

CS5760 - Human Computer Interaction & Usability Testing

Spring 2024

Application name: MI Herp Atlas Mobile App

Evaluation Assignment 7 – Usability Test Plan

UX Consultant

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Development Team

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Usability Testing Schedule

| Administrator | App | Location | Testing Date | Name | Email |
|-----------------|------------|----------|-----------------------|----------------------|------------------|
| Sanskriti Bokde | Herp Atlas | Library | 04/08/2024 2:00 PM | Vikramaditya Gurrapu | vgurrapu@mtu.edu |
| Sanskriti Bokde | Herp Atlas | Library | 04/09/2024 3:30 PM | Aishwarya Mahima | gade@mtu.edu |
| Sanskriti Bokde | Herp Atlas | Library | 04/10/2024 2:00 PM | Alisa Teige | ateige@mtu.edu |
| Sanskriti Bokde | Herp Atlas | Library | 04/11/2024 3:30 PM | Avery Doherty | aadohert@mtu.edu |
| Sanskriti Bokde | Herp Atlas | Library | 04/08/2024 3:00 PM | Nehal Sheware | nsheware@mtu.edu |
| Sanskriti Bokde | Herp Atlas | Library | 04/09/2024 4:15 PM | Mitchell Warner | mtwarner@mtu.edu |
| Sanskriti Bokde | Herp Atlas | Library | 04/10/2024 3:00 PM | Dustin Krontz | dckrontz@mtu.edu |
| Sanskriti Bokde | Herp Atlas | Library | 04/11/2024 4:15 PM | Mason Fuchs | mafuchs@mtu.edu |

Computer User Interface Usability Testing

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 fulfil 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.

Pre-test Demographic Survey and Questions

The following questions are all entirely optional and help us ensure that we are testing our application with a wide variety of potential users. Your responses will always remain anonymous and never be used to identify you. You are free to skip any questions you do not wish to answer.

Survey

1. Age: (Select one)
 - a. 12-18
 - b. 19-24
 - c. 25-34
 - d. 35-44
 - e. 45-64
 - f. 65+

2. How comfortable are you using mobile apps? (Select one)
 - a. Beginner
 - b. Intermediate
 - c. Advanced

3. Have you ever used a mobile app to record wildlife observations? (Select one)
 - a. Yes
 - b. No

4. Are you interested in learning more about amphibians, reptiles, and their conservation in Michigan? (Select one)
 - a. Yes
 - b. No

Questions

Please indicate your level of agreement to the following statements on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree).

5. I am interested in the testing of this application.
 - (1) Strongly Disagree
 - (2) Disagree
 - (3) Neutral
 - (4) Agree
 - (5) Strongly Agree

6. I understand the purpose of the application.
 - (1) Strongly Disagree
 - (2) Disagree
 - (3) Neutral

- (4) Agree
- (5) Strongly Agree

7. I understand where this application may be used.

- (1) Strongly Disagree
- (2) Disagree
- (3) Neutral
- (4) Agree
- (5) Strongly Agree

Test Scenario 1

1. **Name:** Recording a New Observation (Focus: Offline Functionality)
2. **Goals:**
 - Evaluate user experience while recording a new observation without an internet connection.
 - Assess user understanding of the offline recording functionality.
3. **Description:** Imagine you are outside somewhere in the wild and you see a frog/herptile. You want to record an observation and take a photo. After recording the observation, you realise that there is no internet connectivity and decide to upload it later when you get the connectivity back.
4. **Task List:**
 - Launch the app and initiate recording a new observation.
 - Select the frog species (if known) or choose "Unknown."
 - Verify the app allows saving the observation without requiring an internet connection.
 - Save the observation for later upload.
5. **Quantitative Measurement:**
 - Time taken to complete the observation recording offline.
 - Number of errors or hesitations encountered while recording offline.
6. **Qualitative Measurement:**
 - User satisfaction with the ability to record observations offline.
 - User clarity on how the app handles offline data storage and syncing.
 - User perception of the ease of using the app in areas with limited internet access.
7. **Potential Observations of Participant:**
 - Facial expressions -
 - Body language -
 - Overall -

Test Scenario 2

1. **Name:** Map/Location (Focus: User Interface & Information Architecture)
2. **Goals:**
Evaluate the user's ability to navigate the app and locate the same on the map.
Assess the clarity and test the map functionality.
3. **Description:**
Yesterday you recorded an observation and want to modify the location from the map. I want you to go to the uploaded observation and change the location on the record and upload the observation with the new location.
4. **Task List:**
Launch the app and go to the uploaded observation and click on edit.
Click on the map and update it with the new location.
5. **Quantitative Measurements:**
Time taken to locate the map feature.
Number of clicks or actions needed to access the map.
6. **Qualitative Measurements:**
User satisfaction with the ease of finding and navigating the species selection.
User perception of the organization and clarity of the species list/selection method.
Any difficulties encountered while browsing or searching for specific species.
7. **Potential Observations of Participant:**
Facial expressions -
Body language -
Overall -

Test Scenario 3

1. **Name:** Update new date (Focus: User Interface & Information Architecture)
2. **Goals:**
Evaluate the user's ability to navigate the app and change the date.
Assess the clarity and test the date functionality.
3. **Description:**
Yesterday you recorded an observation and want to modify the date from the observation you made. I want you to go to the uploaded observation and modify the date on the record and upload the observation with the new date.
4. **Task List:**
Launch the app and go to the uploaded observation and click on edit.
Click on the date and update it with the new date.
5. **Quantitative Measurements:**
Time taken to locate the date feature.
Number of clicks or actions needed to access the date.
6. **Qualitative Measurements:**
User satisfaction with the ease of finding and navigating the species selection.
User perception of the organization and clarity of the species list/selection method.
Any difficulties encountered while browsing or searching for specific species.
7. **Potential Observations of Participant:**
Facial expressions -
Body language -
Overall -

Post-test Survey and Questions

The following questions are all entirely optional. Your responses will always remain anonymous and never be used to identify you. You are free to skip any questions you do not wish to answer.

Questions

Please indicate your level of agreement to the following statements on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree).

1. I believe that the application is easy to understand and use.
 - (1) Strongly Disagree
 - (2) Disagree
 - (3) Neutral
 - (4) Agree
 - (5) Strongly Agree

2. I feel like the application has a useful interface easy was it to use the MI Herp Atlas app to record an observation.
 - (1) Strongly Disagree
 - (2) Disagree
 - (3) Neutral
 - (4) Agree
 - (5) Strongly Agree

3. I believe that I could use the application to perform these tasks again without any further assistance.
 - (1) Strongly Disagree
 - (2) Disagree
 - (3) Neutral
 - (4) Agree
 - (5) Strongly Agree

4. I never felt confused, lost, or otherwise uncertain about how to perform a task.
 - (1) Strongly Disagree
 - (2) Disagree
 - (3) Neutral
 - (4) Agree
 - (5) Strongly Agree

5. All of the functions of the website that I interacted with performed as expected,

e.g., everything that I clicked on did what was expected and nothing that I clicked on did something unexpected.

- (1) Strongly Disagree
- (2) Disagree
- (3) Neutral
- (4) Agree
- (5) Strongly Agree

Post-test interview

1. Were you able to complete all the tasks that were assigned to you? If yes, describe your experience, if no, list down the difficulties you encountered.

Answer:

2. What particular task did you find most difficult?

Answer:

3. Based on your overall use of the application which is your favorite aspect/feature of the application?

Answer:

4. Were you satisfied with the overall experience of the application? Please describe your experience briefly.

Answer:

5. Please list down any suggestions and improvements for the application.

Answer:

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 1

Challenge name:

Challenge description:

2. Technical Challenge 2

Challenge name:

Challenge description: