Evaluation Assignment 4 – Usability Testing Plan

Graduate Student: Ridwan Ahmed Khan

Graduate Student Email : ridwank@mtu.edu

Undergraduate Group No. : Team 1: Team Volcano

Undergraduate Group	Consultants	Scientist
Jon Booth	Jaclyn Barnes	Dr. Greg Waite
Dalton Shoebridge	Ridwan Ahmed Khan	
Alexis Kuprel		
Micah Kempf		
Dillon Mavroulis		
Steven Tracey		
Mathonwy Dean-Hall		

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1. Usability Test Plan

Usability test plan is required to meet the need of proper structure of usability testing. Usability testing is done for an application to found out potential usability issues like what users like most, users' opinions about what the application should do or what the application should stop doing etc. Usability testing is also an effective way to find out bugs of the applications or the functionality errors.

2. Test Setup Details

The usability testing will be conducted in Rekhi room no. 323. At the time of testing, a graduate student will supervise the testing while two undergrad students who are also the developers of the application will help in the testing. They will describe the purpose of the application and a short description of the application. They will take note what users are doing during the testing period. They will act as an observer and provide an environment close to real life sceneries.

When the participant or user comes to testing location, he/she needs to read a Consent form [attached at the end of this document in the appendix part] about the testing and sign it. After that, he/she needs to answer some pre testing questions in a form [attached at the end of this document in the appendix part]. Then the participant is briefed about the application and given the testing device. The participant tries to complete the testing sceneries. After the completion of testing, the participant needs to answer post usability testing questions [attached at the end of this document in the appendix part].

3. Test Sceneries

Pacaya Volcano Monitor application is developed to collect volcano monitoring data provided by the tourists and tour guides. It has three forms – Plumes form, Lava form and Explosion form. Users of the application need to find these forms from the menu and select one to fill out information. The users also need to attach pictures in the form. Finally, the users submit the forms. Then an admin user can login to the application and view the data. Considering all these functionalities, there are three sceneries designed for usability testing.

3.1 Testing scenario 1: Navigation and select the forms

3.1.1 Test Goals: The goal of this scenario is upon going to application website in a mobile device, the user navigate through the pages and find the correct forms to submit the observation.

3.1.2 Quantitative measurement list:

a) The time user needs to find the form selection page

b) The number of time user selects the wrong form for observation submission
c) The number of attempts it takes user to find the correct form
d) The number of times user goes to wrong page instead of form selection page.
e) The number of time users find it difficult to find the correct form and ask test coordinators for help

3.1.3 Scenario description:

Assuming the user as a tourist or tour guides, he/she goes to the application home page in the mobile device and tries to submit observation. After finding the create observation button, click on it and goes to the form selection page. He/she has to select the correct form for observation submission from the collection of three forms. At the end, user is navigated to the correct form page upon selection.

3.1.4 Task list:

a) Find the create observation button
b) Click the create observation
c) Find the suitable form to create observation
d) Select the form

3.1.5 Qualitative measurement list:

a) User's facial expression
b) User's comments
c) User's attention in the application
d) User's comfort

3.1.6 Potential observations of the participant

a) How user or participant is reacting with the application.
b) How the participant is giving attention to the task.
c) How the participant is being distracted by other elements of the application.

3.1.7 Bug report: Bug report form is attached at the end of this document.

3.2 Testing scenario 2: Fill out the Plumes form

3.2.1 Test Goals: The goal of this scenario is to fill out the information of plume observation in the Plume form.

3.2.2 Quantitative measurement list:

a) The time user needs to find the correct form fields
b) The number of time user selects the wrong field
c) The number of time users find it difficult to find the correct field and ask test coordinators for help

3.2.3 Scenario description:

Assuming the user as a tourist or tour guides, he/she is in the Plume form page. The participant finds the correct field and fill up with the information.

3.2.4 Task list:

a) Find the correct field for data
b) Fill up the field with information
c) Submit the form

3.2.5 Qualitative measurement list:

a) User's facial expression
b) User's comments
c) User's attention in the application
d) User's comfort

3.2.6 Potential observations of the participant

a) How user or participant is reacting with the application.
b) How the participant is giving attention to the task.
c) How the participant is being distracted by other elements of the application.

3.2.7 Bug report: Bug report form is attached at the end of this document.

3.3 Testing scenario 3: Fill out the Lava form

3.3.1 Test Goals: The goal of this scenario is to fill out the information of lava observation in the Plume form.

3.3.2 Quantitative measurement list:

a) The time user needs to find the correct form fields
b) The number of time user selects the wrong field
c) The number of time users find it difficult to find the correct field and ask test coordinators for help

3.3.3 Scenario description:

Assuming the user as a tourist or tour guides, he/she is in the Lava form page. The participant finds the correct field and fill up the information.

3.3.4 Task list:

a) Find the correct field for data
b) Fill up the field with information
c) Submit the form

3.3.5 Qualitative measurement list:

a) User's facial expression
b) User's comments
c) User's attention in the application
d) User's comfort

3.3.6 Potential observations of the participant

a) How user or participant is reacting with the application.
b) How the participant is giving attention to the task.

c) How the participant is being distracted by other elements of the application.

3.3.7 Bug report: Bug report form is attached at the end of this document.

3.4 Testing scenario 4: Fill out the Explosion form

3.4.1 Test Goals: The goal of this scenario is to fill out the information of explosion observation in the Plume form.

3.4.2 Quantitative measurement list:

a) The time user needs to find the correct form fields
b) The number of time user selects the wrong field
c) The number of time users find it difficult to find the correct field and ask test coordinators for help

3.4.3 Scenario description:

Assuming the user as a tourist or tour guides, he/she is in the Plume form page. The participant finds the correct field and fill up the information.

3.4.4 Task list:

a) Find the correct field for data
b) Fill up the field with information
c) Submit the form

3.4.5 Qualitative measurement list:

a) User's facial expression
b) User's comments
c) User's attention in the application
d) User's comfort

3.4.6 Potential observations of the participant

a) How user or participant is reacting with the application.
b) How the participant is giving attention to the task.
c) How the participant is being distracted by other elements of the application.

3.4.7 Bug report: Bug report form is attached at the end of this document.

3.5 Testing scenario 5: Take picture and attach to forms

3.5.1 Test Goals: The goal of this scenario is to take picture and select photos for appropriate form. Then the photo is attached and submitted with the respective form.

3.5.2 Quantitative measurement list:

a) The time user needs to take picture
b) The number of times user selects the wrong picture
c) The number of times users selects the correct button to attach picture
d) The number of times users cancels the attached picture

e) The number of times users find the task difficult to find the task and ask test coordinators for help.

3.5.3 Scenario description:

Assuming the user as a tourist or tour guides, he/she is in a certain form page. The participant finds the correct photo button and tries to take photo or select photo from the photo album.

3.5.4 Task list:

a) Find the photo upload button
b) Click the button
c) Select photo
d) Remove the attached photo
e) Go to step (b) for the second time and this time skip step (d) and (e)
f) Submit the form

3.5.5 Qualitative measurement list:

e) User's facial expression
f) User's comments
g) User's attention in the application
h) User's comfort

3.5.6 Potential observations of the participant

a) How user or participant is reacting with the application.
b) How the participant is giving attention to the task.
c) How the participant is being distracted by other elements of the application.

3.5.7 Bug report: Bug report form is attached at the end of this document.

3.6 Testing scenario 6: Admin login

3.6.1 Test Goals: The goal of this scenario is to test the admin login and going to the data download page. Another goal of this test is to test the response of the application if the wrong login information is provided.

3.6.2 Quantitative measurement list:

d) The time user needs to login into the application
e) The number of times user cannot login
f) How much data user can view after login
g) The number of times users find the task difficult and ask test coordinators for help

3.6.3 Scenario description:

Assuming the user as an administrator of the application, he/she tries to find the login button and goes to login page. The participant enters the login information and tries to login. After successful login, the admin user can view the data submitted by the other users.

3.6.4 Task list:

a) Find the correct button for login
b) Fill up the login information
c) Press login button
d) After successful login, user can view the data.

3.6.5 Qualitative measurement list:

a) User's facial expression
b) User's comments
c) User's attention in the application
d) User's comfort

3.6.6 Potential observations of the participant

a) How user or participant is reacting with the application.
b) How the participant is giving attention to the task.
c) How the participant is being distracted by other elements of the application.

3.6.7 Bug report: Bug report form is attached at the end of this document.

3.7 Testing scenario 7: Download of data by admin

3.7.1 Test Goals: The goal of this scenario is to download the data submitted by the users from the admin view. The data will be downloaded and deleted from the application – testing of this functionality is the main goal of this test scenario.

3.7.2 Quantitative measurement list:

a) The time user needs to find the download button
b) The time user needs to download the submitted content.
c) The number of time user can successfully download all the data.
d) The number of time users find it difficult to find the correct field and ask test coordinators for help

3.7.3 Scenario description:

Assuming the user as an administrator, he/she is in the admin view page. The participant tries to find the download button for submitted data download. Once it is found, participant clicks it and downloads all the data. After that, there is no data to download in the admin view page.

3.7.4 Task list:

a) Find the correct button for data download
b) Click the download button
c) Wait until the download is completed
d) After the download is complete see if there is any other data to download.
e) Check if the all the data is downloaded.

3.7.5 Qualitative measurement list:

a) User's facial expression

b) User's comments
c) User's attention in the application
d) User's comfort

3.7.6 Potential observations of the participant

a) How user or participant is reacting with the application.
b) How the participant is giving attention to the task.
c) How the participant is being distracted by other elements of the application.

3.7.7 Bug report: Bug report form is attached at the end of this document.

4. Attachments

4.A Bug Report form

Bug number	Bug name	Bug uniqueness	Bug description

4.B Consent Form

4.C Pre test questions

1. How many years have you used a smart phone?

2. Please indicate your level of agreement to the follow statement:

I am very interest in the testing of this android application.

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

3. Please indicate your level of agreement to the follow statement:

I am very interested in providing observation information about volcano while visiting it.

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

4.D Post test questions

1. Please indicate your level of agreement to the follow statement:
Overall, this web application was easy to perform the task.
1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

2. Please indicate your level of agreement to the follow statement:
I enjoy using this web application.
1. Very much
2. A little bit
3. Neutral
4. Not very much
5. Not at all

3. Please indicate your level of agreement to the follow statement:
I would use this web application again.
1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree