Alumni Record System

A. B. KOLI[1], BHAGYASHRI KISHOR BAGUL[2], GEMINI VILAS PATIL[3], DIVYA VEDU PATIL[4], DEVYANI PRAVIN PATIL[5]

[1]PROJECT GUIDE, B.Tech. COMPUTER ENGINEERING, PSGVP MANDAL'S D.N. PATEL COLLEGE OF ENGINEERING, SHAHADA, MAHARASHTRA, INDIA

[2, 3,4,5]STUDENT, B.Tech. COMPUTER ENGINEERING, PSGVP MANDAL'S D.N. PATEL COLLEGE OF ENGINEERING, SHAHADA, MAHARASHTRA, INDIA

---***---

Abstract – *The aim of this project is to build an android application for student-alumni interaction in our institution. It represents use of database management for ease of access of student records. This application will be useful for the instituition to monitor present students and alumni. It will help the alumni to update their current status and get notification about ongoing college activities. The system provides a single platform to operate alumni data, to enable communication between alumni and the institution and provides great flexible features to keep track of the data.*

Keywords: android-application, database, monitor, communication

1. INTRODUCTION

We are formulating the best android application for alumni which will facilitate effective interaction platform through online chatting, profile viewing and personal messaging within three modules of the institute via Admin, Students & Alumni's. This portal will be providing direct contact of the alumni with the students as well as the faculty members. The desired query of the existing students will be resolved faster. It helps the students to keep themselves updated with the new demands of the market. This application will help our alumni to take advantage of benefits and services that the instituition is offering after graduation. Nowadays the alumni network is becoming very important in development of organization because of their potential that benefits instituition and students both.[8].

1.1 PROBLEM DEFINITION

The purposed of this method is to provide a platform where alumni's can not only communicate among themselves but also communicate with their juniors and organization. This application will be beneficial for the students of our instituite since they are engaging with their seniors and can explore opportunities and career related guidance. The admins can communicate with current students and alumni through chat and can inform them about any recent update about the institutions. The system is not only useful for communication and admin report but also it allows the students to organize the events. All the upcoming events organised in the institute will be displayed within the event manager section and thus the user will be recalled about the events happening so that they would not miss any upcoming events.

2. LITERATURE SURVEY

2.1 EXISTING SYSTEM

In the past alumni engagement intended solely for fund raising and other advance activities. Our previous system was a computerized system where separate databases are maintained in the form of excel sheets. But it is a very time-consuming process as well as maintaining all the records in the form of excel sheets is a complex process. If someone wants any kind of information, they will have to search through all the records. It was not accessible to multiple users. Presently some of the alumni associations are completely independent of their parent institution, even though some of the members are interacting with each other they are having very limited resources for their interaction with their instituition. Currently the alumni portal was developed using static page rather than of dynamic page. In the existing system most of the work is required to be done manually and since human being is involved it is highly prone to error. Our current alumni portal is accessible only to the old students and not to the current students. It is a measure problem for information to flow and to provide guidance to the existing students. Currently the instituition is maintaining a separate portal for present students.

2.2 DISADVANTAGES OF EXISTING SYSTEM

- It can't be used frequently

- Data can be loss

- This system not possible to maintain on regular basis

- There is no security authentication feature

- This is a huge process to maintain all user details

- The current system is not completely computerized and manual system in entering students and faculty data and managing it.

2.3 PROPOSED SYSTEM

Our proposed system is an android-based app which can be acquired by alumni's and other existing students by means of internet. It enables easy and fast communication between admins and users. Each user will have to update their own profiles. Admins and alumni can organize events and find jobs in different sectors in placement section. It also provides security authentication for every user.

As we know that the current system is android application so it targets the wide range of users where they can access the system from anywhere with the help of internet and use it for their instituition purpose. The process of execution of this current application is very simple and also it will help to reduce the load on admin side in maintaining any kind of future updates done by users. It had many features such as security verification, placement, student-alumni registration, chat, event section and many more.

2.4 ADVANTAGES OF PROPOSED SYSTEM

- It is very simplest way to managing the vital data in database

- This system has security credentials

- This system provides a single platform for robust network where all the people connected to the university at a single place allowing interactions, exchange of ideas and other information

- The system is an application for managing and accessing Alumni data on regular basis.

3. SOFTWARE PROCESS MODEL

Each piece of software generated is unique and necessitates a unique SDLC strategy depending on internally and externally considerations. We chose the Waterfall Model as our development system design because

- It works effectively for tasks with well-defined constraints

- It has sequential nature.

"A waterfall model, each phase must be completed before the next phase can begin and there is no overlapping in the phases Waterfall model is the earliest SDLC approach that was used for software development. The waterfall Model illustrates the software development process in a linear sequential flow; hence it is also referred to as a linear-sequential life cycle model".

The sequential phases in Waterfall model are:

- **Feasibility Study:** A feasibility study is carried out by taking into account elements like development cost, operating reaction time, development time, accuracy, and dependability.

- **Requirement Analysis:** During this stage, all possible needs for the system being developed are captured and documented in a need project identification.

- **System Design:** This step examines the needs requirement specifications from the first phase and creates a suggested system. System design assists in the creation of architectural frameworks as well as the documentation of hardware and system requirements.

- **Implementation:** The system is first built as a series of small programmers known as units, which are then merged in the next stage using insights gained during the design process. The process of building and testing each unit for its functionality is referred to as unit testing.

- **Integration and Testing:** Following the testing of each module, all of the units created during the implementation phase are merged into the systems. After the system has been integrated, it is verified for any defects or problems.

- **System deployment:** Once the functional and non-functional testing is done, the system is deployed on the client side or released to the public.

- **Maintenance:** There are a number of issues that develop on the user side. To resolve these issues, updates have been given. In addition, further versions of the software have been released in order to improve the software.
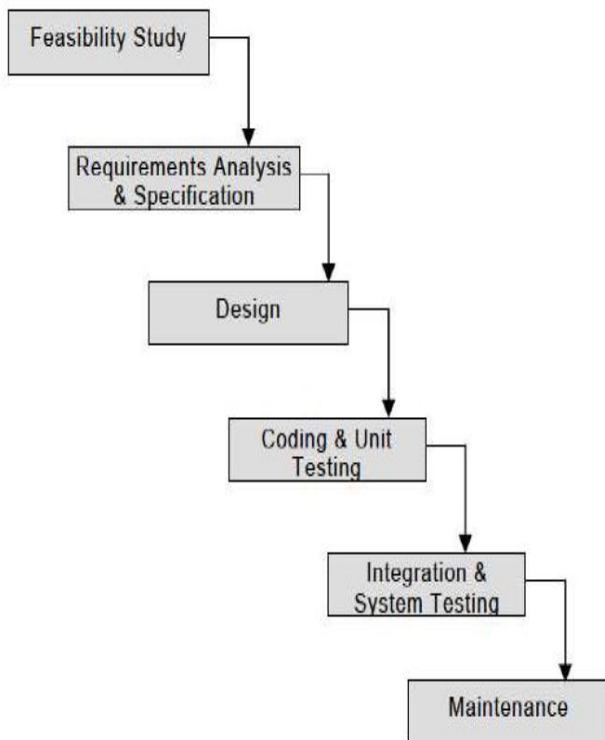
Figure 1. Classical Waterfall Model

4.OBJECTIVE

- One of the main goals of this system is to maintain a database of all college graduates.

- To develop, promote and fellowship among the students, professors, senior faculty of the college.

- Providing a platform for students to organize seminars, professional programmers, and events.

- To give permission to colleges to verify and authenticate their alumni.

- Accommodate and deliver information sheet and registration for alumni.

- Analysis of all graduates and helps faculty to sort the alumni data quickly so it saves time.

- To verify the discrepancy between graduates' knowledge and skills and the industry's requirements for qualifications.

5.METHODOLOGY

As this is a fully android based application, it can be either frontend or backend.

A] Frontend: Frontend technology is a client-side application which provide the user interface i.e., visual aspects. Generally, it contains a designing part.

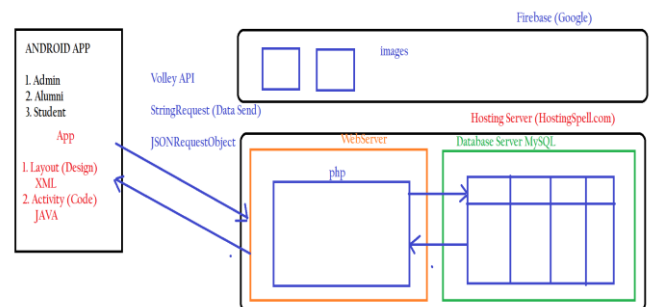 **Exposures:** HTML, CSS & Java Script.

B] Backend: This backend technology communicates the server-side application and database along with that manage the logic control section (generally perform action related part).

 Exposures: PHP, JavaScript, MYSQL, Java

Along with that, we used xml for design purpose whereas java is used for operation purpose.

6. ARCHITECTURE

MVC architecture for our android application are as given below:

This is an android-based application containing 3 modules are as follows:

1.Admin: Admins can access a separate admin portal, along with importing and exporting data also give permission to approve or reject.

2.Alumni: Alumni itself register into system & then verify by admin and after that access all the functionality of the system.

3.Student: Student also register into system & then verify by admin and after that access all the features such as view & update their profile, registration and many more.

 This app categories in two sections:

 1.Layout (used for designing purpose, it contains all xml files)

2.Activity (used for logic or operations purpose, it contains all java files)

Server Side: The system is hosted on hosting spell server and consists of following two parts:

1. Web Server: It contains all the PHP files related to our system.

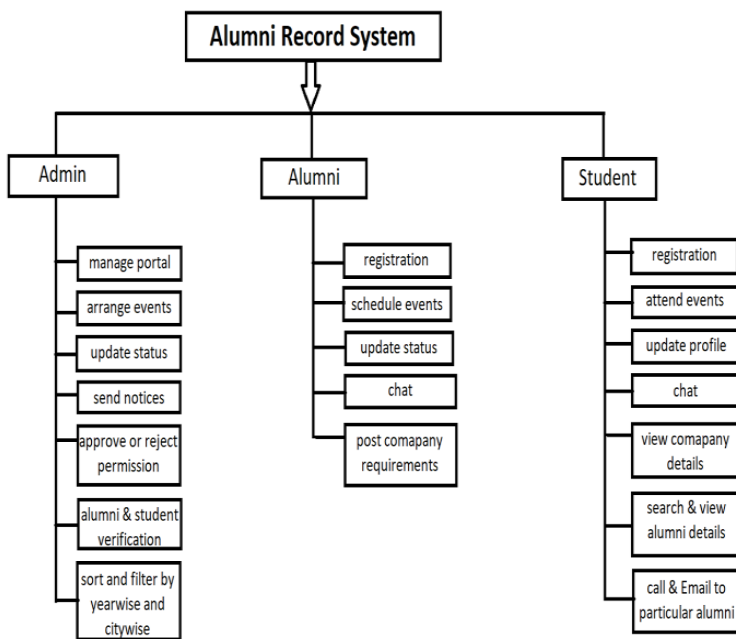2. Database server: It contains all schemas related to our system.

Also, we use firebase from google server for image storage.

Flow: Android application sends data to the web server in stream bits format after that from web server it will transfer to the database server and then it will go back and now that data receive to the web server and then again receive to our application and then application responds accordingly.

For sending and receiving data, we use volley library within that there are 2 classes:

1. String Request (for sending data)

2. JSONStringObject (for data retrieving)

7. FUNCTIONAL BLOCK DIAGRAM

Admin can manage the whole portal, arrange events related to company or placements, update their status & send notices, He can approve or reject permission made by student and alumni. After registration, the student and alumni verified by admin then successful registration

happened. Also, sort and filter students list by year wise and city wise for better managements.

Alumni register into the system, schedule events if required, update their status, resolve student queries through chat, post company requirement related to placements.

Whereas, Student also register into the system, attend events, update their profile, ask questions in chat section, view company details for placements and apply for them. Also, search and view alumni details along with features like calls or sending mails to respective alumni.

8. FUTURE SCOPE

While this project has delivered the fundamentals for a system to keep track of students, many further enhancements are desired for greater authority of the information.

1]The system would be an extended system by which build this application at university level along with that funding section for institution purposes. Also add a feature where user can logout from the system whenever they want.

2]Passed out students are promoted as alumni automatically, along with that their status are also updated automatically like 'left' or 'graduated' after completing their graduation and for that we required AI based system.[8].

3] Build a verification system for alumni as well because if any alumni share some wrong information related to placements or something else So admin can block that particular user using that feature.

4] Add search option in alumni and student section because in current system when n number of entities are added it is very difficult to find particular one, we can't scroll the page n times for that we required search option in this application.

5] When any event are organised students get notification in their mobile notification area or via email as well. Also, admin has choice to approve or reject permission which are coming from students and alumni.

6]Setting personal information private or public: Some people would not like the idea that their information could be seen by everybody that is a member of the alumni application. That is why it would be useful to be able to set some information, such as contact details as private or public.[7].

9. CONCLUSION

The relationship between graduate students and the college can be smoothed down with the help of this application. In

our institution, this engagement creates a strong network. Alumni can share their knowledge and materials with their juniors using this technology, and scholars can clear their doubts in any area and take benefit of the other features provided by this application.

If the Department needs information about alumni in an emergency, they can access it quickly by using this application.

ACKNOWLEDGEMENT

REFERENCES

[1] A. C. Z. Lousada and G. d. A. Martins, "Alumni as a source of information to management accounting courses (in Portuguese)," Journal of Accounting and Finance, vol. 16, no. 37, pp. 73–84, 2005.

[2] Centralized Alumni Management System (CAMS) - A Prototype Proposal Aritra Mukherjee1, Adrita Roy2, Manish Kumar Lath3, Arnab Ghosal4, Diganta Sengupta5

[3] Alegado, L. (2015). Online Alumni Information System Satisfies Alumni in an Educational Institution in Cebu City, Philippines. JPAIR Institutional Research ISSN2244-1824

[4] D Yang, Research on Alumni Resources' Effect in Colleges and Universities Development. Value Engineering, 8(2013)975-975 (in Chinese).

[5] N Rubens, M Russell and R Perez, J. Huhtamaki, Still, K., Kaplan, D. and Okamoto, T. Alumni network analysis. Global Engineering Education Conference, (2011) 606-611.

[6] Davidson-Shivers, G. V., Inpornjivit, K., & Sellers, K. (2004). Using alumni and student databases for program evaluation and planning. College Student Journal, 38(4), 510. Retrieved on May 25, 2013 from https://goo.gl/Ghonjl

[7]   https://www.irjet.net/archives/V8/i5/IRJET-V8I5468.pdf

[8]   https://www.irjet.net/archives/V6/i11/IRJET-V6I1137.pdf

BIOGRAPHIES

	A.B. Koli, Guide, B. Tech Computer Engineering, PSGVP Mandal's D.N. Patel College of Engineering
	Bhagyashri Kishor Bagul, Student, B. Tech Computer Engineering, PSGVP Mandal's D.N. Patel College of Engineering
	Gemini Vilas Patil, Student, B. Tech Computer Engineering, PSGVP Mandal's D.N. Patel College of Engineering
	Divya Vedu Patil, Student, B. Tech Computer Engineering, PSGVP Mandal's D.N. Patel College of Engineering
	Devyani Pravin Patil, Student, B. Tech Computer Engineering, PSGVP Mandal's D.N. Patel College of Engineering