# Sound Trek Usability Testing Plan



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# **Methodology**

# **Participants**

Each testing session will be completed by a pre-selected group of **5-6 participants**. These groups will be composed of our target audience: **college students and inner city residents** all within the age range of **15-30 years old**. These groups must be willing and reasonably able to complete the provided set of tasks and scenarios that they receive, and provide helpful feedback during the end-of-session debriefing process.

## **Training**

A small degree of training will be required for the test facilitator prior to the commencement of test sessions. The facilitator must be trained to use the remote spoofing software and how to manipulate the weather, location, date, and time of each participants' devices.

#### **Procedure**

The entire testing process will be completed in a total of **10 sessions**. Participants will take part in test sessions located in a controlled meeting room in **Patrick F. Taylor Hall**. This meeting room must comfortably accommodate a maximum of 6 participants and a single test facilitator. The testing area must be available for remote monitoring by data loggers and a psychological analyst either through live video/audio feed or a two-way mirror setup.

Phones with the Sound Trek app downloaded to them and headphones will be provided for participants. These devices will also have spoofing software loaded onto them, allowing the test facilitator to remotely update the weather, location, date, and time of the participants' devices. The test administrator will handle activating global events to assist with testing.

In addition to personnel facilitating each session, test sessions will be unobtrusively monitored by data loggers and a psychological analyst, and recorded for later analysis and referencing. Test participants will be encouraged to verbally communicate their thought processes when appropriate, and give honest feedback on each task both during and after completion (whether successful or otherwise).



#### "Get It" Procedure

Before any "key task" testing begins, participants will be instructed to open the app on the provided devices and be given 10 minutes to look around the app. During this time period, the participants will have free access to the app with a provided dummy login so that they can access all features. The dummy account must include at least three playlists of variable length. Each of the three playlists will be tied to a distinct event, with each of those events being of a unique type (weather, location, date, or time). After the 10 minutes passes, users will be polled using the provided "get it" test questions.

At the end of each testing session, the participants should once again be asked the "get it" questions, and any discrepancies should be documented.

## **Protocol**

#### "Get it" tests

- 1. What is the main function of this app?
  - Playing music
- 2. Where do the playlists come from?
  - User makes them
- 3. What makes the listening experience "dynamic?"/How does the music change?
  - o Playlists change based on user-defined events
- 4. Who would use this app?/What is the audience?
  - Younger people/Adventurous people/people who live/travel in cities



# **Key Tasks**

- 1. Create a user account
- 2. Create a playlist
- 3. Remove a song from a playlist
- 4. Create an event
- 5. Create a weather event
- 6. Create a location event
- 7. Create a time event
- 8. Trigger a user made event
- 9. Delete an event
- 10. Change the priority of different event types
- 11. Play a country song by triggering a location-based event
- 12. Play music from the app in the background
- 13. Set one of your event playlists to not loop
- 14. Change the way playlist transitions occur
- 15. Find the name of the currently playing song

#### Data to be Collected

- How quickly did the user complete the task?
- How does the user rate the difficulty of a task? (on a scale of 1 to 5)
- Does the user see themselves using this in their lives?
- How useful does the user find each feature (on a scale of 1 to 5)
- How long does the user spend looking at the wrong screen when completing a task?
- Does the user ever give up before completing any task?
- Does the user experience any visible/audible frustration?
- How many incorrect buttons does the user click before successfully completing a task?
- Percentage of tasks completed correctly without outside intervention/advising
- Percentage of tasks completed with outside intervention/advising
- Percentage of tasks not successfully completed



# Goals

### **Basic/Core Functions**

These goals have an expected completion rate of 100%

- Users will be able to create a Sound Trek user account and login
- Users will be able to create at least 3 of the 4 event types by the end of the testing.
- Users will be able to start music.
- Users will be able to create a playlist.
- Users will be able to create an event and assign a playlist to it.

#### Intermediate Functions

These goals have an expected completion rate of 85%

- Users will be able to change the playlist transition settings
- Users will be able to change the priority of event types

## **Complex Functions**

These goals have an expected completion rate of 70%

- Users will be able to create an event for when it rains, associate it with 3 playlists, and assign it the highest priority
- Users will be able to create an event for when it is sunny outside between 1:30 and 2:30 on weekdays

# Reporting

The final report should include all initial observations made by data loggers and the psychological analyst. Any further analysis of recordings should also be included in the final report, including completion rates and the frequency of any commonly failed tasks or errors encountered.

