Software Requirements Specification

for

CPSC Internship Website

Version 1

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1. Introduction

1.1 Purpose

The purpose of the Software Requirements Specification is to provide detailed descriptions of the CPSC Internship Website. Our intention is to have the client review and approve the requirements to initiate the implementation phase.

1.2 Scope

The client's system primary goal is to serve as an internship portal for computer science students from the University of Mary Washington. It will be a small website that allows students to post reviews about their previous internships and find information on companies where other students have had internships based on recency and location. The client, Dr. Jennifer Polack, is a computer science professor who intends to serve as the administrator of this site.

1.3 Document Overview

Project Descriptions (<u>Section 2</u>) expands upon our objectives and direction for the project. Requirements (<u>Section 3</u>) describes what we have identified as necessary components of the system based upon our client's instruction. Non-Requirements (<u>Section 4</u>) states feature and design suggestions that can assist with the development of the product but do not need to be implemented. Assumptions (<u>Section 5</u>) identifies items that we as the requirements team have assumed when creating this document. Appendices (<u>Section 6</u>) is for extra information one may want to better understand our document.

2. Project Description

2.1 System Overview

The system will be a simple website with only several pages of content. Users will be able to create accounts if they own a UMW email. Subsequently, these users will be able to put pins on a virtual map at the location of the company they worked at. This will provide a base to write a review of their experiences at the internship. Only logged in users will be able to post reviews, however, any visitor to the site will be able to view the interactive map and click on pins to view the reviews for that specific company.

2.2 Client Characteristics

Dr. Jennifer Polack is a Computer Science professor who noticed the lack of easily accessible information about past internships that students have worked for. Her motivation for requesting this system is creating a simple system for UMW students to both post and search past internship experiences from across the country.

2.3 User Characteristics

The intended end users of the system are UMW students that wish to gain more information about internships experiences at different hiring companies. Additionally, users will be students that share information about their personal experience as interns.

2.4 Product Functions

The design allows a potential user to register with an email address ending in @mail.umw.edu. The email address is verified either through email or through the administrator. Once a user is approved as a reviewer, the ability to log in, submit reviews and view information regarding companies is granted.

Authenticated reviewers have access to fill out an internship review form. The form contains different categories to rate their internship experience, with each category having a drop-down menu of client-approved responses. Employer contact information will be requested from the reviewers; information will not be publicly available without approval. Once the form is completed, an email will be sent to the employer requesting approval to display contact information on the UMW Internship Website. They will not be informed of the contents of the review. Additionally, submitted review forms are placed in a pending state, waiting for administrator approval. The administrator approval is needed to make the review information publicly available.

As a guest user, past UMW internship experiences are searchable on the Internship Website. The guest user can search by location, tags, and/or company. The search results are displayed by most recent review first. On the right of the screen, a map is shown with dropped pins of internship job site locations corresponding to the listed results on the left side. If the guest user needs to submit a review of a past internship, the user selects the login button and uses previous credentials. If credentials have not been established, the user selects the request access button located next to the login button on the bottom right of the screen.

3. Requirements

3.1 Reviews

3.1.1 Review List

- 1. As any user, I want reviews sorted chronologically, so I can see the most recent activity.
- 2. As any user, I want to see company names, ratings, top tags and locations of each internship in the list.
- 3. As any user, I want to search by any feature in 3.1.1.2. so I can find relevant reviews for
- 4. As any user, I want to see reviews filtered by my search query.

3.1.2 Specific Review or Company

- 1. As any user, I want to see a specific list of reviews when a company is selected.
- 2. As any user, I want to see the same information from 3.1.1.2, as well as the company contact information if permission is given.
- 3. As any user, I want to select one review and see programming languages used, length of internship, likes, type of environment (desk, open space, etc.), prerequisites taken before getting the internship, paid/unpaid status, valuable skills learned, and a summary.

3.2 Login/Submitting

3.2.1 Guest User

- 1. As a guest user, I want to log in so I can have access to the internship review form.
- 2. As a guest user, I want to request access so that I can join the internship review group.
- 3. As a guest user, I want to log in so I can search for internship reviews.

3.2.2 Logged In User

- 1. As a logged in user, I want to be able to submit an internship review form for approval.
- 2. As a logged in user, I want to log out of the system.
- 3. As a logged in user, I want to still be able to search the system.
- 4. As a logged in user, I want to be reminded that the review forms are approved by UMW faculty.

3.2.3 Admin User

- 1. As an admin user, I want to be able to approve/deny site access using a checkbox.
- 2. As an admin user, I want to be able to approve/deny internship review post before being publicly available.

3.3 Map

3.3.1 Map Functionality

- 1. As any type of user, I want to be able to view a map with pins designating the location of companies which have reviews written about internships.
- 2. As a logged in user, I want to be able to place pins on the map where I have been an intern.
- 3. As any type of user, I want to click an existing pin in order to alter the reviews displayed on the side to match the company selected.

- 4. As any type of user, I want to zoom in or out of an area on the map in order to display the reviews relevant to the area selected.
- 5. As an admin user, I want to be able to remove unnecessary pins from the map.
- 6. As an admin user, I want to be able to add required pins to the map.

3.4 User Interface

It is expected that there will be at least three separate web pages that accomplish different goals.

3.4.1 Splash page

- 1. As any type of user, I want to be initially shown the splash page on entering the website.
- 2. As any type of user, I want the splash page to display reviews, a map, and login/registration functionality.
- 3. As a guest user, I want to be able to create an account with my UMW email from the splash page.
- 4. As a registered user, I want to be able to log in from the splash page.

3.4.2 Admin page

- 1. As an admin user, I want to view approved and unapproved reviews on a page that only admins have access to.
- 2. As an admin user, I want to approve/disapprove reviews with a check box located near the review.

3.4.3 Review Page

- 1. As a logged in user, I want to submit a review with a form located on the review page.
- 2. As a logged in user, I want to fill out the information covered in Requirements 3.1.2-3 and submit the form for admin approval.

3.4.4 Wireframes

Example wireframes of web pages:



Figure 1: Splash Page

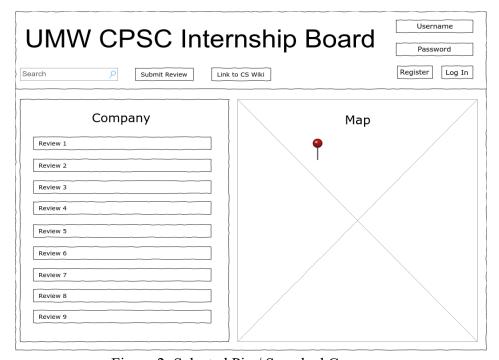


Figure 2: Selected Pin / Searched Company

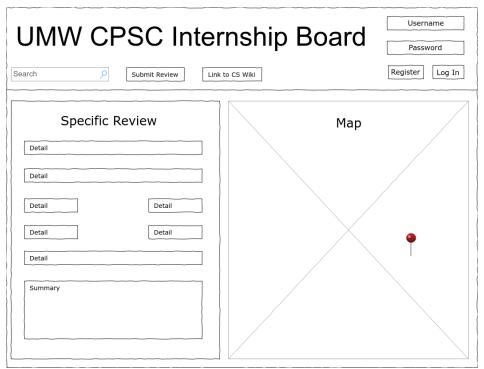


Figure 3: Selected Review



Figure 4: Admin Page

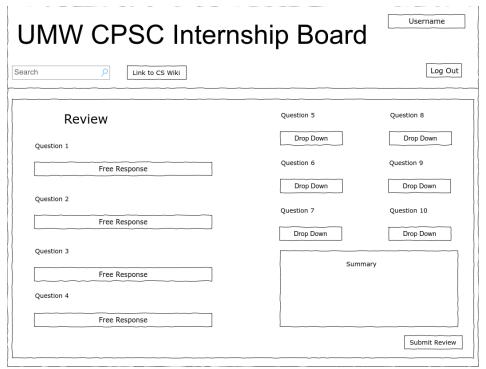


Figure 5: Review Submission Page

4. Non-Requirements

The project team understood the following non-requirements from the client:

- This website will <u>NOT</u> allow users to register unless they have a UMW email.
- This website will <u>NOT</u> allow reviews with profanity to be approved.

5. Assumptions

The project team recognizes that with the budget constraints and limited time to implement a secure website, the following assumptions are made:

- The use of a map API, database management system and web hosting needs to be between \$0-20 per month total. If this project is successful, we assume we can maintain this budget past any discounted prices giving during a limited trial period.
- Software security is important, however, given the time period needed to complete the project and the required personnel/skills to actively monitor and secure such a site may not be present. This project design assumes that no PII or other sensitive data will be stored on this database.

6. Appendices

6.1 Glossary

Administrator User - A user with administrator privileges, typically a UMW faculty member. The administrator manages the site and approves/denies registration forms and review forms.

API - Application Programming Interface

Authenticated Reviewers - Users approved to sign into the site. These users can only submit an internship review form for administrator approval.

CPSC - Computer Science

Guest User - A user not logged into the site. Permissions - View publicly available data.

Necessary Pins - A pin that is required to be placed on the map in order for a review to be displayed.

PII - Personal Identifiable Information

UMW - University of Mary Washington

Unnecessary Pin - A pin on the map that has no review linked to it.

6.2 Author Information

Clare worked on the introduction, the review section of the requirements, the non-requirements, and the assumptions. Igor worked on the description, the user interface and map section of the requirements, and the non-requirements. Steve worked on the introduction, the description, the login and submission sections of the requirements and the formatting.

6.3 Additional Documents

Our client suggested that we link to the Computer Science MediaWiki, so students can find posted internships. http://cs.umw.edu/mediawiki/index.php/Career_and_Internship_Information is the link for this specific webpage.