



Next Generation Web for Alumni Web Portal

Marmik Patel, Devangi Rami^(✉), and Mukesh Soni

Department of Computer, Smt. S. R. Patel Engineering College, Unjha, India
marmikpatelmel3398@gmail.com, devangi28398@gmail.com,
soni.mukesh15@gmail.com

Abstract. At some point, the understudies have insufficient information to proceed further in their career, so getting right exhortation from experienced individual is vital which will be accomplished by establishing an online alumni interface. With this the alumni can communicate to the students regarding job opportunities and the students can share their department activities to the alumni. The proposed system has the dynamic architecture and less static content, which can empower the full duplex association between all graduated students and understudies. This paper portrays how the system will function and collaborate the graduated class with the present understudies.

Keywords: Login · Chat · Database · Smart connect · Post · Placement · Alumni · Dynamic architecture

1 Introduction

Now a days alumni are main part of any institution and Alumni web portal provide a common platform to connect the alumni with their institute. Alumni website is created for the students that have graduated from the Institution. It allows former students to take advantage of the benefits and services that Institution offers after graduation [1]. In current scenario, the database of Alumni is maintained by college which is static. Due to this reason, the real time information of alumni is not present on any central platform. In this way, there is a need of an application which can keep subtleties of all the college graduates continuously. Alumni information will be stored in the database of server which will be accessible through web portal [5]. The goal of Alumni web application is to permit old and new undergraduates of the college to connect with one another. This enables understudies to think about one another and their present exercises. This entrance features the element of correspondence, which will empower the present understudies to interface with the graduated class of the school for getting different updates on current industry patterns, Internship opportunity, supported ventures and different referral opening in the corporate world [6]. This portal will serve the reason for incorporating every one of the partners of Institute, for example, Alumni, College understudies, Faculties to profit the direction and information sharing on different areas.

2 Literature Survey

2.1 IIT Bombay Alumni Association

Landing page of this portal is simple and sober. The principle page has numerous route joins. Highlights of the news, projects, events, jobs, alumni story are present in landing page and its detail portrayal is accessible specifically page. Landing page likewise demonstrate the block of fundraising projects and details of projects. It also displays the amount they have raised. At the home page highlight of almost all the features like, Events, News, Alumni stories, Alumni needs, Jobs, are displayed into the card structure. The Facebook and twitter feed are also displayed on the main page. This portal has a one nice feature in which student can write some problem with their pictures and post it to the wall and after that the graduated class who has some plan to take care of this issue can speak with that student and help that student to take care of the issue. User can search the alumni across the world and explore them in the map. Initiatives page provide awards and scholarship. Post page provide post stories. Also post new letter and alumni needs. Community page provide life membership and chapters. About us page has IIT Bombay Heritage Foundation and IIT Bombay Alumni Association. On the login page any user can login with '@iitbombay.org' ID, this is the better way of authenticate the user who are login to the website [7].

2.2 IIT Roorkee Alumni Association

On the landing page of this entrance a decent photograph exhibition of some mesh graduated class of IIT Roorkee is shown. Same as all the alumni portals this portal also have a events and news highlights on the fundamental page. We can explore the alumni on world map. Event page display upcoming events as well as past events. User can also create an event and register himself to some upcoming event. Memory page can contain alumni images and event wise group pictures and image related to college events. News can be uploaded in this site by staff and students. At the main page a list of features is displayed as a tab when the user clicks on the tab an information is display in the box besides the tab list. User can update their information directly from the home page. Highlight of news and events are displayed on the home page in a box. IIT Roorkee alumni association is handle by a team. Details of this team member is displayed at the end of main page [8].

2.3 PDPU Alumni Website

This portal has all the functionalities in their homepage like Schedule for present and upcoming occasions and an annual plan of university. Unlike all the alumni portal this portal provides some common features such as post, blog and events. It gives a remarkable element that include two topics one is student life and second is campus life. This website has a simple interface. It's a single page website whatever the content you search is available on the single main page. This portal contains more detail of college and their alumni. Alumni Recruiters arrange alumni lecture and mentorship.

In Job page student can decide campus interview on college. An Event page organize convocation and achievement about PDPU. An About us page can arrange annual plan and manage alumni team [9].

2.4 IIT Kanpur Alumni Association

On the primary page of this portal a photo of old alumni of IIT Kanpur is displayed. Same as all the alumni portals this portal also have features of events, news, letter, Academics, Alumni Search, Activities. highlights on the primary page is provide how we reached IIT Kanpur? Event page display upcoming events as well as past events. A separate alumni search page is available there in the portal to search each alumnus. In this portal Activity page has provided short courses, online courses, workshop and conferences. People section on the main page provide details about faculty, staff, research engineers. Research section maintain department facilities, central facilities and project. On the header section there is a link with a label 'Forum' that contain various form like leave form, scholarship form etc. Academics field contains details about undergraduate student, postgraduate student and courses. The gateway additionally has the subtleties of Awards and Honors, distribution and exhibition. IIT Kanpur has addresses subtleties with explicit day and time, Gallery with numerous pictures; contacts which demonstrate whom all are associated with this portal, lady graduated class tradition as independent for the lady just on the Home page. Also, Notice with featured shape is appeared better perception. Additionally gives the Donor Initiative Chance [10].

2.5 IIMB Alumni Website

At the main page recent updates, media, directory, jobs and gallery are displayed in highlighted form for better visualization. User can add post and event directly from the home page with one click. IIMB has blog, books and articles, birthday reminder, trending topics, jobs and gallery with many images. It gives the chance of donation, when alumni/student feels that they can help the establishment as far as gift, they can donate through payment gateway. Apart from all this we have observed the unique feature that IIMB provide unique alumni card to all the alumni. IIMB alumni portal has more efficient user identification and authentication [11].

2.6 Gathering Alumni Information from Web Social Network

This system proposes novel innovation to advise workers of undergrad tasks to gather data about semi-normally graduate class individuals on the web. For the most part, utilizing two alumni class pages as an arrangement of testing pages, the proposed innovation is twice as differing as the general procedures intended for different graduated class related social relationship information. This structure contains three modules and two repositories. The principal module called searcher, seek applicant pages to having a place with graduated class from an undergrad program from an interpersonal organization on the web. The second module, called Filter, that perform sifting, among the applicant pages recovered by the main module. The third module, called Extraction,

performs separating, from the pages sifted continuously module. The principal vault is called Pages Repository, stores the pages from the underlying arrangement of tests. The second vault is called Final Database, identifies with a database where the data on each previous understudy is secured [12].

2.7 Limitations of Community Web Portals: A Classmates' Case Study

In this paper average web-based interfaces supporting correspondence, information sharing and exercises of previous colleagues are examined and the confinements of existing network web-based interfaces are recognized. Existing web portals are experiencing an absence of adaptability, missing functionalities, information input overhead and scanty intelligence. Empowering the Semantic Web will make the network Semantic Web entries increasingly powerful and progressively receptive to the clients' real needs. Semantic work area has a high potential to conquer the constraints of the present network online interfaces [13].

3 Limitations

3.1 Drawbacks of Online Alumni Interface

- Alumni website does not provide necessary dynamic content.
- This system cannot maintain regularly.
- There is no chatroom for specific topic.
- No chat feature between student and alumni.
- Student record can't be easily navigating through the database.
- Existing system doesn't contain direct chat feature.
- It likewise comes up short on the moment answer for the issue which are identified with training and vocation.
- Existing alumni portals doesn't provide auto registration technique.

3.2 Comparison Between Existing Online Alumni System

Services	Existing online alumni portals				
	IIT Bombay	IIT Roorkee	PDPU	IIT Kanpur	Proposed system
Student query post	YES	NO	NO	NO	YES
Direct chat	NO	NO	NO	NO	YES
Alumni search	YES	YES	YES	YES	YES
Event	YES	YES	YES	YES	YES
Giving back	YES	YES	NO	YES	YES
Job post	YES	YES	YES	YES	YES
Article	YES	NO	NO	NO	YES
News latter	YES	YES	NO	YES	YES
Performance & speed	HIGH	HIGH	MEDIUM	HIGH	HIGH
Directory	YES	YES	YES	YES	YES

4 Proposed System Structure

The proposed system will be web based applications so it can be accessed by alumni and students with the help of admin. It enables quick and easy communications. Every user will be in charge of updating their very own data. Alumni will be able to organize meetings and find out about job opportunities by using this system (Fig. 1).

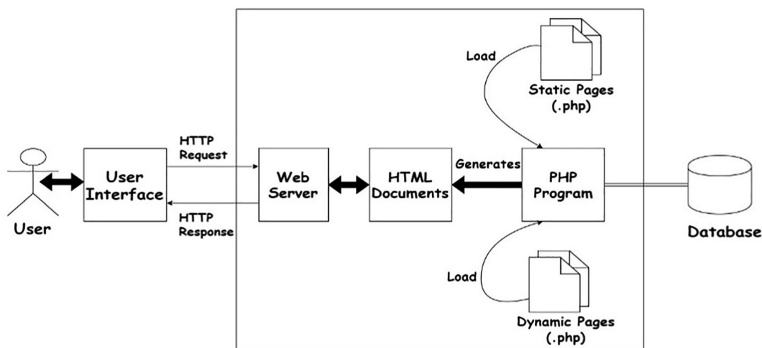


Fig. 1. System architecture.

Proposed system contains following modules:

4.1 Registration Module

There are three type of user who can resister themselves into the alumni portal, (1) Alumni (2) Student (3) Faculty. The administrator is in charge of keeping up data of understudies. Understudy/Faculty and graduated class can enroll themselves onto the entry after the endorsement from the admin, they can login into their record and can send mails, post questions, refresh their profiles and even scan for other understudy subtleties. To prevent fake registration, every registration request must undergoes through an authentication process. Once the user fill up the registration details and create an account he/she can login with their credentials but can't have full access to the features of portal until the admin verify and approve registration request.

4.2 Event Module

This module keeps up the data about different occasions that are directed by college. Warning updates are additionally part of the event module. The administrator can include, erase, alter and see occasion subtleties. Event supervisor can include or evacuate the data about workshops, temporary jobs, master addresses and so on. All the user can view the event details posted by the event manager and can create an event with specific title, date and description. Completed event are automatically deleted from the event page.

4.3 Query Post Module

The post module enables the users to post to what's at the forefront of their thoughts. Sharing and trading of perspectives and thoughts will be done here. Enquiries and questions on employments, entry level positions can be very much elucidated. The data can be posted division shrewd or might be presented on every one of the institute according to the prerequisite or the desire of the user. On the off chance that somebody has a response for the inquiry or a few perspectives in regards to the continuous subject it tends to be finished with the assistance of answer.

4.4 User Search Module

At whatever point user looks for the graduated class/understudies in the search bar, the database is questioned so as to recover the exact outcomes. We use PHP, MySQL and Angular Js for realtime searching data from database. User can apply a filter and sort information by city, name, branch, Enrollment number and so on [16].

4.5 Article Module

Faculties can post the articles about different innovations, advancement of an item or administration, mindfulness about social issues, data sharing about any subject or absolutely energy for composing. Each user can answer with remark on specific article. All other users can read the article and can comment on it. It is like a blog, through which one can spread the knowledge and awareness on specific topic [17].

4.6 Chat Module

The users can chat with each other for their benefit. The user can communicate privately to another user or alumni with the use of chat module and they can also start a conversation in chat room of specific topic. The user can see the enrolled individuals on the portal and as needs be talk with them. We use PHP, MySQL and Angular js with socket.io library for realtime communication. Every online user can see online and offline users list and start a conversation with particular user by clicking on the user name displayed in the online members list [20].

4.7 Placement Module

This module would also provide placed students details, company details and various reports which would be helpful for current students as well as alumni which managed by Placement cell or faculty. This module consists of two sub type, (1) On campus placement (2) Off-campus placement. In "*On campus placement*" the job details like, company name, post name, salary, experience, etc. are displayed and user can apply for it by uploading their resume and clicking on apply button. Once user apply for job his resume will be sent to the admin and he/she is eligible for campus interview.

On the other side, In “*Off campus placement*” job details like, company name, post name, salary, experience, etc. are displayed. Once user click to apply button it will be redirect to the google form, after submitting this form user can go to the company on specific date given by company and take an interview.

5 Methodology

5.1 Auto Registration

In majority of websites people have to enrol themselves by topping off the require subtleties that show up onto the enlistment page. So, this alumni portal will be providing the automatic registration of the students. When the student has carried the enlistment into the college, he/she needs to present their own and instructive subtleties to the college. From this data essential subtleties of that student will be in a split second transferred onto the Alumni portal (Fig. 2).

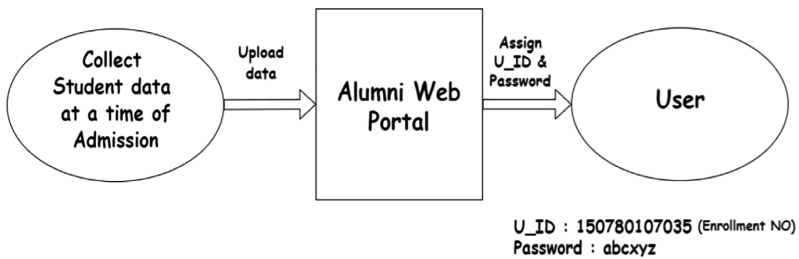


Fig. 2. Auto registration of the users

5.2 Personal Messaging

This portal will provide chat rooms with specific topic for different departments such as Electrical Department, IT Department, Mechanical Department, Computer Department etc. and furthermore give ongoing talk between any two users.

5.3 Auto and Manual Promotion

Auto advancement of existing understudies into graduated class. For example Understudy conceded in 2015 will move toward becoming graduated class in June 2019.

Pseudo code for auto promotion

student_course = year of graduation – year of entry
if (student_course = 4 years and month = June)
then
convert the status of user from student to alumni
else
keep the user in current role.

Pseudo code for handling the conversion of the failure student

if (user has drop year or detained)
then
send confirmation e-mail to verify the status of user
if (user selects “YES”)
then
keep the user in current role
else
convert the role of current student to an alumnus.

In case of failure of auto promotion user can change their role manually. User has to select specific role from the profile page and send the request to admin to change the role. Upon receiving the request admin verify the details of that particular student and change the role of that student.

6 Objective and Scope of the System

6.1 Objective

The aim and objective of alumni web portal are as below:

1. To establish and encourage healthy academic, social and cultural atmosphere among the Alumni and existing students.
2. To bring together all talents of the Alumni to help, all round development of the students and to support them in their academic and professional aims, objectives and activities.
3. Provide a communication way for exchange of ideas on academic, cultural and social issues of the day.
4. To bring together all the old students, existing student and the faculty of institution to share their experiences with each other.
5. To promote the campus placements through the old students working in reputed industries.
6. To get the valuable advices of the Alumni in the overall development of the college.

6.2 Project Scope

The scope of the project is to provide the one click access to the student's profile, job portal, and newsletter, Events, alumni activities, achievements, galleries and more. This helps alumni will re-engage themselves with the institution. The application enables understudies to enlist and after that look through the information dependent on various criteria. Understudies and graduated class can see the activity subtleties and apply for employment according to their fields, expertise and interest. The ideal inquiry of the current understudies will be addressed quicker. This keeps the understudies refreshed with the present updates and requests of the modern market. The understudies neither posting nor visiting can likewise quietly be refreshed with the ongoing in the college just as the market. Alumni portal would provide dynamic feature such as user status, chat rooms, personal chatting, Job posting etc. It also provide auto registration, auto and manual promotion.

6.3 Future Enhancement

- System can be updated in such a way that it can work on all browser.
- The portal can be extended for a larger user base beyond the Indian users.
- To simplify the work, it is necessary to build an android app.
- Add some social site features like timeline, friend requests etc.
- Provide a login to companies to benefit the administrations of this stage. By doing this the students will get more job opportunity.
- To include certain long range interpersonal communication highlights such as of LinkedIn.

7 Conclusion

This paper discuss about Alumni portal UI for the gathering of old students in and Institution. This web application is produced with natural UI components, which encourage simple to get to, comprehend and select different alternatives. This web application is created to permit the graduated class individuals in the organization to have associated and impart effectively. The alumni web portal will help the organization as well alumni association in keeping track of alumni interactions with the institution. It also allows the students to communicate directly with each alumnus, following their specific interests. This portal has been developed for increase the interaction and sharing of ideas among the students and alumni.

Acknowledgements. We would like to take this opportunity to thank our mentor Prof. Mukesh Soni for giving us all the help and guidance we needed. He also provided expertise that greatly assisted the research. We are really grateful to them for their kind support.

References

1. Subashini, S., Sowndarya, A.: Alumni interaction system. *Int. J. Comput. Sci. Trends Technol. (IJCST)* **5**(2) (2017)
2. Breckling, J. (ed.): *The Analysis of Directional Time Series: Applications to Wind Speed and Direction*. Lecture Notes in Statistics, vol. 61. Springer, Berlin (1989)
3. Gannod, G.C., Bachman, K.M., Troy, D.A.: Increasing alumni engagement through the capstone experience. In: 40th ASEE/IEEE Frontiers in Education Conference (2010)
4. Wegmuller, M., von der Weid, J.P., Oberson, P., Gisin, N.: High resolution fiber distributed measurements with coherent OFDR. In: *Proceedings of ECOC 2000*, paper 11.3.4, p. 109 (2000)
5. Jayavant, M., Kawle, S., Khergamkar, P., Gurale, S., Somani, R.: Alumni tracking system. *IOSR J. Eng. (IOSRJEN)* **8**, 80–86 (2018)
6. Arote, J., Chintamani, Y.B., Sonawane, S.A., Kadam, A.R., Pujari, V.D.: Online alumni portal. *Int. J. Res. Appl. Sci. Eng. Technol. (IJRASET)* **4**(III) (2016)
7. IIT Bombay Alumni Website. <https://www.iitbombay.org/>
8. IIT Roorkee Alumni Website. <http://iitraa.in/>
9. PDPU Alumni Website. <https://alumni.pdpu.ac.in/>
10. IIT Kanpur Alumni Website. <https://www.iitk.ac.in/>
11. IIMB Alumni Website. <https://iimbaa.org/>
12. Gonçalves, G.R., Ferreira, A.A., de Assis, G.T.: Gathering alumni information from a web social network. In: 9th Latin American Web Congress (2014)
13. Mercado, C.A., Genove, G.P.C.: Towards Overcoming Limitations of Community Web Portals: a Classmates' Example DERI – Digital Enterprise Research Institute, University of Innsbruck, Austria, and National University of Ireland at Galway, Ireland Anna V. Zhdanova
14. Aruna, P., Sharmila Begum, M., Maghesh Kumar, D.: Alumni smart connect through Android application. Special Issue Published in *International Journal of Trend in Research and Development (IJTRD)*
15. Kengar, V., Jadhav, S., Limkar, N., Ghade, M., Kawtikwar, V.: College communicator. *IJSRD – Int. J. Sci. Res. Dev.* **3**(01) (2015). ISSN (online) 2321-0613
16. Methods and systems for obtaining and presenting alumni data. <https://patents.google.com/patent/US20140101143A1/en>
17. System to attach automatically comment on the information. <https://patents.google.com/patent/JP2008520024A/en>
18. Career and employment services system and apparatus. <https://patents.google.com/patent/US20110231329A1/en>
19. Method and system for employment placement. <https://patents.google.com/patent/US7505919B2/en>
20. Message chat system, message chat information processor, message chat method, and program. <https://patents.google.com/patent/JP2003114858A/en>
21. Ellison, N.B., et al.: Social network sites: definition, history, and scholarship. *J. Comput. Mediated Commun.* **13**(1), 210–230 (2007)
22. Pawar, V., Date, S., Iyer, S., Narvekar, C., Shell, M.: Security mechanism in alumni portal. Department of Information Technology, Xavier Institute of Engineering, Mahim (W), Mumbai (2002)
23. Staab, S., Angele, J., Decker, S., Erdmann, M., Hotho, A., Maedche, A., Schnurr, H.-P., Studer, R., Sure, Y.: Semantic community web portals. *Comput. Netw.* **33**(2000), 473–491 (2000)

24. Gonge, S.S., Joshi, P.S., Kuche, P.R., Chopade, R.M.: Education technology used in education for making student outcomes of engineering graduates. In: International Conference on Advances in Computing, Communications and Informatics (ICACCI) (2017)
25. Brenner, P.R., Schroeder, M., Madey, G.: Student engineers reaching out: case studies in service learning and a survey of technical need. In: Proceedings of the 37th Frontiers in Education Conference. IEEE (2007)