Outreach Group Software Requirements Specification

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1. Introduction

1.1 Purpose

Our goal is to reimagine the process of hiring a tutor, babysitter or dog watcher through the University of Mary Washington. Through this new system, members of the Fredericksburg community will have a much easier time accessing the services that University of Mary Washington students provide. This document provides a detailed description of the system. Our documentation will serve as a guide, for both the users attempting to gain an understanding of the services provided and administrators who will continue to manage the system.

1.2 Scope

The scope of this UMW Outreach program is gathering and maintaining information that connects Fredericksburg residents looking for help and UMW students providing services. The team was tasked to create a website that improves the system already in place at the University of Mary Washington. That is, replace the existing Excel sheets and Google Forms that keep track of employers and students with a website that can allow users to offer and find their own jobs.

1.3 References

N/A

1.4 Overview of Document

There are 6 sections within this document. First is the Introduction (1). The Introduction serves as an overview of both this document and the system. Within the Introduction you will find the purpose of this system and the document, along with the scope of the system. Lastly the references section provides a list of documents used in this document and where they may be found.

Next, the Product Description (2). The Product Description is an in-depth description of the system. This contains an explanation of our clients and users and a more thorough breakdown

of the system. To close, this section defines product functions and gives use cases that clients may reference.

The third section of this document is Requirements (3). Within this section, one can find the system's functional and non-functional requirements. This provides a glimpse into the backbone of the system and the key ideas that drive it.

The last three sections are relatively smaller than the previous. The first of these is the Non-Requirements (4) section. This is a quick glance at the attributes that will not be a part of the system. Next is the Assumptions (5) section. Within this section, one will find the Assumptions that were made about the system. Lastly, we have the Appendices (6). The Appendices will be the container for the information that doesn't belong in the previous 5 sections. This section will have a glossary, an "Additional Documents" section, and information about this paper's authors. Within the glossary, one can find definitions for terms used throughout the paper. The "Additional Documents" section contains any documents that were provided for reference to the development team.

2. Project Description

2.1 System Overview

The Outreach system is a more secure, better organized, and more comprehensive approach to the previous shared document process. Outreach will be a hosted service on a website in order to improve accessibility, security, and efficiency. A database will be utilized on the backend of the system in order to input and output data relevant to the function they will be utilizing. The system will have functionality that will be divided between three separate account types: Admin, Employer, and Student. The system will allow Employers to create and edit their profile, create, edit, and delete their job postings, as well as search and browse student accounts. The system will allow Students to create and edit their profile, create, edit, and delete their job postings, search and browse job postings, as well as Employer and Student accounts. The system will allow Administrators to create and edit their profile, edit and delete others' job postings, search and browse job postings, search Employer and Student accounts, as well as delete accounts of Employers and Students. The system will aim for full functionality on the most prevalent browsers such as chrome, firefox, and edge.

2.2 Client Characteristics

The client for this system consists of two people on behalf of the University of Mary Washington: Leslie Martin and Paul Binkley. Leslie Martin and Paul Binkley are looking to streamline the process in which this process already happens. The current process is a shared document in which users place their contact information and post wanted advertisements or referring users to Handshake. This system would replace the current process with one intended for a design with security, accessibility, and efficiency in mind. Renewal of the current system has gained interest since the beginning of the onset of COVID-19 due to closures.

2.3 User Characteristics

As mentioned in the System Overview section above, there will be three separate users intended to use this system. Those three types of users are Admins, Employers, and Students. Below are the intended functional capabilities for each type of user.

2.3.1. Admin - Admins will have the ability to create and edit their own accounts. This is intended to allow newer "generations" of admins to monitor the system, as the University often employs students who do not intend to work in that capacity for very long. Administrators will also have the ability to edit and delete other users' job postings, intended to be used in a "moderator" capacity. The system will also allow administrators

to search and browse job postings using a search bar function as well as a list of all job postings available to their account. The system will also allow administrators to search Employer and Student accounts, intended to be used in a "moderator" capacity to delete the account of the searched user.

2.3.2 Employer - Employers will have the ability to create and edit their own accounts. Employer accounts will be able to store the user's contact information, which includes their name, phone number, and email address. Employers will also be allowed to create, edit, and delete job postings that they make. These job postings will have a description, time frame, as well as the type of job it will be. Employer accounts will also allow users to search and browse student accounts with the intended functionality of refining their searches.

2.3.3. Student- Students will have the ability to create and edit their own accounts. Student accounts will be able to store the user's contact information, which includes their name, phone number, email address, as well as the types of jobs they are willing to accept. The system will also allow students to create, edit, and delete job postings, which include a description, time frame, and the type of job it will be. The system will also allow users to search and browse job postings by the use of a search bar function, or a list of all job postings available to their account. Students will also be allowed to search and browse Employer accounts, with the intended functionality of refining their searches.

2.4 Product Functions

This system is designed to be used in simple, intuitive ways by different users. First, employers who wish to provide job opportunities for students to fulfill make their account on the website. Once confirmed, this account allows them to post their job offers, which contain all relevant details such as location and payment. Once a job post is created, the system's administrator has the ability to review the post and either allow it to be displayed on the site or deny it, if the post is not suitable. Once a post has been approved, students looking for employment (who have also created their own accounts) are able to view the details of jobs and indicate their interest. Employers then view the profiles of students who have expressed interest and contact whoever best fits their requirements via e-mail.

3. Requirements

3.1 Use Case Diagrams

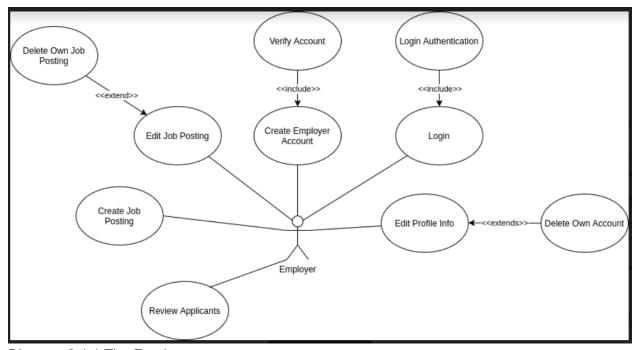


Diagram 3.1.1 The Employer use cases

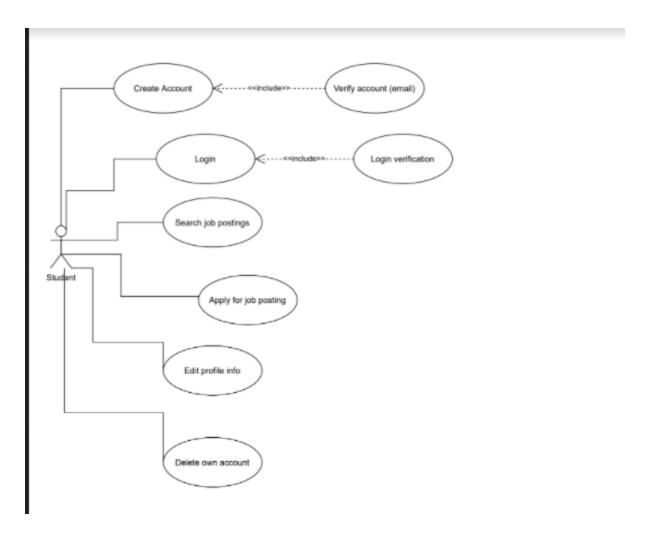


Diagram 3.1.2 The Student use cases

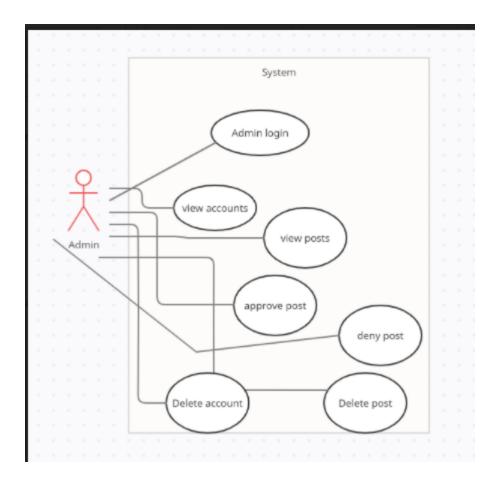


Diagram 3.1.3 Admin use cases.

3.2 Use Case Specifications

UC1 Create Account

1 Description

Allows employers with a valid email as well as students with a UMW email address to create an account.

2 Actors

- System
- Student
- Administrator
- Employer

3 Pre-Conditions

Internet access, valid email address.

4 Basic Flow

- **4.1** The System displays the main menu.
- 4.2 The system displays the login page.
- **4.3** The user pushes the "Create Account" button.
- 4.4 The system displays the Create Account page.
- 4.5 The user enters their email and password.
- **4.6** The user clicks the "Confirm" button or the ENTER key.
- **4.7** The system reviews the entered email and password, checks if the email is of a valid domain, and checks if the password is a valid password.
- **4.8** The system displays a "Success" screen.
- **4.9** The user is redirected to the login screen.

5 Alternate Flow

- **5.1** The System displays the main menu.
- **5.2** The user navigates to the login page.
- **5.2** The system displays the login page.
- **5.3** The user pushes the "Create Account" button.
- **5.4** The system displays the Create Account page.
- **5.5** The user enters their email and password.
- **5.6** The user clicks the "Confirm" button or the ENTER key.
- **5.7** The system confirms that either the email or password are invalid and displays a message to the user to try entering another email or password.
- **5.8** The user enters valid information.

6 Error Flow

- **6.1** The user enters an email that is already being used by another account.
- 6.2 The system displays a message to the user saying "Email already in use."

7 Post Conditions

The user is able to create an account and is able to log in with the account.

UC2 Login

1 Description

Allows user to log into the system and access the site

2 Actors

- System
- Student
- Admin
- Employer

3 Pre-Conditions -

UC1 - Create Account

4 Basic Flow

- 4.1 The system displays the login page
- 4.2 The user enters their email
- 4.3 The user enters their password
- 4.4 The user pushes the submit button
- 4.5 The system authenticates the login information
- 4.6 The system "logs the user in " and navigates them to the home page and login is complete

5 Alternate Flow

NA

6 Error flow

- 6.1 The users email password combination does not authenticate in the database(4.5)
- 6.2 The system prints a message to the user alerting them on an incorrect login info return to step 4.1

7 Post Conditions

User is logged in and can access the site

UC3 View Account

1 Description

Allows the user to view important details about their account, like their email address, and also allows the admin to view a list of all user accounts.

2 Actors

- Admin
- Student
- Employer
- System

3 Pre-Conditions - UC1 Login

4 Basic Flow

- 4.1 The system displays a "view account" option.
- 4.2 The user selects the "view account" option.
- 4.3 The system searches for the user's account information.
- 4.4 The system displays the user's account information.

5 Alternate Flow

Admin

- 4.1 The system displays a "view accounts" option.
- 4.2 The admin selects the "view accounts" option.
- 4.3 The system searches for all user accounts.
- 4.4 The system displays the list of all user accounts.

6 Error Flow

NA

7 Post Conditions

- The user can see required information, including their name and email, as well as any optional information they have provided, such as their phone number or address.
- The admin can see all of the users that are in the database and is also able to delete their accounts.

UC4 View Post

1 Description

Allows the user to view a job post.

2 Actors

- Student
- Employer
- Admin
- System

3 Pre-Conditions – UC1 Login

4 Basic Flow

- 4.1 The system displays a "view posts" option.
- 4.2 The user selects the "view posts" option.
- 4.3 The system searches for a list of posts.
- 4.4 The system displays the list of posts.
- 4.5 The user selects a post.
- 4.6 The system displays the selected post.

5 Alternate Flow

Student

- 4.3 The system searches for all of the posts the student has applied to.
- 4.4 The system displays the list of all the posts the student has applied to.
- 4.5 The student selects a post.
- 4.6 The system displays the selected post in more detail.

Employer

- 4.3 The system searches for all of the posts the employer has created.
- 4.4 The system displays the list of all the posts the employer has created.
- 4.5 The employer selects a post.
- 4.6 The system displays the selected post in more detail.

Admin

- 4.3 The system searches for all posts that fall into a specific group (Pending, Active, All, etc.).
- 4.4 The system displays only one group at a time. The system shows posts pending approval by default.
- 4.5 The admin either:
 - a. selects a post.
 - b. selects another group of posts. Go to Admin Alternate Flow 4.3
- 4.6 The system displays the selected post in more detail.

6 Error Flow

- 4.5 The post no longer exists in the database because, for example, the admin deleted it before the system could retrieve it.
 - a. The system notifies the user about the problem and reloads the page.
 - b. Go to Basic Flow 4.3

7 Post Conditions

The user can see more details about the post, such as the employer's name and the job description.

UC5 Review Post

1 Description

As an administrator, once a user posts, I need to be able to approve said post so that it may be published onto the site.

2 Actors

- System
- Admin

3 Pre-Conditions -

UC2 - Login

UC8 - Create Job Post

4 Basic Flow

- 4.1 The system displays the pending posts page
- 4.2 The admin selects a post
- 4.3 The system displays a particular post
- 4.4 The admin clicks the approve button
- 4.5 The system publishes the post to the main site and review post is complete

5 Alternate Flow

- 4.4 The admin clicks the deny button
- 4.5 The system deletes the post and informs the author, review post is complete

6 Error flow

NA

7 Post Conditions

Post is visible to users or post has been deleted from the site.

UC6 Delete Post

1 Description

Allows job providers to delete their own posts as well as administrators to delete any posts.

2 Actors

- Admin
- Employer
- System

3 Pre-Conditions

UC8 - Create Job Post

4 Basic Flow

- **4.1** The System displays the main menu.
- **4.2** The user navigates to the job listings.
- **4.3** The system displays the job listings page.
- **4.4** The user selects which job posting they would like to delete.
- **4.5** The user pushes the "Delete Job" button.
- **4.6** The system requests user input for confirmation to delete the post in a Yes or No format.
- **4.7** The user pushes the "Confirm" button.
- **4.8** The system then deletes the post and reloads the page.

5 Alternate Flow

- **5.1** The System displays the main menu.
- **5.2** The administrator navigates to the job listings.
- **5.3** The system displays the job listings page.
- **5.4** The administrator selects which job posting they would like to delete.
- **5.5** The administrator pushes the "Delete Job" button.
- **5.6** The system requests user input for confirmation to delete the post in a Yes or No format.
- **5.7** The user pushes the "Confirm" button.
- **5.8** The system then deletes the post and reloads the page.

6 Error Flow

- **6.1** Either the employer or administrator deletes the job post while the other attempts to select the job before the web page refreshes.
- **6.2** The second user, the one who is viewing the job post tries to update, delete, or edit the job post and cannot due to it not existing.

7 Post Conditions

The job post is deleted and cannot be viewed by anyone.

UC7 Delete Account

7.1 Delete Account Student/Employer User

7.1.1 Description

The process for a Student or Employer account holder to delete their account from the system.

7.1.2 Actors

- Student
- Employer
- System

7.1.3 Pre-Conditions -

- 7.1.3.1 UC1, the user is logged on.
- 7.1.3.1 The system displays a "user profile access" option.
- 7.1.3.2 The user selects the "user profile access" option.
- 7.1.3.3 The system displays user profile data in a "user profile window".

7.1.4 Basic Flow

- 4.1 The "user profile window" displays a "delete account" option.
- 4.2 The user selects the "delete account" option.
- 4.3 The system displays a confirmation window requesting confirmation that the user wishes to have their account permanently removed from the system.
- 4.4 The user selects the "confirm and delete account" option.
- 4.5 The system processes the delete account request.
- 4.6 The account is deleted from the system.
- 4.7 The system displays a confirmation of deleted account message.

7.1.5 Alternate Flow

- 4.1 The "user profile window" displays a "delete account" option.
- 4.2 The user selects the "delete account" option.
- 4.3 The system displays a confirmation window requesting confirmation that the user wishes to have their account permanently removed from the system.
- 4.4 The user selects the "cancel account deletion" option.
- 4.5 The system returns the user to the "user profile window."

7.1.6 Error Flow

- 4.1 The "user profile window" displays a "delete account" option.
- 4.2 The user does not make a selection, or no selection is recognized for 30 seconds.
- 4.3 The system returns the user to the "user profile window."

Post Conditions

The deleted account is no longer in the system.

7.2 Delete Account- Admin

7.2.1 Description

The process for an Admin to delete an account from the system.

7.2.2 Actors

- Admin
- System

7.2.3 Pre-Conditions

- 7.2.3.1The Admin successfully searched for the desired user account.
- 7.2.3.2 The system displays a "user profile access" option.
- 7.2.3.3 The user selects the "user profile access" option.
- 7.2.3.4 The system displays user profile data in a "user profile window".

7.2.4 Basic Flow

- 4.1 The "user profile window" displays a "delete account" option.
- 4.2 The Admin selects the "delete account" option.
- 4.3 The system displays a confirmation window requesting confirmation that the Admin user wishes to permanently remove the account from the system.
- 4.4 The Admin user selects the "confirm and delete account" option.
- 4.5 The system processes the delete account request.
- 4.6 The account is deleted from the system.
- 4.7 The system displays a confirmation of deleted account message.

7.2.5 Alternate Flow

- 4.1 The "user profile window" displays a "delete account" option.
- 4.2 The Admin user selects the "delete account" option.
- 4.3 The system displays a confirmation window requesting confirmation that the Admin user wishes to permanently removed the account from the system.
- 4.4 The Admin user selects the "cancel account deletion" option.
- 4.5 The system returns the Admin user to the "user profile window."

7.2.6 Error Flow

- 4.1 The "user profile window" displays a "delete account" option.
- 4.2 The Admin user does not make a selection, or no selection is recognized for 30 seconds.
- 4.3 The system returns the Admin user to the "user profile window."

Post Conditions

The deleted account is no longer in the system.

7.3 Delete Account - System

7.3.1 Description

The process for the system to automatically delete an account from the system based on preset parameters.

7.3.2 Actors

System

7.3.3 Pre-Conditions – N/A

7.3.4 Basic Flow

- 4.1 On May 25 of each year, the system locate all student accounts containing a graduation date of May 24 or earlier for that year.
- 4.2 All accounts with graduation dates on or before that year's deadline are deleted from the database.

Post Conditions

Deleted accounts are no longer in the system.

UC8 Create Job Postings

1 Description

Allows user to create a job listing

2 Actors

System, Employer, Admin

3 Pre-Conditions

- 1. UC1 Create Account
- 2. UC2 Login

4 Basic Flow

- 1. The system displays the create job listing GUI
- 2. User selects create post button
- 3. System displays text window to prompt for description
- 4. User enters job information, brief description and the job type
- 5. User selects submit
- 6. System notifies user their post will be submitted for approval
- 7. System adds job to database and displays on main job board

5 Alternate Flow

- 1. Admin rejects job post
- 2. System notifies user their post has been rejected
- 3. Post is removed from database

6 Error flow

NA

7 Post Conditions

1. System displays new job post on the main board

UC9 Edit Post

1 Description

Allows user to edit an existing post

2 Actors

System, Employer, Admin

3 Pre-Conditions

- 1. UC1- create account
- 2. UC2- login
- 3. UC3- create post

4 Basic Flow

- 1. The system displays edit GUI on user profile page.
- 2. The user selects the edit post option
- 3. System displays a list of the users active posts
- 4. User selects the post to be altered
- 5. System prompts user for changes to be made to the post
- 6. User enters changes to the post
- 7. System sends post to admin for approval
- 8. System adds changes to post in database

5 Alternate Flow

N/A

6 Error flow

NA

7 Post Conditions

1. The user's post is updated with the changes

UC10 Search Job Postings

1 Description

Allows user to search the posted jobs that are available on the site

2 Actors

- System
- Student
- Admin

3 Pre-Conditions

UC1 - Create Account

UC2 - Login

4 Basic Flow

- 4.1 The system displays the search job posting GUI
- **4.2** User selects search job postings
- **4.3** The system displays job offers (sorted default by time posted)
- **4.4** The user chooses what filters to specify in their search (date, location range, type of iob)
- 4.5 The system returns jobs that fit the user's search filters

5 Alternate Flow

5.1 The system returns a message informing the user that no jobs are available that fit the user's search filters.

6 Error flow

NA

7 Post Conditions

System is displaying jobs that fit the user's search

UC11 Edit Profile Info

1 Description

As a user, I need to be able to edit the information available for others to see on my profile.

2 Actors

- System
- Student
- Employer

3 Pre-Conditions

UC2 - Login

4 Basic Flow

- 4.1 The system displays the edit profile info GUI
- **4.2** The user selects the edit profile info GUI
- **4.3** The system displays the user's information (skills, training, availability, etc)
- **4.4** The user clicks on the edit profile button
- **4.5** The system displays an editable version of the user profile page
- **4.6** The user makes any edits necessary to their information
- **4.7** The system asks the user for their password to confirm changes
- **4.8** The user enters their password
- **4.9** The system saves the changes and returns the user to their updated profile page

5 Alternate Flow

NA

6 Error flow

- **6.1** The user enters their password incorrectly
- **6.2** The system informs the user that their password was incorrect, and asks them to enter it again.
- **6.3** Go to 4.7

7 Post Conditions

The user's profile is updated with new information.

3.3 Functional Requirements

3.3.1. The system will include the ability for active University of Mary Washington students to create a Student User account for themselves. During account creation the student must provide their name as recognized on the UMW Banner ID system as well as a valid UMW student email address. The student's email address shall serve as the student's username. The student user must also provide an estimated date of graduation that is a date beyond the date of account creation. Students whose date of graduation have passed will be automatically deleted as Student Users. The student will create a password. Additional information from the student is optional, but if provided can be displayed on their Student Profile.

The system will allow potential employers to create Employer User accounts. The system will require an Employer user to provide their name and a valid email address. The Employer's email address shall serve as the Employer's username. A person requesting an Employer User account must also create a user password. Additional information from the Employer User is optional, but if provided can be displayed on their Employer Profile.

The system shall validate all user creations through an email.

All users, students, employers and Admins will begin a user session the same way, the system will provide access through a login portal. The user must provide both their username (their UMW email address) and their password (the password will be a minimum of 8 characters containing both upper-case and lower-case letters and one numerical digit. Special characters excluding @,#,\$ are optional.) The username and password must be provided during each login to the system to begin a User Session. The software shall authenticate user log on through password verification. When a user provides a registered username along with the correct password, the system shall inform the user that their login was successful.

The system shall prevent users who have entered incorrect information in either the username or password field from beginning a User Session. If the system is not able to confirm that the username and passwords are a match for a currently active account holder, the User Session is not created, the login has failed, and the system shall display a message that says, "Your username or password is incorrect. Please try again."

Rationale: The client wants currently active students to be able to create Student user accounts. The client wants prospective employers to be able to create Employer user accounts. The client wants only designated Admins to be granted Admin access and authority. The client wants all users to have unique usernames and passwords. These student account holders are then able to login and begin Student User Sessions, the Employer account holders are able to login and begin Employer User Sessions and an Admin is able to login and begin an Admin User Session. Once a student's date of graduation has passed, they can no longer be considered active students and are therefore no longer eligible to maintain a Student User account.

3.3.2. The system provides an option during each user session (User must be logged on) for the user to navigate to their own profile for the purposes of editing, this option also serves as access to their account settings. Within their own profile page, the user is able to edit their profile page, to add, delete or edit information and choose what is displayed to other system users. Student users may choose from a selection window to indicate what type(s) of jobs they are seeking: childcare, pet care, tutoring. If a student activates the 'tutoring' field they have the option to add text to indicate specific subjects.

Optional Text boxes are available for both Student Users and Employer Users to add up to 180 characters to convey additional information the user may wish to convey.

While a Student OR Employer user is in the edit profile window, there is also displayed a button feature for "delete profile" where a user may ask to have their accounts deleted. When a user clicks on the "delete profile" option, they will be prompted to enter both their username and password for verification. If the username and passwords are not able to be successfully verified, the system will indicate that the operation could not be completed at this time and the account will remain active. If the system is able to verify that the username and password entered are correct for the current logged in user, the system shall display a confirmation screen requesting the user's input to the question "are you sure you would like to remove your account from the system? This action cannot be undone once completed." If the user indicated "no" to this question, the user is returned to the Edit profile screen. If the user selects "yes", the account is immediately deleted and the user is logged out of the system and redirected to a "thank you" page.

Rationale: The users should be able to edit their own profile information to correct any errors and to adjust the optional information they wish to have displayed. Should the student user decide they no longer want to participate, the student user shall be able to delete their own account and remove themselves from the system.

3.3.3. Employer users, once logged onto an active Employer User Session, are able to create job postings. The information they are able to convey in each job request shall include: type of job (tutoring, child care, pet care, other) and a text box to display relevant details is provided for the optional addition of information (e.g. if tutoring selected, they may choose to enter "math" or another subject into the text box, or leave the text box blank.) A start date and end date must be entered. Additional drop down selections for the job will reflect selections for "on campus/off campus" location, if transportation is provided (if needed). An additional text box is available for the poster to include additional information, if desired.

Once completed the Employer clicks on the "submit" button and the job is assigned a posting number and put into the "pending" queue.

During an Employer User Session, an employer user is able to select an option to view their own job postings. Inside their job posting portal, the system displays which job postings are in

which status either, pending or approved/active. If the posting has been approved it is actively posted and available for Student users (job seekers) to view. If an active post has received 'applicants', the employer can click to view the profiles of any Student Users that have applied and retrieve their email addresses to facilitate contact.

During an Employer User Session, an employer user can edit a job posting. Any job posting that has been edited will be resubmitted and returned to the "pending" queue. An employer may also delete any job posting that they have created. The employer will be reminded to delete job postings that have been filled so that they will no longer appear as active postings.

During an Employer User Session, the employer user can select the search option and conduct an open search of Student Users based on types of jobs they have indicated they desire (e.g. tutors OR child care OR pet care). The employer user is also provided the option to search for Student users based on usernames. If a student user has contacted them about one of their job postings, this enables the prospective employer to view the Student user's profile.

3.3.4. During a Student User Session (Student user is logged on), the student user is able to view an open posting board which will display all active job postings. The Student User is also able to select from among several search options from among a "refine your search" drop down menu. If the Student User chooses to search for jobs by type, they will then need to select from the options of job type such as: tutor, child care, pet care, other, and the system will display all currently active job postings that fit the selection criteria.

If a job search is conducted by date, the Student User must specify a date, and then the system will display all job postings open for that date. If the job search option for "by day of the week" is selected, the Student User must then select the day (e.g. Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday) and any jobs posted for that particular day of the week is displayed.

When a Student User selects a job posting they are interested in applying for, they are able to select the "apply" button and their interest in the job is recorded and forwarded to the job poster.

3.3.5. During an Admin User Session (Admin account holder is actively logged on to system) the Admin User performs all authorized operations. The system will maintain a list of all pending job postings so that the Admin User may select each, review and then process each. To process each posting, the Admin will choose to either approve the posting, which immediately moves the posting into the active posting list, or the Admin can deny the posting, which will return the posting to the job poster (the poster is alerted that their posting was not eligible.) The system also enables the Admin User to delete any posting.

The system permits an Admin user to edit postings. The system permits an Admin user to edit other user profiles. The system permits Admin users to delete accounts.

3.3.6. The system will have a logout feature to allow all users to log out of the system. The logout feature shall inform the users if their logout was successful or not.

3.4 Nonfunctional Requirements

Non-Functional Requirements

- 1. The software should time out user accounts that have not been validated within 72 hours
- 2. A Student user will create a user account which will create a Student user profile and permit access to a Student User Session best suited for job seekers.
- **3.** Employer users shall create an Employer User Account utilizing an employer user profile.
- **4.** The application should have a color scheme utilizing the UMW school colors.
- 5. Any request should take no more than 200ms to be processed
- **6.** The software should require a user password to be updated every 90 days
- 7. The system shall be available for searching at all times
- 8. The website shall take no longer than 15 minutes for a user to learn to use.
- 9. The back-end design shall be easily navigable for maintenance or modification
- **10.** The website shall be reliable with minimal downtime
- **11.** The site should take no more than 1 to 3 seconds to load pages.
- **12.** The system should be back up and running within 24 hours if it goes down.
- **13.** The system should cost no more than \$5 to \$10 per month to maintain.
- **14.** The system should use a method of secure communication and encryption that complies with UMW policies.
- **15.** The system should have a comprehensive layout for all targeted ages.
- **16.** The system should lessen the number of steps required for finding a sitter/tutor or finding a job from the current process by a noticeable margin.
- **17.** The system shall be secure using credentials, as well as the UMW website's restrictions.
- **18.** The system shall provide a way for job posters to indicate when a position is filled -employer user deletes post.

4. Non-requirements

This section describes features that are not included in this software. Below is a list of services the software does not offer, either because they are not feasible or are beyond the scope of this project. These features range from a payment processing system and user reviews to data analytics and ads.

4.1 Email

4.1.1 The system must not provide an email service (e.g. webmail) for students and employers to contact each other.

4.2 Processing payments

4.2.1 The system must not handle payments from an employer to a student.

4.3 Tracking approved job applications

- **4.3.1** The system must not record in the database when an employer approves a student's job application.
- **4.3.2** The system must not notify students when employers approve their job applications.

4.4 User reviews

- **4.4.1** The system must not allow students to rate employers.
- **4.4.2** The system must not allow students to review employers.
- **4.4.3** The system must not allow employers to rate students.
- **4.4.4** The system must not allow employers to review students.

4.5 Reactivating job posts

- **4.5.6** The system must not automatically reactivate a job post if a student terminates their employment.
- **4.5.7** The system must not automatically reactivate a job post if an employer terminates a student's employment.

4.6 User permissions for creating admin accounts

- **4.6.1** The system must not permit students to create admin accounts.
- **4.6.2** The system must not permit employers to create admin accounts.
- **4.6.3** The system must not authorize more than one admin account to be created.

4.7 Database archiving

4.7.1 The system must not use database archiving to store expired job posts.

4.7.2 The system must not use database archiving to store user accounts.

4.8 Data collection and analytics

4.8.1 The system must not perform data analysis or collection to generate aggregate reports about user activity.

4.9 Ads

4.9.1 The system must not support advertisements on the website.

4.10 Social media integration

4.10.1 The system must not enable users' social media accounts to interact with the website.

5. Assumptions

This is a list of assumptions regarding the functionality of the system that the team has made and is working under.

• The system will have a way to determine if the user is signing up with a UMW school email

- If the user does not sign up with a UMW email, they will not be able to apply for job postings
- Users with a UMW email will be able to create job posts as well as apply to job posts
- Only users with a UMW email will be able to see job postings
- There will be one admin account, access to which will be given to any admins
- Before a job posting is shown to other users, an admin will have to approve it
- All users will have a notification center alerting them of when posts have been approved and when users have applied to job listings
- The system will not handle messaging between users
- The system will have a profile system where users can enter basic info(availability and contact information)
- Users will have to log into the system whenever they start a new session
- The system will be a web application

6. Appendices

6.1 Glossary of Terms

Accessibility - A goal of the system, to create a site which is intuitive and usable for users with different levels of tech knowledge and ability.

Data Analytics/Analysis - The practice of studying and using the data of users of the site, which this system will not be doing.

Database - The structure used to store the information of users of the site.

Database Archiving - The practice of storing old or outdated databases and user information, which this system will not be doing.

Efficiency - A goal of the system, to provide a user experience which is responsive and requires minimal effort to use to maximum effect.

Moderator - The job of the system's Admin user, designed to prevent the system from being abused.

Pre-Conditions - The requirements for a use case to be active.

Post-Conditions - The end state of the system after a use case is activated.

Security - A goal of the system, to ensure that user data housed in the system is safe and cannot be exploited by bad actors.

System - Refers to the website and all its processes and functions, the end product of project as a whole.

UMW - The University of Mary Washington, the University for which this project is being developed.

Webmail - An electronic communication service, which this system will not be providing.

6.2 Author Information

Thomas Cheek - Wrote up assumptions section of requirements document, contributed to use cases with writeups for UC8 (create job post) and 9 (edit job post).

Jacob Dietrich - Wrote up main description of project in requirements document, contributed to use cases with writeups for UC1 (create account) and 6 (delete job post).

Megan Grant-Burgess - Wrote up project functional requirements section of requirements document, contributed to use cases with writeup for UC7 (delete account)

Benn Mellinger - Wrote up introduction section of requirements document, contributed to use cases with writeup for UC5 (review posts).

Abdel Hamid Shehata - Wrote up appendices section of requirements document and edited final numbering/formatting, contributed to use cases with writeups for UC10 (search job postings) and 11 (edit profile info).

John Thomas - Wrote up project non-requirements section of requirements document, contributed to use cases with writeups for UC3 (view accounts) and 4 (view posts).

6.3 Additional Documents

N/A