Software Requirement Specification (SRS)

for

“Alumni Information Management System”

1. Introduction

1.1 Purpose

This document is meant to delineate the features of Alumni Information Management System, so as to serve as a guide to the developers on one hand and a software validation document for the prospective client on the other. The main aim of the project is to build an interaction between alumni, admin and the students, a system that will be able to manage alumni data of a college and provide easy access to the same. The alumni will also be interested to maintain relations with their institutions. The alumni and the student can communicate only through the admin permission. A system that will be able to manage alumni data of a college and provide easy access to the system. The administrator module will enable a system administrator to approve and reject requests of new register students and alumni. And maintain lists of student and alumni.

1.2 Scope

This system allows the admin to maintain students and alumni database. And also allows students and alumni to interact with each other.

1.3 Definitions

- SRS : Software Requirement Specification.
- GUI : Graphical User Interface.
- Stakeholder : The person who will participate in system. E.g., Alumni, Admin, Student etc.

1.4 References

www.google.com
www.javatpoint.com
www.w3school.com

1.5 Overview

This system provides an easy solution for alumni and students to interact with each other. The system increases the accuracy and save some amount of time.

2. Overall Description

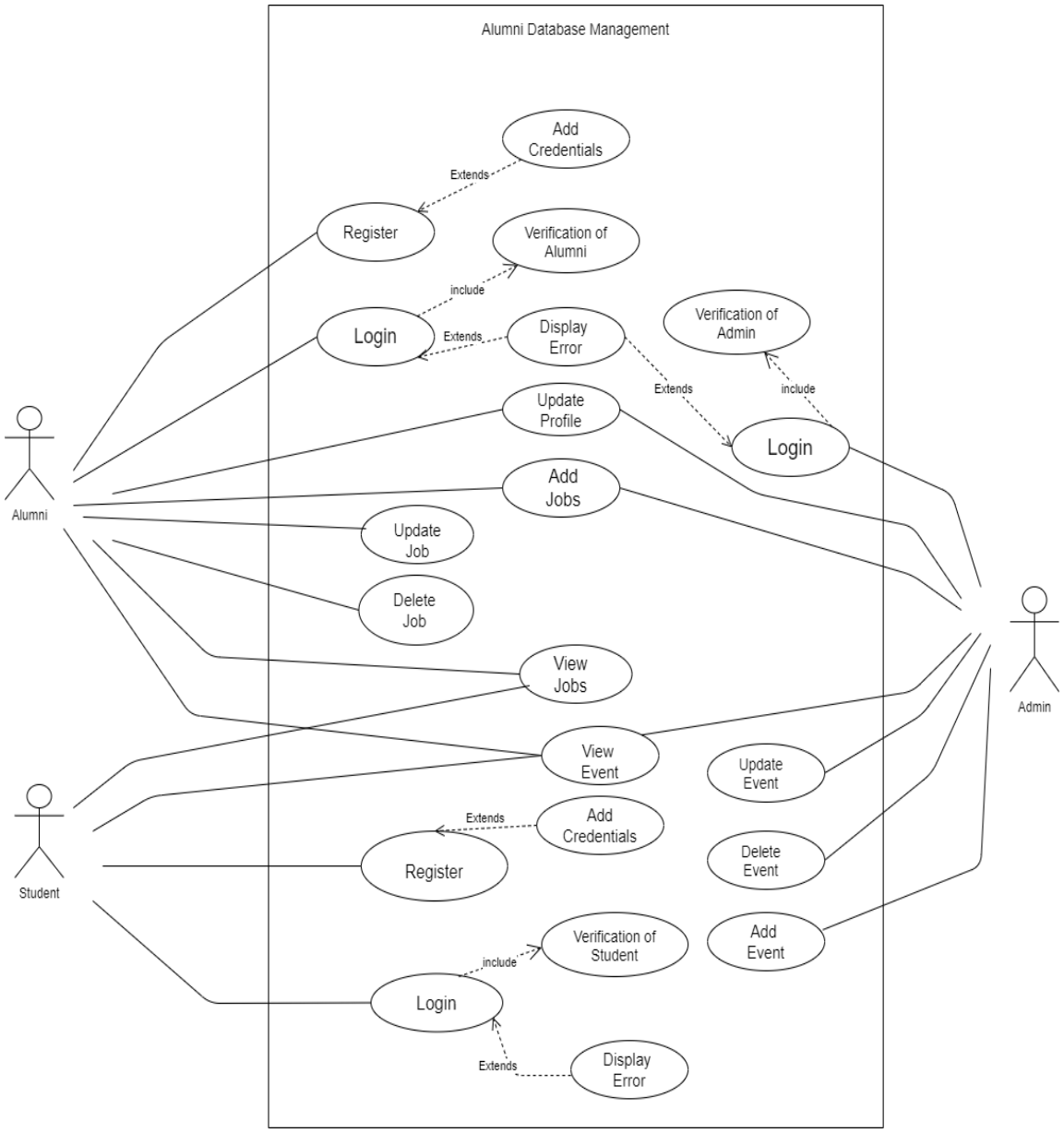
Overall description consists of background of the entire specific requirement. It also gives explanation about actor and function which is used. It gives explanation about architecture diagram and it also gives what we are assumed and dependencies. It also supportspecific requirement and also it support functional requirement, supplementary requirement other than actor which is used. It also gives index and appendices. It also gives explanation about any doubt and queries. Once a student graduates from the institute, his/her professional life or career begins, with higher education playing an important in establishing himself/herself in the profession. In respect of college, it has been our experience that from the very beginning, the alumni have maintained personal contact with one another, rather than use the channel of Alumni Association.

2.1 Product Perspective

This product aimed towards to build an interaction between alumni, admin and the students, a system that will be able to manage alumni data of a college and provide easy access to the same.

2.2 Product Functions

Alumni Information Management System should support this use case:



2.3 User Characteristics

User should be familiar with the terms like login, register etc.

2.4 Principle Actors

Principle Actors are Alumni, Administrator and Student.

2.5 General Constraints

A full internet connection is required for Alumni Information Management System.

2.6 Assumptions and Dependencies

Working of Alumni Information Management System need internet connection.

3. Specific Requirements

3.1 Functional Requirements

This section provides requirement overview of the system. Various functional modules that can be implemented by the system will be-

Description

3.1.1 **Registration**

If Students and Alumni wants to see the details about upcoming events organized by admin then he/she must be registered, unregistered user can't see the upcoming events details.

3.1.2 **Login**

Students logins to the system by entering valid user id and password for the seeing the events and job added by alumni and admin.

3.1.3 **Logout**

After seeing the job the student has to logout.

3.2 Non- Functional Requirements

Following non-functional requirements will be there in the insurance to the internet:

(i) Secure access to consumers confidential data.

(ii) 24X7 availability.
(iii) Better component design to get better performance at peak time.
(iv) Flexible service-based architecture will be highly desirable for future extension.
(v) Nonfunctional requirements define system properties and constraints. Various other non-functional requirements are:

- **Security**
- **Reliability**
- **Maintainability**
- **Portability**
- **Extensibility**
- **Reusability**
- **Compatibility**
- **Resource Utilization**

3.3 Performance Requirements

In order to maintain an acceptable speed at maximum number of uploads allowed from a particular customer as any number of users can access to the system at any time. Also, the connections to the servers will be based on the attributes of the user like his location and server will be working 24X7 times.

3.4 Technical Issues

This system will work on client server architecture. It will require an internet server, and which will be able to run Spring MVC application. The system should support some commonly used browser such as IE, Mozilla, Firefox, chrome etc.,

4. Interface Requirements

Various interfaces for the product could be -
1. Login page
2. Registration form
3. There will be a screen displaying information about events organized by admin.

4.1 Software Interface

1. Operating System: Windows 7 ultimate which supports networking.
2. Java development toolkit.

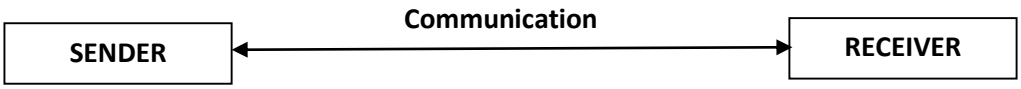
4.2 Hardware Interfaces

Hardware requirements for insurance on internet will be same for both parties which are as follows:

- Processor - Dual Core
- RAM - 2 GB
- Hard Disk – 320 GB
- NIC – For each party

4.3 Communication Interfaces

The two parties should be connected by LAN or WAN for the communication purpose.



5. System Design Specification

5.1 Architecture Design

5.1.1 **Data Flow Diagram (DFD)** :-

It is a way of representing system requirements in graphical form, this led to modular design. A DFD describes a data flow (logical) rather than how they do not depend upon software, hardware, data structure or file organization. It is also known as 'bubble sort'.

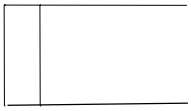
A DFD is a structured analysis and a design tool that can be used for flowchart charting in place of, or in association with, information- oriented system flowcharts.

A DFD is considered as an abstract of the logic of information oriented or process-oriented system flowchart. The four basic symbols used to construct data flow diagrams are -

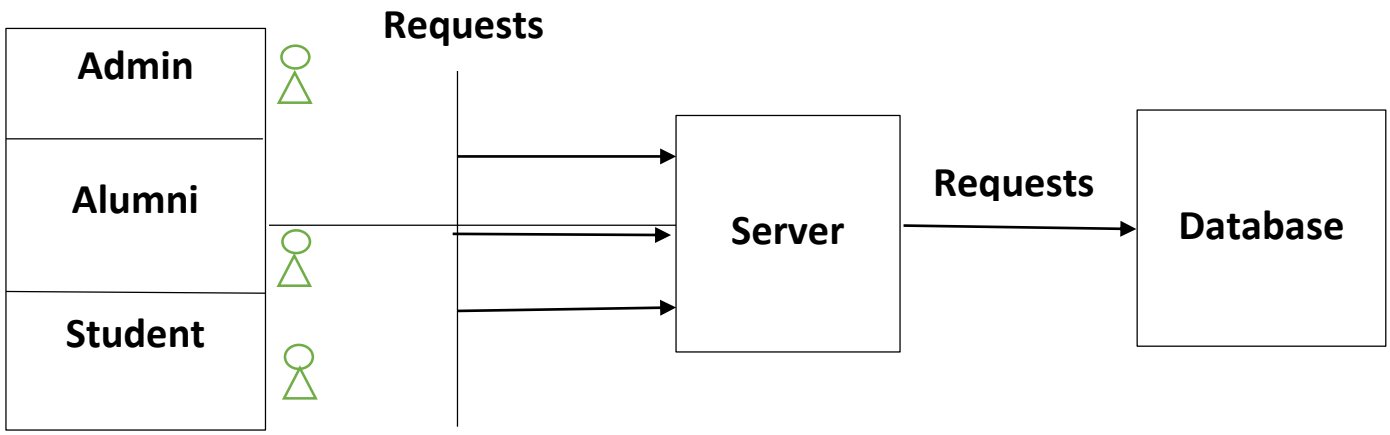
- A rectangle represents a data source or destination.

- A directed line represents flow of data.

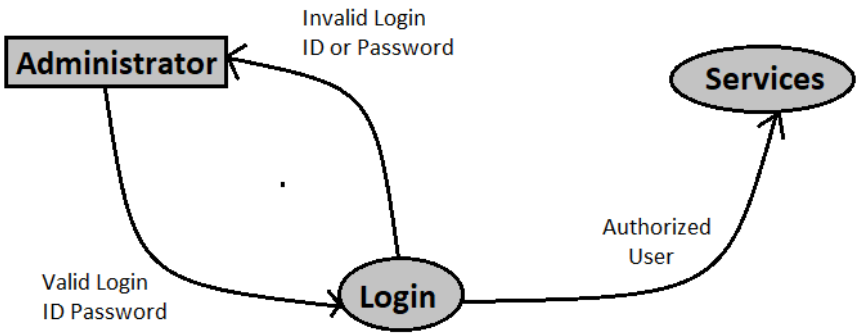
- An oval represents a process that transforms into streams storage.



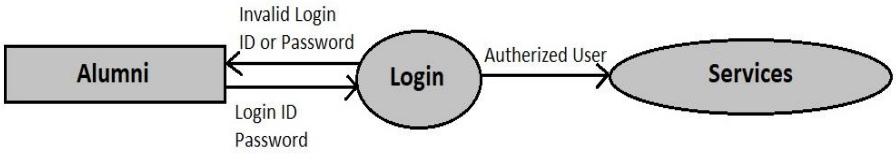
- An open-ended rectangle represents the points at which data is transformed are called as nodes. The principle processes that take place a node is –
    - Combining data streams
    - Splitting data streams
    - Modifying data streams.



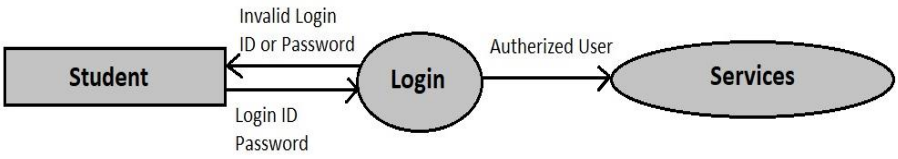
1. Level DFD for ADMIN:



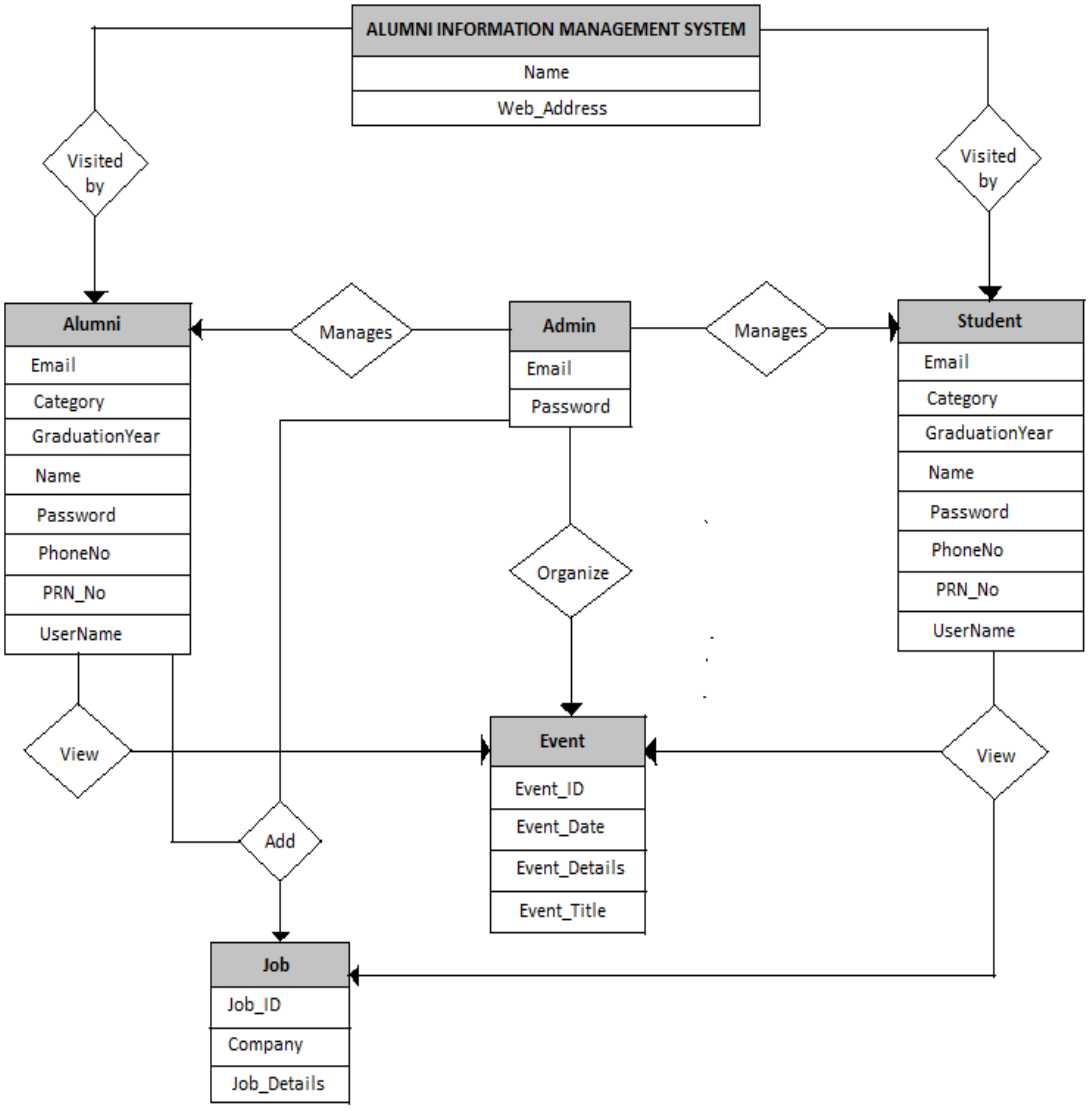
2. Level DFD for ALUMNI:



3. Level DFD for STUDENT:



4. ER DIAGRAM:


ALUMNI INFORMATION MANAGEMENT SYSTEM
Name
Web_Address
Visited by
Visited by
Alumni
Email
Category
GraduationYear
Name
Password
PhoneNo
PRN_No
UserName
Manages
Admin
Email
Password
Manages
Student
Email
Category
GraduationYear
Name
Password
PhoneNo
PRN_No
UserName
Organize
View
Event
Event_ID
Event_Date
Event_Details
Event_Title
View
Add
Job
Job_ID
Company
Job_Details

4. Class Diagram: