, while current students miss opportunities to interact with former students who can provide guidance and share experiences. Important announcements such as events, workshops, reunions, and institutional updates are usually distributed through multiple channels, making it difficult for users to stay informed. This lack of centralized communication creates a gap between administrators, staff, students, and alumni.

To address this problem, Alast circle is proposed as a unified web-based platform that connects all members of a school or university community. The platform allows administrators and staff to share announcements, create events, and manage users from a single system. Students and alumni can access updates, participate in events, and stay connected with their institution. By providing a centralized environment, Alast-circle improves communication and encourages long-term engagement between former and current students.

The main objective of the system is to build a digital community where students and alumni can interact and remain associated with their institution even after graduation. The platform simplifies event participation, improves information accessibility, and provides structured communication among users. With role-based access for admin, staff, students, and alumni, Alast circle ensures organized interaction while maintaining institutional control.

II. LITERATURE REVIEW

Communication between students and alumni has traditionally been maintained through social media groups, email lists, and institutional notice boards.

Although these methods allow information sharing, they do not provide a structured and centralized environment for long-term engagement. Social media platforms are widely used for alumni interaction, but they lack role-based access, organized event management, and official institutional control. As a result, important announcements may be missed and communication becomes scattered.

Some institutions have developed alumni management systems to maintain records of former students and share updates. These systems mainly focus on storing alumni data and providing basic communication features. However, many of them do not support interaction between students, staff, and alumni in a single platform. In addition, event participation, announcements, and community engagement features are often limited or unavailable. This reduces the effectiveness of such systems in maintaining active communication.

Recent web-based community platforms emphasize centralized communication and user engagement. These systems provide dashboards, notification features, and event management modules. However, many existing solutions are complex, difficult to maintain, or designed primarily for corporate environments rather than educational institutions. Schools and universities require a simple, structured, and easy-to-use platform that supports all users including admin, staff, students, and alumni.

III. MATERIALS AND METHODS

The Alast circle platform is developed as a web- based application that connects administrators, staff members, students, and alumni in a single system. The development process follows a structured approach that includes requirement analysis, system design, implementation, and testing. The main goal of the system is to provide a centralized platform where users can communicate, receive announcements, and participate in institutional events.

System Overview

The system allows different users to access the platform based on their roles. The administrator manages user accounts, announcements, and overall system activities. Staff members can create events and share important updates. Students and alumni can view announcements, communicate with each other, and participate in events. The platform ensures that all users remain connected with the school or university community.

Technology Stack

The Alast circle platform is implemented using modern web technologies to ensure scalability and performance. The frontend is designed to provide a responsive and user-friendly interface. The backend handles authentication, data processing, and communication between modules. The database stores user information, announcements, and event details.

- **Frontend:** React.js, HTML, CSS
- **Backend:** Node.js with Express.js
- **Database:** MongoDB
- **Authentication:** JWT-based login system
- **API Communication:** RESTful APIs

Design and Implementation Steps

The development of Alast circle follows these steps:

- Requirement Analysis: Understanding the need for a centralized school and university communication platform.
- System Design: Creating user roles, module structure, and database schema.
- User Management Module: Implementation of admin, staff, student, and alumni roles.
- Announcement Module: Allowing admin and staff to post institutional updates.
- Event Management Module: Creating and managing events with participation options.
- Communication Module: Enabling interaction between students and alumni.
- Testing: Verifying system functionality and ensuring smooth user interaction.

System Modules

The Alast circle platform consists of the following modules:

- **Admin Module –** Manages users, announcements, and events
- **Staff Module –** Posts updates and creates events
- **Student Module** – Views announcements and participates in events
- **Alumni Module** – Connects with institution and interacts with students
- **Event Module** – Displays event details and participation
- **Announcement Module** – Shows institutional notifications

IV. MODELING AND ANALYSIS

The Alast circle platform is designed to provide a structured communication system for schools and universities. The modeling phase focuses on identifying system actors, defining their interactions, and designing the overall architecture. The analysis helps in understanding how different users interact with the platform and how data flows within the system.

Use Case Analysis

The Alast circle system includes four primary actors: Administrator, Staff, Student, and Alumni. Each actor interacts with the system based on their role and permissions.

- **Administrator:** The admin manages users, verifies accounts, posts announcements, and monitors platform activity. The administrator also controls event visibility and system settings.
- **Staff:** Staff members can create events, post announcements, and share institutional updates. They also interact with students and alumni through the platform.
- **Student:** Students can register on the platform, view announcements, participate in events, and communicate with alumni and staff members.
- **Alumni:** Alumni users can remain connected with their institution, view updates, participate in events, and interact with students and staff.

The main use cases of the system include user registration, login, announcement viewing, event creation, event participation, and communication between users. These interactions define the functional behavior of the Alast circle platform.

Entity Relationship Analysis

The system database is designed to manage users, announcements, events, and participation details. The main entities in the system are User, Announcement, Event, and Participation.

- **User Entity –** Stores user information such as name, email, role, and login credentials.
- **Announcement Entity –** Contains announcement title, description, posted date, and author.
- **Event Entity –** Includes event name, description, date, location, and organizer details.
- **Participation Entity –** Maintains records of users participating in events.

System Architecture

The Alast circle platform follows a layered architecture to maintain modularity and scalability. The presentation layer provides the user interface where users interact with the system. The application layer handles business logic, authentication, and role- based access control. The database layer stores user data, announcements, and event information.

This architecture allows independent development of frontend and backend components while ensuring smooth data communication. The modular structure also makes the system easy to maintain and extend in the future.

V. RESULTS AND DISCUSSION

The Alast circle platform was tested to evaluate its effectiveness in maintaining communication between administrators, staff members, students, and alumni. The system was able to successfully provide a

centralized environment where users could access announcements, view events, and interact with one another. The testing focused on usability, communication efficiency, and event participation.

The announcement module allowed administrators and staff members to share updates in a structured manner. Users were able to view announcements without relying on external communication platforms. This reduced confusion and ensured that important information was easily accessible. Students and alumni could regularly check updates related to institutional activities and upcoming events.

The event management feature enabled users to view event details and participate through the platform. This simplified the process of managing institutional events. Admin and staff members could create events, while students and alumni could register their participation. The centralized event system improved user engagement and reduced manual coordination.

The communication aspect of the platform helped maintain connections between current students and alumni. Alumni users were able to stay connected with their institution and remain informed about activities. Students benefited from interacting with former students and staying updated with institutional news. This created a continuous relationship between users even after graduation.

VI. CONCLUSION

Alast circle is designed as a centralized platform that connects administrators, staff members, students, and alumni within a school or university environment. The system provides a structured way to share announcements, manage events, and maintain communication among users. By bringing all members of the institution onto a single platform, Alast circle helps reduce communication gaps and improves overall engagement.

The platform allows students and alumni to remain connected with their institution even after graduation. Administrators and staff members can easily share updates and organize events, while users can view announcements and participate in activities. This improves information accessibility and encourages long-term interaction within the academic community.

The results show that the Alast circle platform simplifies institutional communication and enhances participation in events. The system reduces dependency on multiple communication channels and provides a unified environment for interaction. In the future, additional features such as real- time messaging, notification systems, and mobile support can be added to further improve the platform.

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