StayConnected Vision

This document describes the vision for the StayConnected system for the Software Engineering graduate program at the University of Scranton. It discusses key terms and concepts, the problems the system addresses, its stakeholders and users, its features, and its functional and development constraints.

StayConnected is an online application aimed to keep alumni and current students in the Software Engineering graduate program connected while they are in the program and after they have graduated.

Currently, alumni of the Software Engineering graduate program do not have a convenient way to stay in touch with each other, the CMPS department and the current students. Often alumni need to call or email individual professors for employment opportunities at their company, and when current students or alumni are looking for a job at a company, they don’t know if any alumnus works for the company.

# Problem Statement

StayConnected seeks to provide a secure environment where alumni and current students of the SE graduate program can stay connected with each other, with the department and their professors. Specifically:

* Each alumnus and current student can update his/her profile which include demographical information and technical competencies and work experience.
* Alumni can post employment opportunities at their company.
* Alumni and current students can search for job openings by field, job title, location, etc.
* Alumni and current students can find alumni who are working or previously worked for certain employers.

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# Stakeholders and Users

The major stakeholders and users of the StayConnected online application are listed and described briefly in Table 1.

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| --- | --- | --- |
| **Stakeholder/user** | **Description** | **Concerns and responsibilities** |
| Alumnus | A person who graduated from the M.S. of Software Engineering graduate program. | * Register with the system * Browse alumni and employment opportunities posted by other users * Post employment opportunities (full-time and part-time positions and internships) at his/her company. * Find alumni and/or current students who possess certain technical skills. |
| Current Student | A person who is currently registered in the SE program as a student. | * Register with the system * Browse alumni and employment opportunities posted by alumni * Find alumni at certain companies or geographical locations. * Post employment opportunities * Update his/her profile |
| Faculty member | A faculty member in the CMPS department | * Browse alumni * Manage user accounts * Browse employment opportunities posted by alumni * Determine the functionality of the system and decide if the department hosts the system or not. |

[Present a summary list of all the identified stakeholders. This list should include all the participants in the value chain identified above. Consider the role each plays in the current value chain and the role each will have with respect to your new net market. Recognize that not all participants in the current value chain will necessarily support the new net market. Consider the value or harm that each will receive from the net market and plan how to involve (or not involve) each participant in development of the net market.]

[List the key problems with existing solutions as perceived by the stakeholders. Remember that participants at different points in the value chain will have different problems. E.g., manufacturers face a different set of challenges than either distributors or buyers. For each problem and participant, clarify the following issues:

Causes of the problem: is it inherent in the market dynamics and value chain, is it a result of internal operating processes at the stakeholder, is it a result of technological limitations?

How is the problem addressed now?

What solutions is the stakeholder aware of and what solutions are desired?

It is important to understand the relative importance the stakeholder places on solving each problem. Ranking and cumulative voting techniques indicate problems that must be solved versus issues they would like addressed.

# Features

The major features to be incorporated into StayConnected are as follows:

### **Managing user accounts**

Alumni, current students, and faculty members should be able to registered with the system

Faculty members of the CMPS department can update alumni and current student information, and create a new account and delete accounts.

### **Browsing, searching posting employment opportunities**

Any registered user should be able to browse a list of alumni and current students, and employment opportunities.

Search for alumni by company name, geographical location, and job titles

Search for employment opportunities by company name, job title, and geographical location.

### **Maintaining system security**

Only registered users can access the functionality of the system. No functionality should be accessible to users who is not currently logged in.

A user should only be able to perform tasks that are allowed for the type of the user. For example, no alumni or current student can modify or delete another user’s account, only faculty members can create, update, and delete accounts that belong to other users.

All registrations must be approved in some fashion. For example, a registration is not complete until the user has entered a special code which is emailed to the user. Before a registration is approved, the user should not be allowed to access any functionality of the system.

# Functional Constraints

Each user is assigned a unique identification number and each user can be uniquely identified by an email address. The identification number for a user is assigned by the system upon successful registration and it should never be changed, however, the email address may be updated by the user.

The system must be able to accommodate name changes of the user. It should allow the user to specify his/her name and the time period during which the name was used.

# Deployment Constraints

StayConnected should be deployed on the CMPS departmental Tomcat web server with PostgreSQL or MySQL as the database management system. The development should produce all the key artifacts prescribed by the process:

* Documentation (Vision, Glossary and Use-case Descriptions)
* Models (Use Case Model, User Experience Model, Analysis Model, Design Model and Implementation Models), and
* Code (source code, deployment descriptors, DB scripts, etc.).