

ALUMNI PORTAL

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Abstract: Alumni portal provides a common platform for institute and the alumni. Every educational institutes need to connect the alumni. So, the main aim for developing this web-based application is make it possible for the alumni of the college to bridge a connection with college and that will help institute to substitute the manual system of the alumni records with an automated one. This will make alumni easy to know the current running programs in college which are useful to them. This also connects alumni among them and can unlock new opportunities. Current Graduating can also contact the alumni and can unlock large opportunities. Current graduating students can know about the stuff like current industrial trends, different ways to apply for jobs, opportunities in their fields, etc. This application can make a lot of things easier for institution.

1. INTRODUCTION

Alumni portals are essentially websites or online platforms designed by colleges and universities to maintain a connection with their graduates. They offer a range of services and benefits exclusively for alumni, serving as a virtual hub for interaction and engagement.

One key function of these portals is to provide a space where alumni can keep in touch with their alma mater, as well as with each other. They often feature tools such as directories, forums, and social networking capabilities, allowing graduates to connect, network, and share experiences with fellow alumni. This fosters a sense of community among graduates, regardless of their location or years since graduation.

Moreover, these portals serve as a valuable resource for alumni to stay informed about current events and news related to their college or university. They often include updates on upcoming events, such as reunions, seminars, or career fairs, as well as news and developments within the alumni community and the institution itself. This ensures that alumni remain connected to the ongoing activities and initiatives of their alma mater.

Additionally, alumni portals typically offer access to various services and benefits provided by the college or university. This could include access to career services, library resources, discounts on continuing education programs, or opportunities for mentorship and professional development. By centralizing these offerings in one convenient location, alumni can easily

take advantage of the resources available to them and continue to benefit from their association with the institution.

Overall, alumni portals play a vital role in maintaining and strengthening the relationship between graduates and their alma mater. They serve as a dynamic platform for communication, networking, and lifelong learning, ensuring that alumni remain engaged and connected members of the college or university community long after graduation.

2.LITERATURE SURVEY

Recent studies have highlighted a prevailing reliance on manual methods for alumni management within many universities, coupled with minimal technological investment. Nonetheless, there is a notable shift towards implementing automated systems, including web-based databases and social media platforms, to enhance alumni management practices. These systems offer real-time access to alumni information and facilitate seamless communication and networking among alumni. Moreover, some universities have introduced alumni portals, offering online resources such as career development and networking opportunities.

In investigating the relationship between alumni faculty members and their alma mater, the study revealed intriguing findings regarding collaborative behaviour among returnee scholars. It was observed that alumni faculty members tend to engage less frequently in situational collaboration than non-alumni faculty. Surprisingly, the study found that alumni ties do not significantly impact a scholar's likelihood to engage in international collaboration. This outcome contrasts with expectations, as one might anticipate alumni to be more inclined towards collaborative research with their alumni matter.

Gonaives et al., (2014) developed a novel technique to assist teaching staffs of undergraduate programs in semi automatically gathering information on the desired alumni population from the Web. It is seen that, the proposed method was able to collect data on a number of alumni twice as large as adopted conventional methods, all from a small collection of sample pages consisting of a few graduates.

In their study, (Babu et al., 2021) actively engaged new and former graduate students in registering, looking for, and managing alumni data in order to get updates. The Alumni portal's preferred Dynamic design facilitates interaction amongst all alumni and students. The Portal is used to provide information on colleges, special events, careers, and placements after graduation.

Cravioto et al., (2020) employed data mining techniques and a machine learning model to predict alumni's postgraduate degree attainment after graduation. The study compares the outcomes of utilizing three distinct decision tree algorithms (REPTree, J48, and Random Forest) to address this challenge. WEKA studied revealed that the Random Forest algorithm had the highest classification accuracy, leading to the conclusion that this is the optimal method for the dataset. The study can be utilized to provide a deeper understanding of patterns in alumni's propensity to pursue a postgraduate degree and to provide higher education system decision-makers with information that can aid in the improvement of educational initiatives.

In Luo et al. (2016), the authors conducted surveys at three prominent Chinese universities to explore factors influencing the transformation of social capital within alumni relations. They emphasized the importance of maintaining and developing strong alumni relations across three dimensions: cognition (value-oriented, identity construction), relationships (building alumni connections), and structures (establishing organizations, platforms, and access). By leveraging these dimensions, universities can tap into untapped resources and foster public and multiplying alumni relation social capital. The authors argued that the role of universities' alumni relations offices should focus on creating and sharing, with the establishment of thriving alumni relations infrastructure through relevant groups, platforms, and adequate access.

Dai & Lan (2017) proposed an intelligent integrated alumni information management system framework to address issues such as data fragmentation, information transmission latency, and management simplicity. The framework comprises three subsystems: "Alumni Social Network," "Intelligent Data Acquisition and Storage," and "Data Mining and Decision-Making Support." By utilizing intelligent technology for data collection and storage and data mining technology for enhancing decision-making in talent training programs, the system aims to construct social platforms to strengthen alumni networks.

In addressing alumni job difficulties, Azis et al. (2019) developed an Android-based mobile application for Syarif Hidayatullah State Islamic University Jakarta. The solution consists of native Android mobile apps accessible on mobile devices and dashboard apps for content management. This approach aims to provide alumni with easier access to job opportunities and facilitate communication between the university and its graduates. This mobile application involves activities for obtaining job vacancies, scholarships, training, IT projects, and tracer studies. The system will provide information that has been processed from data submitted by alumni, allowing the department's head of information systems to simply and immediately contact alumni to gather data for accreditation.

(Mijic & Jankovic, (2012) proposed a remedy for the information system for keeping track of data on alumni. Alumni-provided employment data is helpful for assessing the value of academic programs and defending their continued existence. The country's other economic characteristics also affect employment rates, which can be utilized to determine which study programs produce graduates who are more or less in demand on the job market. The authors emphasized the necessity for institutions to create alumni associations and offer a variety of incentives to registered alumni in order to encourage them to participate more actively in activities related to enhancing the quality of curriculums.

(Olowolayemo et al., (2019) presented a system that allows Universities are increasingly adopting mobile applications to monitor the employment status of their graduates, providing a platform for job-seeking alumni to connect with available opportunities. These applications serve as valuable tools for both universities and graduates, allowing institutions to gather employment data while aiding graduates in their job search endeavors. Additionally, fostering social networking among alumni post-graduation is essential for strengthening collaboration and support networks. Various studies have addressed this need, proposing systems to facilitate alumni communication and information sharing.

For instance, Pooja Patil et al. (2019) introduced an alumni system designed to promote idea-sharing and bonding among students and graduates. This system efficiently manages alumni data and provides secure access to information for both parties. With a focus on communication, the portal enables current students to engage with alumni for updates on job opportunities, industry trends, and events. The system ensures seamless transfer of alumni information from student records to the alumni module, enhancing connectivity between different cohorts.

Similarly, Lyn Rodriguez Maata et al. (2020) presented a theoretical framework for an alumni tracking information system, facilitating online communication between higher education institutions (HEIs) and their alumni. This web-based system, developed for Omani educational institutions, aligns with the requirements of the Oman Academic Accreditation Authority (OAAA) and other stakeholders. By leveraging alumni data, the system generates employment rates and provides valuable insights for educational institutions and stakeholders.

The integration of mobile applications and online systems for alumni management not only assists universities in tracking graduates' employment status but also fosters a sense of community and collaboration among alumni. These innovative approaches facilitate communication, idea-sharing, and networking, ultimately benefiting both graduates and educational institutions.

An Alumni information portal was developed by (Dattatray et al., 2019) the web platform was developed using Java and MYSQL as the programming language and database respectively. The goal of the proposed system is to allow students communicate among themselves and share ideas. It is to also allow school management track their graduated students.

The construction of a college alumni web site was reported on the thesis work of (Ansori, 2015). The major goal of the project is to develop a web-based application that enables former students of the College to maintain connections with each other while replacing the manual alumni office system with an automated one. Afolabi et al. (2019) addressed this need by developing alumni feedback system specifically tailored for curricular development in Building Technology courses. They highlighted the benefits of such a system over manual questionnaires, emphasizing its role in enhancing curriculum based on alumni perceptions and evaluations. The proposed system incorporates alumni feedback tests and evaluations to improve course content, leveraging web-based technologies such as HTML, CSS, MySQL, and PHP for development.

The significance of Alumni Associations in higher education was underscored by Fatima Shakil & Un Nisa Faizi (2012) in a survey involving 120 respondents from universities with existing Alumni Associations. The study revealed that Alumni Associations are crucial for the growth and prosperity of educational institutions, contributing significantly to academic and administrative aspects according to both teachers and students.

Furthermore, Rattanamethawong et al. (2015) explored an innovative framework for meeting the demands of students and alumni, focusing on an alumni relationship management system to support it. Through surveys, the authors identified the mutual need for cooperation between the university, students, and alumni. They outlined eight factors essential for driving

alumni participation, including demographics, communication, value creation, awareness, motivation, collaboration, engagement, and alumni satisfaction. This framework highlights the importance of fostering strong relationships between educational institutions and their alumni for mutual benefit and growth.

Mukherjee et al., (2019) proposed a prototype for an institution-independent centralized alumni management system. The proposed system contains a mentoring component that effectively helps students to look for people who attended that specific college as mentors. Furthermore, the system can be coupled with a capability for acquiring Letters of Recommendation from an alumnus in the same vertical in an organization.

Kailanto et al., (2012) investigated how alumni narratives can motivate and engage students in their studies. They utilized the university-specific social media portal TUT Circle to collect and distribute alumni stories. The observed results provide useful insight into the students' perspectives on alumni stories and alumni activities. From the study, it was seen that students were interested in finding out what courses alumni had completed and how these courses related to their present job requirements.

The article proposes enhancing mentoring between alumni and students by integrating selected characteristics of social networking and data mining into alumni systems. It introduces a framework for Smart Alumni Systems (SAS) and presents a prototype implementation of a subset of SAS as its main contributions. The SAS framework broadens stakeholder roles to include current students, teachers, staff, visitors, and alumni. Development of the proposed Smart Alumni System was carried out using ASP.net and C#, establishing infrastructure for active communication and interaction among alumni, current students, faculty, and university officials. Stakeholders are categorized into user sub-groups with tailored permissions and capabilities, promoting collaboration towards common goals. Additionally, the system leverages data mining concepts to offer personalized functionalities based on data analysis, aiming to optimize collaboration, engagement, and satisfaction while effectively meeting user needs.

3. EXISTING SYSTEM

The current framework is somewhat modernized, but it heavily relies on numerous Excel spreadsheets created by individual users. This setup poses several challenges, such as the need to sift through multiple spreadsheets to find specific records, which can be time-consuming. Additionally, maintaining these Excel files is a cumbersome task. The system lacks multi-user access and does not provide different user privileges, making collaboration and data management more difficult. Furthermore, the system relies heavily on manual processes, which are prone to errors and inefficiencies. There is no easy access to specific student information records, further complicating tasks that require accessing or updating data. Overall, the current system lacks efficiency, accessibility, and the necessary features to support frequent use and effective data management.

4.PROPOSED SYSTEM

The proposed system will be a web-based application, allowing alumni to access it with the assistance of an admin. This system will be computerized, utilizing a centralized database for streamlined operations. By employing automation, processes will become quicker and more efficient. Maintaining the database will also be simplified thanks to the online system, which enables easy access and swift retrieval of data. Furthermore, the system will provide multiple users with simultaneous access, enhancing collaboration and efficiency. Overall, the proposed system promises improved accessibility, speed, and usability compared to the current manual processes.

5.PROBLEM STATEMENT

Traditional techniques of managing alumni information have been used in the past, and this strategy is not adaptable, efficient, or productive. Over time, files containing information and details about these students may have been misplaced, damaged, or simply forgotten. Additionally, since these reports are in physical form, locating them can be a cumbersome and time-consuming task. This can lead to inefficiencies in accessing historical student data and may hinder efforts to maintain accurate records of the university's alumni base. Therefore, transitioning to a digital system or database management solution could greatly improve the organization, accessibility, and preservation of student records, ensuring that valuable information is readily available for reference and analysis. More so, the few computers in use have led to several vulnerabilities in the system because there is no tracking, monitoring, or control over the system for the information accessible in the department, and there are no security measures in place. Such sophisticated scenarios were often difficult to meet manually because the process of managing data was stressful due to multiple file handling, slow due to non-automation, inflexible due to discrepancy in data provided, and most likely repetition of records; thus, the need for computer software, a web-based automated system, and a highly centralized database.

ADVANTAGE OF PROPOSED SYSTEM:

- **Automated Data Management:** The system is fully automated, making it easy to manage recorded data in the database efficiently.
- **Centralized Database Maintenance:** Information is stored in a centralized database, improving organization and accessibility of data.
- **Unified Networking Platform:** The system offers a single point of network access, allowing all users to connect to the university from one place.
- **Enhanced Connectivity:** This centralized platform streamlines communication and collaboration among stakeholders, including alumni, students, and faculty.
- **Easy Access to Alumni Resources:** The system provides alumni with convenient access to university resources and information, fostering ongoing engagement and support.

6.CONCLUSION

In conclusion, an online alumni portal represents a powerful tool for enhancing alumni engagement and support. By providing a centralized platform for networking, communication, and resource sharing, the portal strengthens the bond between alumni and their alma mater, benefiting both parties. Educational institutions that invest in developing and maintaining an effective alumni portal stand to reap the rewards of increased alumni involvement, support, and loyalty in the long run.

REFERENCES:

1. [1] Afolabi, A., Eshofonie, E., & Akinbo, F. (2019). Development of an Alumni Feedback System for Curriculum Improvement in Building Technology Courses. Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 11623 LNCS, 257–265. https://doi.org/10.1007/978-3-030-24308-1_21
2. Ansori. (2015). Paper Knowledge. Toward a Media History of Documents, 3(April), 49–58.

BIBLIOGRAPHY:



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