
User Testing Specification

for

Campus Ministry Software

Version 1.0 approved

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Revision History

Name	Date	Reason For Changes	Version

1. Executive Summary

The Campus Ministry System is being developed to assist campus ministry in their daily works flow and to execute tasks efficiently. This system shall qualify the following components to be considered usable. First, we shall look at learnability – this asks the question of how easy is it for user to accomplish basic task in first encounter. Next is efficiency which speaks the speed of user performing task once they have learned the system. Then memorability is considered which refers to how easily the user can reestablish using system after not lack of use. Next we look at errors, specifically how many errors a user makes and if they can recover from them easily. Finally, the last one is how pleasant the overall design is. Another quality component is utility which asks you to make sure that your software provides the features needed. The usefulness of product is decided by checking if the product has both usability and utility.

The software includes two main user classes – privileged users and non-privileged users. The non-privileged users shall test the usability of the Guest forms. The Guest forms include wedding forms, retreat form, attendee form and contact form. The privileged users shall test the login process and query process. The privileged users shall test how to interact with database via web interface. This documents explains in greater detail how

2. Methodology

2.1 Participants

The participants' responsibilities will be to attempt to complete a set of representative task scenarios presented to them in as efficient and timely a manner as possible, and to provide feedback regarding the usability and acceptability of the user interface. The participants will be directed to provide honest opinions regarding the usability of the application, and to participate in post-session subjective questionnaires and debriefing. As discussed in the Executive summary, we have two different user classes, thus different type of users will require us to have different participants.

The privileged user class includes Staff members and those members are the only ones who are allowed access to the database and allowed to interact with the data. Access to the privileged user interface requires a password and username. Participants for this class will be interns and staff members of Campus Ministry. The Participants will include five Staff members and ten interns. These members have no previous experience of working with the system but these participants shall have computer skills. The participants shall require training – explained in the training section.

The non-privileged users class includes attendees of campus ministry program, anyone interested in program information and choir members. These participants can be college students, Loyola Alumni, parents and public. These participants are not required to have any previous experience. The instructions for the interface is given on the form but the users will only fill out the form with information being requested. These participants shall be accumulated by emailing Chapel Choir members and requesting information. At least 50 random participants from Loyola University shall be asked to interact with the interface and the usability tests shall be performed.

2.2 Training

The privileged class shall receive training to explain how the system must be used. The users shall be given an overview of functionality available for users to compete and run down of how to complete the functionality. The users shall only require at most 30 minutes of training. The participants shall be allowed to choose their own username and password. Upon gaining access to the interface, participants shall be shown how to use the interface only once. The participants will receive an overview of the usability test procedure, equipment, and software.

2.3 Procedure

Participants will take part in the usability test at Campus Ministry Staff Meeting at Campus Ministry Office in Cohn Hall, Loyola University Maryland. A Dell Computer with the interface will be used in a Windows OS. The participant's interaction with the prototype will be monitored by the facilitator seated in the same room. The facilitator will also act as note taker and data logger.

Below listed is a procedure list which must be followed for each participant participating in the testing. These tasks and steps are for privileged user class.

1. Participants is given access with username and Password
2. Participants is given training for the Interface
3. Participants must complete the tasked listed in Usability Task section.

The task list below is for the non-privileged users who are simply being asked to complete the guest forms. These participants shall be picked at random and will not receive any train. They shall be asked to complete the tasks listed in the usability tasks section.

The Administrator shall be provided with the username and password for the server and site hosting. The Administrator shall complete the tasks listed in the usability tasks section.

2.4 Ethics

All persons involved with the usability test are required to adhere to the following ethical guidelines:

- The performance of any test participant must not be individually attributable. Individual participant's name should not be used in reference outside the testing session.
- A description of the participant's performance should not be reported to his or her manager, or be otherwise made publicly available.
- Privileged-users shall not share their username and password with anyone else.

3. Usability Tasks

The software shall have different tasks to conduct for the different user classes. The participants shall follow the procedure and proceed to complete the tasks listed. The user shall either pass the test or fail it. Below the user classes have been divided into three different classes to test their usability.

Tasks for Privileged Users:

Goal	Task	Pass	Fail
Initiate Action	Log in		
Locating form	Go to Search Page		
Query	Search for all Choir Members		

Query	Search for Brandon in Attendee Table		
Complete Action	Print the list for Ignite Retreat		
Initiate Action	Run AI to suggestion for Attendance of 20		
Query	Search for Bride Name Jessica		
Complete Action	Check on Project Progress		
Update	Update Hours on Project		
Initiate Action	Add New Program to Database		

Figure 1 Task list for Privileged Users

Tasks for Non-Privileged Users:

Goal	Task	Pass	Fail
Find Form	Find Attendee form on Site		
Fill out Form	Complete Attendee form		
Complete Action	Submit the Attendee form		
Find Form	Find Wedding form		
Fill out Form	Fill out wedding form		
Try Navigation	Go Back on Wedding form to previous page		
Complete Action	Complete and Submit Wedding form		
Incomplete Action	Try to Enter email in phone input		
Incomplete Action	Submit form without information		

Figure 2 Task list for Non-Privileged Users

Tasks for Administrator:

Goal	Tasks	Pass	Fail
Navigation	Log in to hosting		
Navigation	Log in to PHP Admin		
Initiate Action	Change password		
Action Completion	Check status of server		
Navigation	Go to Web files folder		
Action Completion	Turn server on		
Action Initiate	Update hosting software		
Action Initiate	Troubleshoot web forms not submitting		
Initiate Action	Add new username and password from database		
Initiate Action	Delete username and password from database		

Figure 3 Task list for Administrator

4. Usability Goals

4.1 Completion Rate

Completion rate is the percentage of test participants who successfully complete the task without critical errors. A critical error is defined as an error that results in an incorrect or incomplete outcome. In other words, the completion rate represents the percentage of participants who, when they are finished with the specified task, have an "output" that is correct. Note: If a participant requires assistance to achieve a correct output then the task will be scored as a critical error and the overall completion rate for the task will be affected. A completion rate of 90% is the goal for each task in this usability test. Completion rate testing shall be completed for all the tasks listed in the usability tasks section. Each user class shall have separate completion rate which will be averaged to get a averaged completion rate for the system.

4.2 Error-free Rate

Error-free rate is the percentage of test participants who complete the task without any errors (critical **or** non-critical errors). A non-critical error is an error that would not have an impact on the final output of the task but would result in the task being completed less efficiently. An error-free rate of 80% is the goal each task in this usability test. Error-free testing shall be completed for all the tasks listed in usability tasks. Each user class shall have separate error-free rate and it shall be defined for that class only.

4.3 Time to Task

The time to complete a scenario is referred to as "time on task". It is measured from the time the person begins the scenario to the time participant signals completion. Below we have listed for different times for some of the tasks participants are being asked complete.

Task	Time	Rational
Form Completion	3 minutes – Typing speed of person	If depends on each user typing speed but at most it should be 3 minutes
Query	2 minutes	This form is mostly drop down selections thus it should be done quickly
Log in	1 minute	Only require username and password and submit
Update hours	2-4 minutes	Depends on if user has to add new project or simply add more hours
Check on server	2-3 minutes	Simply log in and check

Figure 4 Time to Task for Different tasks

4.4 Subjective Measure

Subjective opinions about specific tasks, time to perform each task, features, and functionality will be surveyed. At the end of the test, participants will rate their satisfaction with the overall system. Combined with the interview/debriefing session, these data are used to assess attitudes of the participants.

- Participants shall be asked about consistency in color, layout, capitalization and same action for similar situations.
- Participants shall be asked about universal usability – meaning regardless of any variations the software should work the same on all devices, platforms and for people.
- Participants shall be asked to give feedback to user for every action – this includes helpful information and even give visual representation for objects and action.
- Participants shall be asked about dialogs and menus to confirm if we have a completed action meaning it should have beginning, end and middle
- Participants shall be about indicators which allow them to move forward and backwards within the site.
- Participants shall be asked about design and error making – to test how easy or difficult is it for users to make mistakes.
- Participants shall be asked to check if they can undo their action and user control is maintained throughout the system.

- Participants shall be asked about memorizing necessities pieces of information from one screen to another and if it was possible to do so or not.

5. Supporting Documents

Below we have listed the survey users will be asked to complete. All the questions will be Boolean question except for those which require time or number of errors.

1. Forms are clearly displayed and easy to find.
2. Information is clearly visible and understandable.
3. Information is written in style which is easy to follow.
4. Colors on the site are complementing.
5. Screens have the right amount of information.
6. It is easy to find my way around the site.
7. The typography is attractive.
8. It is clear how screen elements work.
9. My mistakes were easy to correct.
10. It is easy to remember where to find things.
11. How long did it take you to complete the form?
12. How many mistakes did you make before submission?