

Usability Test Plan

Team-5: Asher

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Consent Form:

Summary:

The test imposes minimal risk, no harm should come to you performing the test, the results of the usability test are anonymized, and if at any time you wish to terminate the testing. you may.

You are being invited to participate in a research study to determine the usefulness and usability of computer user interfaces. This study is being conducted by Dr. Robert Pastel of Michigan Technological University Computer Science Department and Dr. Pastel's Human-Computer Interaction (HCI) courses. The students are performing the usability tests as part of their project and to fulfill the HCI course requirements.

There are no known risks if you decide to participate in this research study. There is no cost. to you for participating in the study. The information about you and the tasks that you will perform. will determine the usefulness and usability of user interfaces. The questionnaires and the tasks should take less than an hour to complete. The information collected may not benefit you. directly, but the information learned in this study should provide more general benefits

The questionnaires and tests are anonymous. No one will be able to identify you and your answers, and no one will know whether you participated in the study except for the instructor of the class who is giving you credit for participating. Should the data be published, no individual information will be disclosed.

Your participation in this study is voluntary. By completing the questionnaires and performing the tasks, you are voluntarily agreeing to participate. You are free to decline to answer any. question you do not wish to answer or not to perform a task for any reason.

The testing may make use of video conferencing software which will record your tasks on the computer screen and from your webcam. The webcam

recordings will not be shared, and you may mute the webcam at any time. Before sharing your screen, you should clear your desktop of any open apps except your browser. Also, you should clear your desktop of any icons or widget that you wish not to be observed.

If you have any questions about the study, please contact Dr. Robert Pastel, Associate Professor, Computer Science Department, Michigan Technology University, Houghton, MI 49931.

Test Scenario – 1:

Test Name: Responsiveness

Description:

We will be testing the application on various devices from the user perspective, in terms of comfortability in using the application.

Test Goal:

The objective of this assessment is to evaluate the accessibility of the application across multiple devices, including mobiles, tablets, and desktops. The aim is to determine whether users on various devices encounter any challenges while using the app, In terms of design.

Scenario Text:

Imagine you are a user of this application who wants to perform certain actions to test the applications responsiveness across various devices.

Software or Equipment required:

- Laptop, Smart Phone/Tablet.
- Asher Application.
- Internet (optional).

Quantitative Measurement:

Task List:

- Access the website
- Go through all the pages in application and test the responsiveness of the Application in each device.
- Easiness in reading the sample data displayed.

Qualitative Measurement:

- Is the application easy to navigate between the pages on various devices.
- How many times has the application crashed.

Observations:

I. Facial expressions

II. Body language

Interview:

- Can you describe your overall experience with using the application.
- Were there any specific actions or features within the app that seemed slower or less responsive on this device.
- How would you rate the app's performance in terms of responsiveness on a scale of 1 to 10, with 10 being extremely responsive and 1 being very unresponsive.
- Were there any differences in responsiveness when using the app on this device compared to other devices you've used it on

Test Scenario 2:

Test Name: Login, Logout and create an account.

Test Goal: Test the Login, Logout and create user functionality of the application.

Description:

In this Scenario, we will test if the user will be able to Login and Logout successfully from the application and create an account if not registered for the application.

Scenario Text:

Imagine you are a user of this application; you want to login by inputting the credentials, you enter incorrect credentials once and then you enter correct credentials. For the create account credentials imagine you are a new user and would like to register the account.

Task List:

- I) Initially the user is ready to login with the login page on the mobile screen.
- li) If the user is registered with the application, then the user will proceed to login.
- lii) If the user is not registered then the user will proceed to register/create an account.
- Iv) User inputs the credentials to login or enters the information to register an account with the application.
- V) After registering the account, the user will proceed to login.

Observations:

I. Facial expressions

II. Body language

Quantitative Measurement:

- I) Time taken to display dashboard after login.
- II) Time taken to register/create an account and redirect to login.

Qualitative Measurement:

- i) Ease of navigation.
- ii) Are the users prompted in case of a wrong password, incorrect username, not registered.

Post Scenario Interview:

- I) Can you describe your experience with the registration process? Was it intuitive and easy to follow?
 - i) Did you receive any confirmation emails or messages after completing the registration process?.
 - ii) Did you encounter any issues while entering your credentials or logging in?

- iii) Were you able to access all the features and functionalities of the app after logging in successfully?
- iv) Did you encounter any difficulties finding the logout option or completing the logout process?
- v) Overall, how satisfied are you with the login, logout, and registration functionalities of the application?, any suggestions.

Test Scenario 3:

Test Name: Successful Form submission.

Test Goal: Enter duplicate data into the form and submit it, in this test we focus mainly on photo upload and ash color selection.

Description:

In this test we will see if user can successfully submit the data entered into the form, which has geo-coordinates, picture of ash, ash color selection and other important fields as specified by the scientist for data collection.

Scenario-Text:

Imagine you are in the team that's visiting the assessment site and you want to submit the data that has been collected by you. Instead of ash picture you can upload any random picture, try re-uploading the picture.

Task List:

- Access the website.
- Login into the application/ register and then login to the application.
- Submit values required
- Upload photos to the application, submit it from in-app camera feature and submit
- Upload photos to the application, submit it from the files option and see if it is reflected in the database.

- elect the color from the ruler that is displayed in the screen.
- Ash color selected will be displayed in the field relevant to it.
- Submit the form.

Observations:

I. Facial expressions

II. Body language

Quantitative Measurement:

- Time taken to submit the form
- Time taken to upload the picture.

Qualitative Measurement:

- Did the picture quality decrease after uploading to the database.
- Did the user get prompted to access the media from the application?
- Is the selected color being displayed in a field.

Post Scenario Interview:

- How was your experience in filling out this form? How comfortable were you?
- What do you think about the layout. Any suggestions
- Is the restriction placed on selecting only one picture.
- Were you able to easily preview the selected photo before uploading it?
- Did you encounter any issues with the upload process, such as slow loading times or error messages.
- Any issues while resubmitting the photos.
- Are the colors represented in the ruler same as the ones given by the scientist.
- How would you rate the ease of selecting an ash color on a scale of 1 to 10?

Test Scenario 4:

Test Name: Reupload/ Correction of submitted form

Test Goal: Try to edit a form that is already submitted, which has wrong information.

Description:

Since, the collected data will be used for testing by the scientist. It is required that the data is accurate, if incase form has error or wrong data. We will see if we can edit the form that is submitted.

Scenario:

Imaging you are a user of this app, and you noted that the previously submitted form has some errors. So, you would like to edit the form which is submitted.

Task List:

- 1)Either the user is logged in or will be logged in if not.
- 2)User clicks on the edit last form option on dashboard.
- 3)User enters correct data and tries to resubmit it.

Quantitative Measurement:

- How many times can a user resubmit the form.
- How many previous forms can a user resubmit.

Qualitative Measurement:

- Time taken to resubmit the form.

Interview Questions:

- How easy was it to identify the form which you would like to edit.
- Did the data which was previously recorder has been populated?
- Did you face any difficulties in resubmitting the form?
- Overall, how satisfied are you with the form resubmission features of the application in terms of usability?

Post-Scenario questionnaire

1. On a scale of 1 to 10, how would you rate your understanding of the overall purpose of this application?
2. How would you rate the ease of use of the application?
3. How highly do you rate this application as a good source to collect the data?
 - a. High b. Neutral c. Low
4. On a scale of 1 to 10, how would you rate your overall experience with this application.

Bug Report

List of all the encountered bugs in the application

1. Application bug 1:

- **Bug name:**
- **Bug location:**
- **Bug description:**
- **Expected behavior:**

2. Application bug 2:

- **Bug name:**
- **Bug location:**
- **Bug description:**
- **Expected behavior:**

Testing challenges

Technical challenges encountered by the administrator or the participant with the testing environment not involving the application.

1. Technical challenge

a) Challenge name:

b) Challenge description:

2. Technical challenge

a) Challenge name:

b) Challenge description: