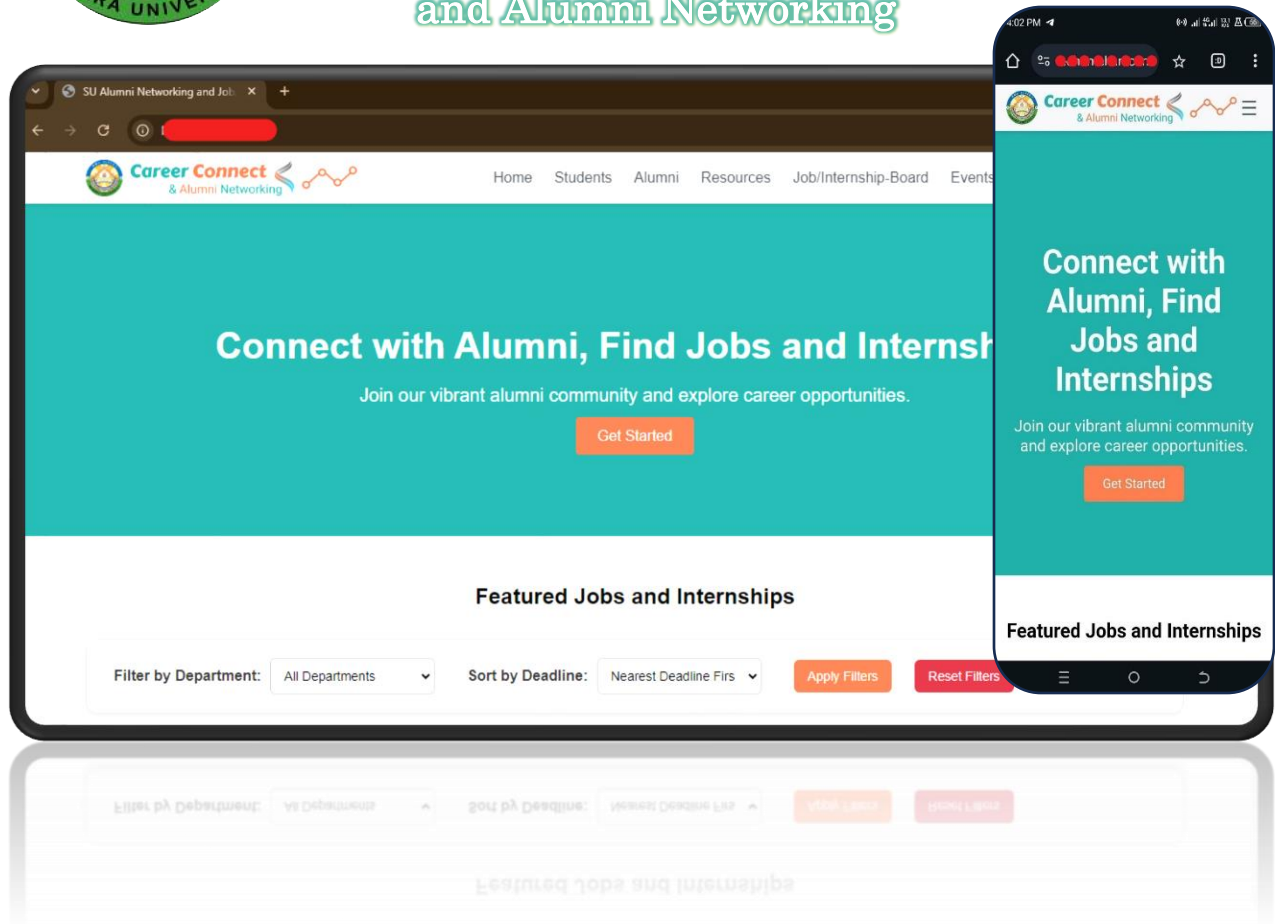




Samara University Career Connect and Alumni Networking



Comprehensive Software Requirements

September 6, 2024

Samara Ethiopia

PREFACE

This Software Requirements Specification (SRS) document serves as a comprehensive guide for the development of the SU Career Connect and Alumni Networking System. It outlines the purpose, scope, product functions, user classes, operating environment, system architecture, and user interfaces, facilitating an intuitive platform that connects students, alumni, employers, and academic institutions. The primary objectives of this SRS are:

- To provide a clear and detailed description of the system's features and capabilities, ensuring that all stakeholders have a common understanding of the project's scope and requirements.
- To establish a foundation for the system's design and implementation, guiding the development team in creating a cohesive and well-structured application.
- To serve as a reference document throughout the software development lifecycle, facilitating communication and alignment among project managers, developers, and end-users.
- To ensure that the final product meets the specified requirements and delivers a satisfactory user experience.

Definition of key terms

- **API:** Application Programming Interface
- **DBMS:** Database Management System
- **GPA:** Grade Point Average
- **HTTPS:** Hypertext Transfer Protocol Secure
- **SMTP:** Secure Mail Transfer Protocol
- **SRS:** Software Requirements Specification
- **SU:** Samara University
- **UI:** User Interface

SU Career-Connect & Alumni Networking SRS

1. Introduction

1.1. Purpose

The purpose of this Software Requirements Specification (SRS) document is to provide a comprehensive description of the SU Career Connect & Alumni Networking System. This document outlines the system's objectives, functionalities, and constraints, serving as a guide for stakeholders. The SRS aims to ensure that all parties involved have a clear understanding of the system requirements and expectations.

1.2. Scope

The system is designed to facilitate the management of academic and employment-related data for students, employers, and educational institutions. The system will enable students to manage their academic information, certifications, extracurricular activities, internships, job postings, and alumni networking, while allowing employers to post job and internship opportunities. The key features of this system include:

2. Overall Description

2.1. Product Perspective

The SU Career Connect & Alumni Networking System is a standalone application designed to integrate seamlessly with the existing infrastructure of Samara University, including the student information system. It will serve as a central hub for managing academic and employment-related data, facilitating meaningful connections between students, employers, and academic institutions.

2.2. Product Functions

The SU Career Connect and Alumni Networking System will provide the following key functionalities:

- Academic Information Management

Students can manage and maintain their academic records, including transcripts, GPA, and course history.

- Certification Management

The system allows students to upload and manage their professional certifications and licenses.

- Extracurricular Activities Management

Students can document and showcase their involvement in extracurricular activities, such as clubs, organizations, and volunteer work.

- Internship and Job Posting Management

Students can search for internships and job opportunities posted by employers or the Career Center Officer. Employers can also use the system to post job and internship openings.

- Employer Profile

Employers can create and manage their company profiles, post job openings.

- Alumni Networking

The system facilitates networking and mentorship opportunities between current students and alumni. Alumni can volunteer to mentor students, share career experiences, and build their professional networks.

By incorporating these features, the SU Career Connect and Alumni Networking system aims to enhance the connection between education and employment, providing a comprehensive platform for students, employers, and alumni to engage and succeed in their career development.

2.3. User Classes

The SU Career Connect and Alumni Networking System will have the following user classes:

1. Students
2. Registrar Officer
3. Career Center Officer
4. Employers
5. Alumni
6. System Administrator

2.4. Operating Environment

The SU Career Connect and Alumni Networking System will be a web-based application accessible through popular web browsers, such as Google Chrome, Mozilla Firefox, Microsoft Edge, etc. The system will be hosted on a secure server with a reliable internet connection.

2.5. Design and Implementation Constraints

The SU Career Connect system will be developed using the latest version of PHP, and a relational database management system (RDBMS) MySQL.

2.6. User Documentation

Comprehensive user documentation will be provided, including a user manual, FAQs, and tutorials. The documentation will cover all aspects of the system, from registration to advanced features, ensuring that users can effectively utilize the SU Career Connect and Alumni Networking System.

3. System Architecture

The system will be developed using a client-server architecture, featuring a web-based front end and a relational database management system (RDBMS) for efficient data storage. The architecture will leverage the latest stable version of PHP (currently PHP 8.2). The key components of the system architecture include:

- Web Client

The user interface will be crafted using **HTML, CSS, and JavaScript**, providing a responsive and interactive experience for both students and employers. The web client will directly communicate with the application server to ensure an efficient user experience.

- Application Server

The server-side logic will be implemented using a latest version of PHP. This framework will handle user requests, process data, and interact with the database.

- Database Server

The **RDBMS, MySQL**, will be responsible for storing and managing all data related to academic information, job/internship postings, and profiles of alumni and employers.

- Security Measures

Security will be a top priority, with all communications secured via **HTTPS**. Robust authentication and authorization mechanisms will be established to protect sensitive data and prevent unauthorized access.

- Documentation and Maintenance

Regular updates to the system architecture documentation will be essential to reflect changes and enhancements. This practice will ensure that all team members are informed about the latest technologies and practices, fostering better collaboration and maintenance.

4. User Interfaces
