
SOFTWARE REQUIREMENTS SPECIFICATION

for

ICT ALUMNI WEBSITE

Version 1.0

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1 Introduction

1.1 Purpose

This Software Requirements Specification document will offer a comprehensive explanation of all features and specifications for the "ICT Alumni Website" for the students of the "Faculty of Science and Technology" at the "Bangladesh University of Professionals." This document will also highlight the objective and declaration of scope for the development of the prototype and the final product. This article is intended for former students of the Science and Technology faculty who will utilize and assess this system. This paper is beneficial for developers and other team members, including the testing team. In addition, it will function as a resource for other students.

1.2 Intended Audience and Reading Suggestions

1.2.1 Audience Definition

This document is intended for the developers who will be managing the whole project and update or develop it. Again, our client will also have access to this document to ensure their satisfied needs in short. For better understanding to the whole project, project managers, users, testers, documentation writers can go through this document. Again, in order to have a good sell to the project, we would have the marketing team and concerned developers involved in this documentation. This SRS document has a proper flow of our continuous work in and out. At the very overview, the aim, team, proceedings are hopefully understandable very neatly.

1.2.2 Acronyms and Abbreviation

CI	Configuration Item
CIS	Computing and Information Sciences
HTML	Hyper Text Markup Language
IEEE	Institute of Electrical and Electronics Engineers
QA	Quality Assurance
SCMP	Software Configuration Management Plan
SDD	Software Design Document
ISBN	International Standard Book Number

1.3 Project Scope

This website is mainly created for the proper update to the concerned clients who are the alumni of ICT department. The website may contain the details, programs, works, memories of the concerned authority and enlighten everyone related to it. Also, the prototype is shareable or can be sold to other related clients and authority who are trying to make such websites. The system's database will allow for the tracking and visualization of requests, access, as well as the storage of changes and the counting of delivered and waiting requests. The goal is to reach to the client satisfaction level and provide a well-organized website.

1.4 References

- IEEE 830-1998 standard for writing SRS document.
- I Sommerville, Software Engineering, 8th ed, Addison-Wesley, 2007
- The Basics of Software Quality Attributes
- SRS of Web Accessible Alumni Database, Software Engineering Research Team, Faculty of Automatic Control and Computers, Polytechnic University of Bucharest

2 Overall Description

2.1 Product Perspective

Alumni Website is an alternative to the conventional paper-pen method for keeping record about various information of the Alumni.

2.2 Product Functions

2.2.1 Administrators

1. The Admin has full-fledge control of the website.
2. The Admin should be able to insert, delete and modify any data.
3. The Admin should be able to see all the activities of the users.
4. The Admin should be able to manage all the financial transactions related to donations and other funding.
5. The Admin should be able to get information about the users.
6. The Admin should be able to send any notices or launch any events.
7. The admin can edit any information about the users.
8. The Admin should be able to approve any post made by the users.

2.2.2 Normal Users

1. The Users should be able to create a profile.
2. The Users should be able to insert any information or remove any information from their profile.
3. The Users should be able to go through other user's profile.
4. The Users should be able to sort users by providing a criteria.
5. The Users should be able to contact the admin directly.
6. The Users should be able to make financial transactions such as donations or fund collections.

7. The Users should be able to post any notices, news, events or any help post.
8. The Users should be able to upload any photos in the photo gallery.
9. The Users should be able to see the CVs' of other users

2.2.3 Operating Environment

The Alumni Management System is a website and shall be able to operate on popularly used browsers such as Google Chrome, Mozilla Firefox, Microsoft edge with JavaScript and Flash Player.

2.2.4 User Characteristics

1. The Users of the website are the alumni of a University/ Department/Organization and the administrators will maintain the website.
2. The Users should have basic knowledge about internet browsing and computers.
3. Administrators should have basic knowledge about the website and should know basic troubleshoots if any problem occurs.

2.2.5 Design and Implementation Constraints

1. Information about the Users must be stored in a database that is accessible from the website.
2. MS SQL Server will be used as our SQL Engine and Database.
3. Users must use correct Username and password to login.
4. Users has to access the website from any mobile devices or any computer having internet connections.
5. The system will run 24 hours a day.

3 External Interface Requirements

3.1 User Interfaces

Sign Up: If a user is not yet registered on the website, he or she can only view the website's announcements, about page, and photo gallery. That person's access to the website will be specific. He or she must register on the website by providing the required information in order to gain full access.

Sign In: A user will continue using the website as an unregistered user before logging in. He or she must sign in to the website using an email address and password in order to have full access. A failure to sign in error message will be displayed if any of these details are provided incorrectly.

Search: A user who has signed in can search for data such as blood groups, resumes, details about other alumni, and many other things.

Profile: Every user will have a unique profile, and that profile will contain all of their information and a history of their activities. A user's profile can also be modified by the user. Three different profile types will be available. When registering on the website, users can choose the kind of profile they want to create. Teachers will have the opportunity to create a research profile, job holders will have the option to make an industrial profile, and businessmen and entrepreneurs will have the choice to construct their specific sort of profile.

Access: A user who has signed in can access the contact diary, the blood bank with the necessary information, the cv bank and notice section, the publication section, the fund collecting area, and the event section. They can also perform any actions they see appropriate in these sections.

Admin Panel: The notice part, executive committee area, and photo gallery section of the website will all be updated by the admin panel. Additionally, it will enable users to publish content on the website, make any kind of donation, and update the information in their profiles. When a user makes a donation of any type, the admin panel will confirm it and add this history to their profile.

3.2 Hardware Interfaces

To visit the website, a computer only needs to meet the very minimum requirements. To run the website, no additional specialized hardware is needed.

3.3 Software Interfaces

1. Any browser will work to access the website.
2. An operating system.

3.4 Communication Interface

1. TCP/IP model.
2. World Wide Web (HTTP)

4 System Feature

4.1 Functional Requirements

4.1.1 User

Sign Up: Unregistered users must register on the website in order to have full accessibility. While registering, they need to provide the required information.

Sign in: A user will sign into the website by providing the correct email and password.

Profile: Users can view their activity history and edit their personal information in their profile.

CV Bank: User can submit their cv in the cv bank by following the specified naming and file format.

Contact Diary: In the contact diary, some general and detailed information about the alumni will be displayed. These details will be gathered at the time of registration. A registered user has access to the contact diary and the provided information regarding other alumni.

Fund Collection Section: The organizer committee will collect funding from the alumni for any kind of event in this section. Basic information will be taken when collecting funds, this history will get stored in the user profile and a fund receipt confirmation is manually provided to the user.

Blood Bank: An alumni's blood groups and history of blood donations will be shown by the blood bank. The list of available blood donors can be obtained by other alumni using these details. When blood is needed, a user may also fill out a form in this section to donate blood.

Donation Section: The organizing committee can gather donations for the underprivileged in this section during any natural disaster or any national crisis. Additionally, a notification will be included in the notice section if someone needs money for an emergency, such as a medical issue. For that person, users may donate money. The user will fill a form by providing information in the donation area. Donor will transfer funds to the bank account or agency number specified in the form. Following form submission, the database will be updated with the donation history and the history will be displayed

in the user profile. Additionally, the admin panel will manually send the donor a confirmation email.

Publication: The annual magazine that is produced by collecting writings and other contributions from alumni will be found in the publication section. An option will be created for the user in this part to submit their contents for the magazine after the announcement of the yearly magazine publication is made.

CV Bank: Alumni may upload their resumes to the CV bank. The cv must follow a specified naming pattern and file format. This will be required to find applicants' resumes for a particular position. There will be various sections in the CV bank that will contain the resumes of individuals from various fields. The user can choose whatever field they want to submit their resume in.

Events: If a specific alumnus wishes to plan an event, they can post about it and set up a voting system in this section to gather the alumni's feedback on the event. The next steps in organizing that event can be taken based on the alumni's opinions. But before post and voting system needs to be approved by the admin panel.

Search: Alumni can use this option to search the information they need on the website.

4.1.2 Admin

Login: Admin will have to login to the admin panel of the website to perform their tasks.

Notice: The administrators will post any announcements in the notice section.

Photo Gallery: The admin panel will upload pictures from various alumni events and activities to the photo gallery.

Executive Committee: This section will display the most recent and previous information about the executive committee, and the admin panel will update it.

About Us: The administrators will also maintain this page. The page will provide information about the website.

4.2 Response Sequence

1. When a user registers on the website, their information is entered into a database and a personal user profile is established for them.
2. Some specific information is taken from the database and displayed in the contact diary section.

3. The user's provided email address and password are used to validate their login when they submit them to the website. A text error will be displayed if any of these don't match. If it matches, they will sign into the website and be given special access.
4. When a user donates money, blood, or funding, they must submit a form to complete the process. They must fill out the form completely and submit it. If they do not complete all the needed sections, the form won't be submitted. Based on the data, the contribution history will be updated in the database and their profile, and their blood donation history is updated in the blood bank. The admin panel manually verifies whether the payment was received or not, and then they email the user to confirm.
5. The post initially goes to the admin panel when a user wishes to launch an event and create a post about it. If it meets a few prerequisites, the administrative panel will approve it. The post will thereafter be posted in that section.
6. The admin panel receives user-submitted content for the annual magazine or publication. Following the selection procedure, a magazine featuring the chosen items will be created and published in the publication section.

4.3 Behavioral Requirements

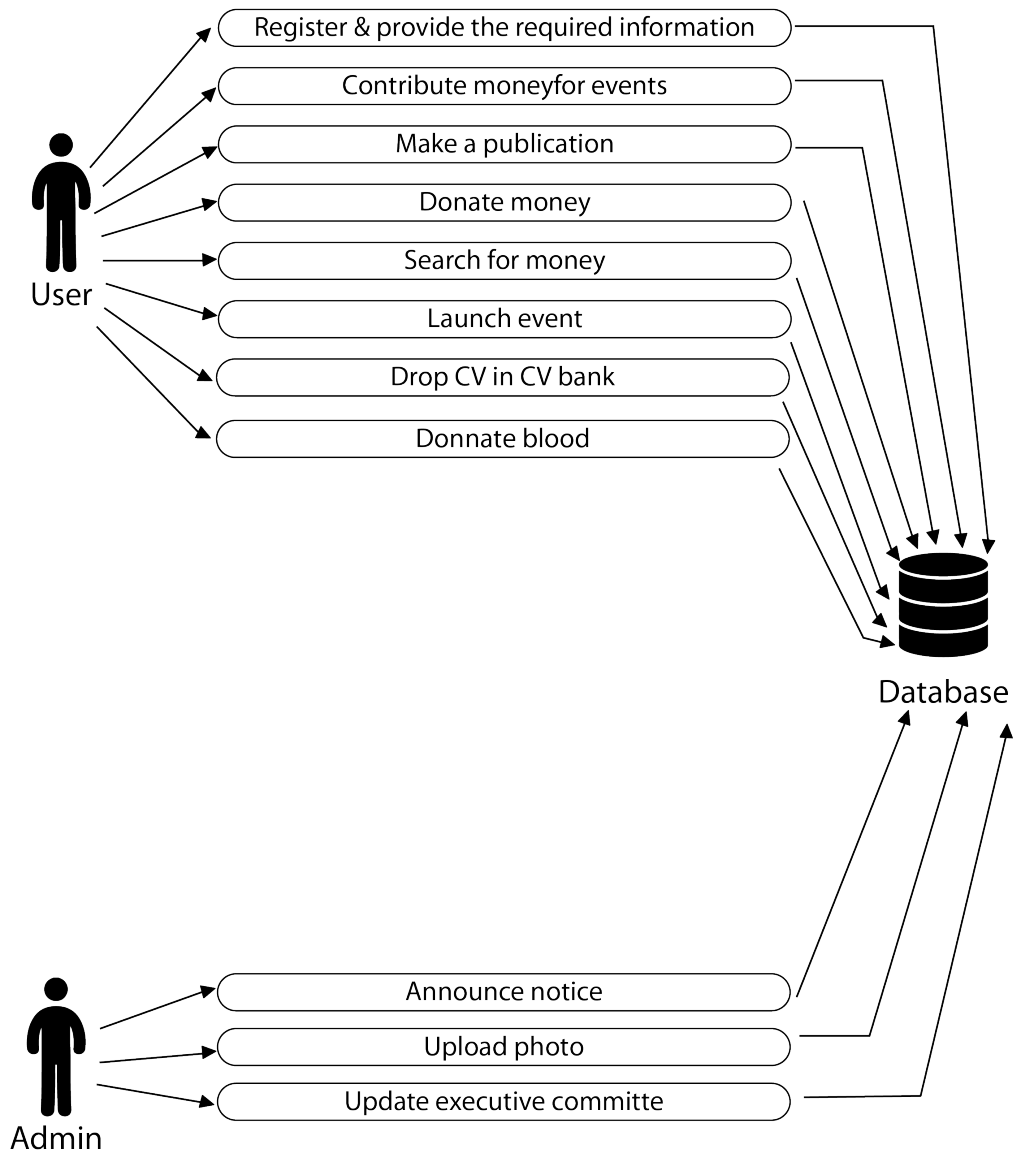


Figure 4.1: Behavioral requirements of the Alumni website

5 Other Nonfunctional Requirements

5.1 User Interface Requirements

The application's user interface needs to be anatomically sound, user-friendly, and easy to use to meet the requirements of the ergonomics standards.

5.2 Performance Requirements

The system must work in real time, which means that any operation on the stored information that is triggered by Alumni must be done in less than 10 seconds. At least 100 people should be able to use the system at the same time without the data getting messed up.

5.3 Availability Reliability

The software system is able to provide an automatically created backup (on external hard drives) that can contain all of the information that is being stored at the time that the backup is being taken. It is necessary for the system to provide authorized users with the ability to recover data from a previous backup.

5.4 Security Requirements

Users must first log in with their name and password before they can use certain parts of the system. If the user's log-in information is wrong, the system should not let them in.

If a user hasn't done anything for a certain amount of time, the system should automatically log them out (e.g., 30 minutes). Only authorized people will be able to physically access the computer(s) that hold the Alumni Database.

5.5 Internationalization Requirements

The design or development of the website assures that it will function effectively for users of any culture, area, or language, or that it can simply be converted to perform well for those users.

5.6 Software Quality Attributes

Attributes like availability, interoperability, correctness, reliability, learnability, robustness, maintainability, readability, extensibility, testability, efficiency, and portability are all examples of Software Quality Attributes. With high scores in Software Quality Attributes, software architects can be sure that a software app will work the way the client wants it to.

5.7 Business Rules

Business Rules set the rules for the site's Web pages. When a site visitor looks around, they can choose an action based on whether the conditions are true or false. With Business Rules, all you have to do is run the Business Rules wizard, add a Business Rules server control to your Web form, and give the server control a Business ruleset.