Software requirement specification

1. **Introduction**

This document includes the software requirement specification(SRS) of the system. The overall working of the system and the requirements of the system is understood by this document. The alumni management system is designed to help the college to gather their alumni graduates in one platform.

In this system the alumni must register by making the standard or premium payment and then all the personal details must be entered so that the admin of the system can verify the registered alumni account to be true. Once the alumni register the admin will verify the account to know whether it is alumni of their college. If the account is genuine then admin activates the account of the alumni and the alumni can login using the valid login credentials.

Once the alumni logs in to website, alumni can view the various events that can place in the college. The admin or the staff of the college portal can conduct the various training programmes for the alumni graduates. The alumni can view them and can take part in these training sessions. The alumni who is settled in a good company can post job openings of different locations and the other alumni who is in search of job can view these job openings and can apply for those job.

The alumni can donate the fund amount they wish to the college management for the development of their college. They can also view the total collection of fund as well as the utilised fund amount. This is the most important part of the system. The alumni can view the various photos of the college in the gallery. The alumni can provide their suggestions to the college management in the feedback panel.

The staff must register to the portal to use the website and the admin must verify and activate staff account to make available for the staff to login to the webpage. The admin monitors the staff and the alumni and manages the entire activities of the website.

The system uses MySQL database hence all the records of the system will be stored in the MySQL database server. Whenever the users of the website view any data in webpage, the data from the database is fetched and made available to the users. Hence MySQL database server plays the prominent role in the working of the system.

**1.1 Purpose**

The purpose of developing Alumni management system is to provide the platform for the alumni graduates to be in contact with their college. This also helps the college management to keep track of all the students passed out from their college. The college will know the career details of the alumni and it’s a proud feeling for the college to know that their students are well settled and built their career successfully. This system helps the college management to collect fund for their college and alumni graduates to be in contact with their friends who reside in various different places in the world.

**1.2 Project Scope and Product Features**

The features of this system are as follows:

* The alumni who wish to login to the website must make the registration by making the payment as registration fees. The alumni can login only when the admin verifies the account and activates it.
* The admin must not only verify the alumni; admin must also verify the staff also when staff makes the registration by entering their personal details.
* The admin and the staff can conduct the training programmes for the alumni by mentioning the training topic and the schedule date and time. The alumni can view the training schedules and take participation in the scheduled training sessions.
* The alumni can donate the fund for the development and betterment of the college and also the alumni can view the total fund amount collected by the college and the alumni can know for which purpose the collected fund has been utilised. The admin must update the collected and utilised fund details in the website which is available for the alumni to view.
* The alumni can add the job postings of different locations under various different fields. Other alumni graduates can view these job posts and can apply for the job if they are in search of it.
* The admin or the staff can post the details of the various events that take place in the college and the alumni can know about these events.
* There is a photo gallery where the admin can post the photos of the events that took place in the college and the alumni can have a look at those photos.
* The alumni can have their suggestions and feedbacks regarding their college in the feedback panel of the website. This helps the college management in developing the features of their college.

## Definitions, acronyms, abbreviations

* SRS – Software requirements specifications.
* PHP - A server side scripting language.
* MySQL - The database that will be used for this project.
* http – Hypertext transfer protocol
* www – World wide web

## References

* Software engineering by Pankaj Jalote
* www.w3schools.com
* [www.tutorialspoint.com](http://www.tutorialspoint.com)

**1.5 Overview**

The SRS document includes the overview of the alumni management system. It includes all the description about the proposed project. All the requirements of the system such as perspective of the system, interfaces and characteristics of the system is included in the SRS document. All the specific, external, functional and non functional requirements are met in this document.

1. **Overall description**

Overall description in the SRS document includes the product perspective, system interfaces of the website, user classes and characteristics, operating environment of the system, various design and implementation constraints and all the documentation and the requirements are specified.

**2.1 Product perspective**

The proposed project alumni management system helps college management to connect to its alumni graduates and helps in collecting fund to the development of the college. The perspective of the product is that the alumni records which were in paper mode is now made available online and all the alumni can contact their fellow batch mates through this webpage.

**2.2 System interfaces**

The website which is designed uses the internet and also works without internet for some of the functionalities. The interface used in the system communicates with all the users of the system.

**2.3 User classes and characteristics**

The characteristics of the system includes that the administrator of the system must have the complete knowledge about all the technology used in the system. The users of the system must have the knowledge of the internet, computer and some features which are required to use the system.

**2.4 Operating environment**

The proposed system can be executed in most of the browsers such as Chrome, Firefox, Microsoft edge, internet explorer etc.

The project uses xampp control panel and Apache server to run the project and MySQL server is used to create and manage the database.

**2.5 Design and implementation constraints**

The system is designed using the PHP, HTML5 and CSS3 coding and all other documentation is maintained. The system design follows the problem solving methodologies of the software system such as problem definition, design, coding, testing and debug and document processes are followed.

The database is designed using the MySQL server and the database is connected to the project in the coding using the SQL queries.

**2.6 User documentation**

Documenting the designed project is necessary for the understanding of the user. Any system which is developed must be documented as it is required for the future user to know the deep knowledge of the system.

The user document acts as a manual for the future users as it helps them to know the details of the system as well as to maintain and modify the system in the future.

**2.7 Assumptions and dependencies**

The development system will work without any complexity in any of the platform such as in mobile phones, laptops, desktops in any remote areas.

The necessity for the project is the continuous supply of internet.

Since the system works under several servers for project as well as database, must make sure that the servers are on throughout.

1. **Specific requirements**

This section includes the requirements of the system such as external, user and various functional requirements which are to be followed by the system design to assure the quality of the system.

**3.1 External interface requirements**

There are several features in this section which gives the detailed description of the system requirements. It concentrates on the various interfaces of the system such as user interface, hardware and software interface and communication interface.

**3.1.1 User interface**

This includes the users of the system. The system is used by three of its users.

* **Admin**: The one who manages the entire website. Admin monitors all the activities that happens in the webpage and also monitors the alumni and staff accounts.
* **Staff**: The staff is verified by the admin. The staff doesn’t not have all the authorities as the admin. But staff is also the one user who has prominence in the system.
* **Alumni**: Alumni is the old student of the college who has to register to the website to use the system. Alumni can donate fund as well can post the job offers and can view the activities of the college.

**3.1.2 Hardware interface**

* **Operating system:** Windows XP or higher
* **Hard disk:** 40 GB hard disk
* **RAM:** 1 GB RAM
* **Processor:** Intel Pentium or above

**3.1.3 Software interface**

* XAMPP 1.8.2
* Apache server
* PHP 5.4
* MYSQL server 5.5
* Adobe dreamweaver CS 6.0

**3.1.4 Communication interface**

The only source of communication of the system is internet. The system uses internet to keep the website active as well as all the users of the system can use the system by having the internet connection in their respective devices.

**3.2 Functional requirements**

This includes the features of the various modules of the project.

* **Admin module**: Admin is the one who manages the entire website and also has the full authority over all the activities of the Alumni management system. The admin monitors the other users of the website.
* **Alumni module**: Alumni is the most important user in the system. The alumni must register to the portal by making the payment. Once the admin approves the alumni account and activates it the alumni can login to the account using valid login credentials.
* **Staff module**: Staff must register to the portal and can login only after the approval of the admin. Staff can post the events that happen in the college and also the staff can conduct the training programmes for the alumni graduates.
* **Job posting module**: In this module, the alumni can post the job and those alumni who are in search of job can apply for the job openings posted by the alumni. The admin and the staff can also view these job postings.
* **Fund module**: In the fund module, alumni can donate the fund they wish. Alumni also has the authority to know the total collected fund amount as well as the fund amount utilised by the college management. The admin must update these details as to make it available for the alumni.
* **Training module**: The admin or the staff must post the training programmes for the alumni. This includes the training topic, training date and venue, and the training fees details. The interested alumni can take participate in the training sessions on the scheduled date.
* **Event module**: Event module includes the events such as the various activities that take place in the college. The staff or the admin can post the college event details here so that the any of the alumni who wishes to visit can attend the program.
* **Gallery module**: Gallery module includes the photos of the college events. The admin or the staff can post these records and the alumni can have a look at the college function photos in this module.
* **Feedback module**: The alumni can give their suggestions and comments regarding the college management and activities of the college here. The admin can view the feedback and take actions on the suggestions.

1. **Other non-functional requirements**

**4.1 Performance requirements**

* The users all over the world can use the system at any time since it is available 24/7.
* The response from the system is quick enough as the web servers used perform at a good speed.
* Since the system is independent of the device, users can access the system anywhere from the world using any device provided they must remember their login information.

**4.2 Safety requirements**

Since the development system is the website there is no necessity of the safety requirements.

**4.3 Security requirements**

The system is managed only by the admin and staff of the college. The admin as well as the staff are authorised members of the system and have a valid login credentials.

The other user of the system is the alumni, since the alumni is verified by the admin and only then the account is activated there is no chance of misuse of the system by any other intruders.

**4.4 Software quality attributes**

Since the system doesn’t operate well in the absence of internet, the breakage of internet would cause the system not function. In such scenarios the system will notify the users of the website to resume their work once the internet connection is back with speed.