Rayat Shikshan Sanstha's

Karmaveer Bhaurao Patil College of Engineering, Sa

Department: Computer Science & Engineering

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Mini Project Synopsis

On

"Alumni Associations Platform"

By

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I) Introduction:

Alumni associations play an essential role in higher education institutions, as they provide networking opportunities and contact between the university and the alumni or among the alumni. However, the lack of communication between the alumni, faculty and the department as a whole leading to the lack of updated data of alumni hinders the effective development of an alumni association. The lack of data update can be tied to disinterest or ignorance of the alumni about the potential of an alumni association to promote a professional network, academic and even personal relationships. Similarly, the need for an effective system to maintain these records and to update them frequently becomes increasingly pressing as the number of students enrolled in the campus continues to increase. One of the ways to consolidate the relationship between alumni and educational institutions is to create a virtual and interactive portal to provide useful information to the alumni to help extend the contact between the alumni and the university to beyond the period of course completion, regardless of geographic location or time.

II) Literature Review:

(i) Predication of Alumni Association Membership

Newman and Petrosko 2011 [6], In this the students undergo after graduation they are alumni in the university. The alumni impact on the motivation to member of the association. The results indicate that the alumni increase more members in the association. The work of professionals of these associations can help improve the alumni's perceptions. Were more often involved with the university and were to make interacts with
other member of the association.

(ii) Online Community Portal for Enhanced Alumni Networking

For Barnard 2007[2], the alumni's has one person who great potential to contribute financially, and credibility of an educational institution. The alumni can register the detail in alumni association website, and admin can upload event the integrated network of relationships could give the institution the opportunity to create a best situation. Alumni, is the term used to designate a graduate student (former student) of a university develop and maintain Wikipedia, 2013.

(iii)Enhancing Mentoring Between Alumni and Student via Alumni System

Chia, Jonesa, and Grandhama 2012, [3]the alumni are most valuable assets of university. The alumni people who represent the university in the real world In terms of contact in the educational field, a common concern is to keep alumni connected to their educational institutions, and storing the
large member of alumni in the web sites. The effective contribution of education to the society is observed based on the alumni's experiences during the university course, proving
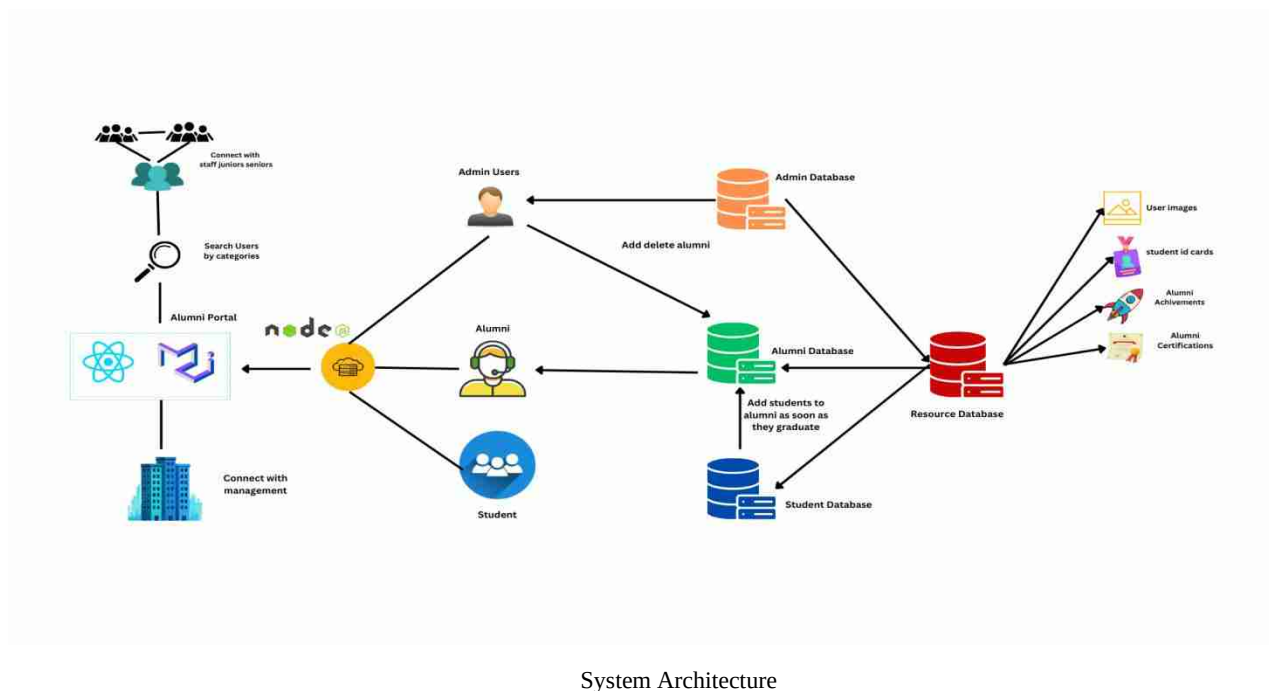the university name.

III) Existing system:

It is very tough to find and locate the old students of a particular institution and collect their current details using the university records. Searching a particular batch student is a time taking process. In the conventional process to maintain the alumni database is a very big task because it is difficult to get the details of the alumni manually. Updating student current profile is a tedious task. This does not allow efficient data management and retrieval process. A student willing to get information about others has to approach the university or has to search in social networking site which is often tedious. The information if at all available is not updated and often misleading.

IV) Proposed Work:

a. Problem Statement: -

Alumni Association platform - Alumni associations play a pivotal role in fostering lifelong connections between graduates and their alma mater, facilitating networking, mentorship, and philanthropic support. However, many alumni associations face challenges in maintaining engagement, facilitating donations, and providing valuable services such as job networking and tracking alumni success stories.

b. Architecture :-

System Architecture

V) Project Objectives:

i) **Enhance Communication :** Facilitate seamless communication between alumni, current students, and faculty through various channels.

ii) **Promote Engagement :** Increase engagement and participation in alumni events, reunions, and activities.

iii) **Support Career Development:** Provide career resources and opportunities for alumni, including job boards, mentorship programs, and career advice.

iv) **Foster Giving and Fundraising :** Encourage alumni to contribute to the institution through donations, sponsorships, or volunteer efforts.

v) **Provide Educational Resources :** Offer access to exclusive educational content, webinars, and professional development resources.

vi) Ensure Data Security : Protect the personal data of users and ensure compliance with relevant data protection regulations.

vii) Facilitate Institutional Connection : Strengthen the relationship between the alumni   association and the institution by sharing updates and involving the institution in events.

VI) Academic Objectives (Which new technologies need to be learnt for this project work): -

Web Frameworks: **React** or **Angular** for front-end development; **Node.js** or **Django** for back-

Database Systems: **MySQL**, **PostgreSQL**, or **MongoDB** for data management.

Cloud Services: **AWS**, **Azure**, or **Google Cloud** for hosting and scaling.

APIs: **RESTful APIs** or **GraphQL** for integrations.

Security: **OAuth** for authentication; **SSL/TLS** for encryption.

Mobile Development: **React Native** or **Flutter** for mobile apps.

UX/UI Design: Basic principles for designing user-friendly interfaces.

Data Analytics: Tools for analyzing and reporting user engagement.

VII) Requirement analysis:

a. Software Requirements -

01. Operating System : Windows / Mac OS / Linux distros
02. IDE : Visual Studio Code
03. Browser : Chrome / Firefox / Safari / Opera
04. API Validator : Thunder Clien

b. Hardware Requirements/ c. Operating System Requirement –

01. CPU's Processor : Min Pentium IV
02. RAM : Min 4 GB (Main Memory)
03. Processor's Clock Speed : 2.4 GHz
04. Storage Memory : Min 30 GB
05. Mouse : At least Trackball Mouse
06. Keyboard : QWERTY Keys
07. Monitor Display : IPS display
08. Network Speed : Min 2 Gbps

VIII) Advantages of the Proposed System:

Enhanced Communication: Easy updates and announcements.

Networking Opportunities: Facilitates connections and professional growth.

Event Management: Streamlines planning and promotions.

Directory Access: Connects alumni with one another.

Fundraising: Simplifies donations and campaigns.

Career Services: Offers job postings and mentorship.

Community Building: Fosters engagement and interaction.

Content Sharing: Allows updates and achievements to be shared.

Data Insights: Provides analytics for better decision-making.

Customizable Features: Tailored to the association's needs.

Accessibility: Connects alumni regardless of location.

Cost Efficiency: Reduces need for physical materials.

IX) Limitations of the Proposed System:

Technical Issues: Potential for downtime and bugs.

User Adoption: Not all alumni may use the platform.

Privacy Concerns: Risk of data breaches and misuse.

Maintenance Costs: Ongoing expenses for updates and support.

Integration Challenges: Difficulties with syncing with existing systems.

User Engagement: Keeping alumni active can be tough.

Scalability: Needs to handle growing user numbers effectively.

Digital Divide: Limited access for those with poor internet.

Security Risks: Vulnerable to cyber threats.

Content Moderation: Managing and moderating user content.

X) Future Scope:

Profile Management: Personal and professional profiles for alumni.

Networking Tools: Connection requests, messaging, and groups.

Event Management: Event creation, registration, and updates.

Directory: Searchable alumni directory with contact details.

Fundraising Tools: Donation forms and campaign tracking.

Career Services: Job listings, career advice, and mentorship.

Content Sharing: News feeds, achievements, and updates.

Discussion Forums: Groups and forums for discussions and collaboration.

Analytics and Reporting: Insights into engagement and activities.

Customizable Features: Tailored functionalities to meet specific needs.

Security and Privacy: Data protection and user privacy controls.

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