Gogglefox Usability Test Plan

Maple Syrup Production Monitoring

Brandon S. Perelman
- **Test Scenario 1**: Enter data into the application for the first time and check to verify that it has saved.

- **Scenario 1 Test Goals**
  - Determine intuitiveness of the design.
    - Can participants enter data for a single tree without accessing the tutorial?
  - Determine effectiveness of the tutorial instructions.
    - Does the tutorial provide sufficient information? Is more / different information required?
  - Determine suitability of data inputs.
    - Do participants know what information to enter into the fields? Do they understand the scale / units involved?
    - Is data entry efficient?
  - Determine quality of the data display
    - Once entered, is the data easily understandable?
  - Determine quality of “soft” design features.
    - Responsiveness
    - Aesthetics
    - Engagement
    - Legibility and accessibility

- **Scenario 1 Quantitative Measurements**
  - Time to complete (how long does it take the participant to complete the task?)
  - Non-fatal errors (how many times does the participant make an error from which they can recover?)
  - Fatal errors (how many times does the participant make an error from which they must ask the experimenter’s help to recover?)
  - References to tutorial (how many times does the participant reference the tutorial?)
  - Help requests (how many times does the participant ask for help?)

- **Scenario 1 Qualitative Measurements**
  - On what screens did the participant appear frustrated or confused?
  - On what screens / in what situations did the participant have to ask for help from the experimenter?
  - What is the participant’s demeanor while using the application? Does he or she appear to be engaged? Frustrated? Confused?

- **Scenario 1 Task List**
  - If necessary, access the tutorial to acquaint yourself with the application.
  - Enter all pertinent data from your plot into the application.
  - Check the records to ensure that all of the data you have entered is accurate, and is saved into the application.
• **Scenario 1 Description:**

In this test, you will assume the role of an amateur maple syrup enthusiast. Your goal in this scenario is to enter data into the application as if you were using it for the first time. Your plot of land contains the following trees:

- Sugar Maple tree, 34” in diameter, with one tap in it. So far this year it has produced 30 gallons of sap.
- Sugar Maple tree, 65” in diameter, with two taps in it. So far this year it has produced 64 gallons of sap.
- Sugar Maple tree, 96” in diameter, with three taps in it. So far this year it has produced 83 gallons of sap.
- Black Maple tree, 40” in diameter, with one tap in it. So far this year it has not produced any sap.
- Black Maple tree, 40” in diameter, with one tap in it. So far this year it has not produced any sap.

Once you have entered this information into the app, check to ensure that it has all been correctly saved.
• **Scenario 1 Post-Scenario Interview Questions**

• Please provide feedback on the basic structure of the application. Do the screens logically transition one to the other? 

• Please provide feedback on the usability of the interface. Are the buttons appropriately sized? Is the font sufficiently large? 

• Please provide feedback on the data logging process. Is it clear to you what you are supposed to enter into each field? 

• Please provide feedback on the data display. Is it clear to you what data you have logged, and is it easy for you to view the data? 

• Please provide feedback on the efficiency of the design. Are there any areas where you found yourself working less efficiently than possible? 

• How many years of experience do you have with amateur maple syrup production? If you have no experience, put “0”. 

• Rate your interest in the hobby of amateur maple syrup production (circle one).

  1 2 3 4 5 6 7

• If you were to start amateur maple syrup production as a hobby, how important to you is having an app to track your production (circle one)?

  1 2 3 4 5 6 7

• Rate your interest in grass roots-style citizen science ventures (circle one).

  1 2 3 4 5 6 7

• Please rate the design in terms of its (circle one)…
  • Intuitiveness (is it easy to use?)

    1 2 3 4 5 6 7
  • Aesthetics (does it look nice?)

    1 2 3 4 5 6 7
  • Legibility (is all of the text easy to read?)

    1 2 3 4 5 6 7
  • Simplicity (do the screens contain only the necessary information or is there extraneous information?)

    1 2 3 4 5 6 7
• Please indicate your level of agreement with the following statement: Overall this android application was easy to use to perform the task
  1. Strongly Agree
  2. Agree
  3. Neutral
  4. Disagree
  5. Strongly Disagree

• Please indicate your level of agreement with the following statement: I would use this android application again
  1. Strongly Agree
  2. Agree
  3. Neutral
  4. Disagree
  5. Strongly Disagree

• Please indicate your level of agreement with the following statement: I enjoyed using this android application
  1. Very much
  2. A little bit
  3. Neutral
  4. Not very much
  5. Not at all
• **Test Scenario 2:** Use the tapping guide to tap a tree for the first time. The participant will read through the tapping guide, then describe, step by step, the process required to tap a tree. Quality of the guide will be determined by the correctness of this step by step description.

• **Scenario 2 Test Goals**
  o Determine intuitiveness of the design.
    ▪ Can participants access the tapping guide easily?
  o Determine effectiveness of the tapping guide.
    ▪ Does the tapping guide provide sufficient information? Is more / different information required?
  o Determine quality of the guide display
    ▪ Is the tapping guide easily understandable?
  o Determine quality of “soft” design features.
    ▪ Responsiveness
    ▪ Aesthetics
    ▪ Engagement
    ▪ Legibility and accessibility

• **Scenario 2 Quantitative Measurements**
  o Time to complete (how long does it take the participant to complete the task?)
  o Non-fatal errors (how many times does the participant make an error from which they can recover?)
  o Fatal errors (how many times does the participant make an error from which they must ask the experimenter’s help to recover?)
  o Help requests (how many times does the participant ask for help?)
  o Errors in the step-by-step description
  o Correct points in the step-by-step description

• **Scenario 2 Qualitative Measurements**
  o On what screens did the participant appear frustrated or confused?
  o On what screens / in what situations did the participant have to ask for help from the experimenter?
  o What is the participant’s demeanor while using the application? Does he or she appear to be engaged? Frustrated? Confused?

• **Scenario 2 Task List**
  o Access the tapping guide.
  o Read through the step-by-step tapping instructions.
  o Reproduce, in your own words, the process you would go through to tap a tree.
• **Scenario 2 Description:**

In this test, you will assume the role of someone who wants to learn how to tap trees to produce maple syrup. Your goal in this scenario is to read the Tree Tapping Guide, and produce a step-by-step explanation of how to tap a tree in order to demonstrate your competency. First, access the Tree Tapping Guide, then use the guide to produce step-by-step instructions.
• **Scenario 2 Post-Scenario Interview Questions**

• Please provide feedback on the basic structure of the guide. Do the instructions logically transition one to the other? ____________________________________________________________

• Please provide feedback on the usability of the guide. Are the buttons appropriately sized? Is the font sufficiently large? ____________________________________________________________

• Please provide feedback on the description of the tree tapping guide. Is it clear to you what you are supposed to do at each step? ____________________________________________________________

• Please provide feedback on the efficiency of the guide. Are there any instructions that you felt could be worded more efficiently? ____________________________________________________________

• If you were to start amateur maple syrup production as a hobby, how important to you is having a guide available on your phone to describe the process (circle one)?
  1  2  3  4  5  6  7

• Please rate the guide in terms of its (circle one)...
  • Intuitiveness (is it easy to use?)
    1  2  3  4  5  6  7
  • Aesthetics (does it look nice?)
    1  2  3  4  5  6  7
  • Legibility (is all of the text easy to read?)
    1  2  3  4  5  6  7
  • Simplicity (does the guide contain only the necessary information or is there extraneous information?)
    1  2  3  4  5  6  7

• Please indicate your level of agreement with the following statement: Overall this android application was easy to use to perform the task
  6. Strongly Agree
  7. Agree
  8. Neutral
  9. Disagree
  10. Strongly Disagree

• Please indicate your level of agreement with the following statement: I would use this android application again
  1. Strongly Agree
  2. Agree
  3. Neutral
  4. Disagree
  5. Strongly Disagree
Please indicate your level of agreement with the following statement: I enjoyed using this android application

1. Very much
2. A little bit
3. Neutral
4. Not very much
5. Not at all
Pre-Usability Test Questionnaire

- For how many years have you used a smart phone? ___________________

- Please indicate your level of agreement with the following statement: I am very interested in testing this android application
  1. Strongly Agree
  2. Agree
  3. Neutral
  4. Disagree
  5. Strongly Disagree
Bug Report Form

Experimenter Name: __________________________

Date: __________________________

Bug Number: ______

Bug Name: __________________________

Bug Location: __________________________

Bug Description:

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

Procedure for Replicating the Problem:

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________