

# CS5760 - Human Computer Interaction & Usability Testing

Venkata Rohith Kola

## Usability Test plan

### Team 5: Fire Watch

#### Team:

#### Developers

Cami Maynard  
Atharva Kadam  
Ransom Duncan  
Jyoti Suhag  
Mitch Konoya  
Jacob Strome  
Logan Woznak

#### UX Consultants

Venkata Rohith Kola  
Dinakar Jonnalagadda

## **Testing Information:**

The below mentioned test scenarios will be tested in a total of 8 sessions each with duration of 1 hour administered by UX consultant (Venkata Rohith Kola) and two developers participate for each session. A total of 4 sessions will be conducted in offline mode and remaining 4 in an online mode.

## **Test Scenario - 1:**

**Name:** Form Experience

### **Test Goals for the scenario:**

The goal of this scenario is to test if the user is able to clearly navigate through the different options in the application while filling the form.

### **Software / Equipment Required:**

1. Computer / Smartphone (with internet connection)
2. Zoom Software

### **Quantitative Measurement List:**

1. Time taken to fill the form
2. Number of clicks used to select the ash color in the interactive ash panel.

### **Scenario Description:**

The expectation of this scenario is to know if the form submission functionality is user friendly.

### **Scenario Text:**

Imagine you are a new user of this application Asher, you want to fill out a form by filling data in the app by following the instructions and data provided to you.

### **Task List:**

1. Open the Asher application and login to your account by giving credentials given to you.
2. Choose 'Begin New Form' on the Dashboard page.
3. Click on Help icon to view information.
4. Upload the image provided and select the ash color on the panel.
5. Fill out the remaining information in the form and submit

### **Qualitative measurement list:**

1. Participant's ease in choosing the ash color on the panel.
2. Are the fields in the form designed clearly for ease of filling details?
3. How helpful is the 'Help' option?

### **Potential observations of participant:**

1. Time taken in filling the form.
2. Activity of the participant while filling the form.
3. Post-scenario answers of participants.

### **Bug Report Form:**

Participant Name: \_\_\_\_\_

Bug Name: \_\_\_\_\_

Bug Description: \_\_\_\_\_

Steps to reproduce:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### **Post-Scenario Questionnaire and Interview:**

Please check one option given below for the question:

**Is the form filling task easy or difficult for you? And tell me why?**

- Easy
- Difficult
- Little Easy
- Little Difficult
- Moderate

**Is the selection of ash color on the ash color panel easy or difficult? And tell me why?**

- Easy
- Difficult
- Little Easy
- Little Difficult
- Moderate

**How's the help option? And why?**

- Useful
- Not Useful
- Could be better

**How's your experience using the app? And any suggestions?**

- Good
- Bad
- Moderate

**Test set up details:**

The test will be conducted in online and offline mode, for online mode Zoom software will be used with no distractions in a quiet environment. For offline mode, the study rooms located in the library will be used.

## **Test Scenario - 2:**

**Name:** Database Connectivity, view of database and Edit of Submitted records.

### **Test Goals for the scenario:**

The goal of this scenario is to test if the user is able to edit the submitted records and view the database in the application.

### **Software / Equipment Required:**

1. Computer / Smartphone (with internet connection)
2. Zoom Software

### **Quantitative Measurement List:**

1. Time taken to display the data after clicking the 'view database' button.
2. Time taken to display the submitted records when choosing the option 'continue last created form'.

### **Scenario Description:**

The expectation of this scenario is to know if the application is able to connect with the database properly and how fast it is able to fetch the data and the experience in editing the submitted form.

### **Scenario Text:**

Imagine you are a user of this application Asher, you want to view the database of this application and want to update information on a submitted form.

### **Task List:**

1. Open the Asher application and login to your account by giving credentials given to you.
2. Choose 'View Database' on the Dashboard page.
3. Navigate back to the dashboard page.
4. Click on the 'Continue Last Created Form'.
6. Fill out the date to be updated the form and submit

### **Qualitative measurement list:**

1. Participant's ease in navigating between the different options via the dashboard.
2. Is the database information shown clearly?
3. Is it easy to update the submitted form? How the submitted form showed?
4. Is the application able to fetch the data from the database promptly?

### **Potential observations of participant:**

1. Participant's activity while navigating the application.
4. Activity of the participant while updating the form.
5. Post-scenario answers of participants.

### **Bug Report Form:**

Participant Name: \_\_\_\_\_

Bug Name: \_\_\_\_\_

Bug Description: \_\_\_\_\_

Steps to reproduce:

5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_

### **Post-Scenario Questionnaire and Interview:**

Please check one option given below for the question:

**Is the form updation task easy or difficult for you? And tell me why?**

- Easy
- Difficult
- Little Easy
- Little Difficult
- Moderate

**How did you feel about navigating between options in the application? And tell me why?**

- Easy
- Difficult
- Little Easy
- Little Difficult
- Moderate

**How did you feel about the view of the Database? Explain to me why?**

- Good
- Great
- Not Bad
- Bad

Could be better

How's your experience using the app? And any suggestions?

Good

Bad

Moderate

**Test set up details:**

The test will be conducted in online and offline mode, for online mode Zoom software will be used with no distractions in a quiet environment. For offline mode, the study rooms located in the library will be used.

## **Consent Form:**

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 are no costs to you for participating in the study. The information 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 or not 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 particular 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 computers 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.



