

## User Testing

### Plan:

- Perform usability testing in pairs with one team member being a facilitator and the other a note taker.
- Present the user with the following speech to prepare them to use the think out loud protocol. “We have found that we get a great deal of information from these informal tests if we ask people to think aloud as they work through the exercises. It may be a bit awkward at first, but it's really very easy once you get used to it. All you do is speak your thoughts as you work. If you forget to think aloud, I'll remind you to keep talking.”
- Provide a brief explanation of what Short Sounds is at a high level.
- Upon completion of each task, ask the user if they felt we could improve anything or if there was anything they were confused about.
- Upon completion of tasks let the user play with the app.
- Upon completion of letting the user play with the app, ask the user how they felt the app was overall. Ask the user what could be improved upon. Ask the user what was confusing.

### Usability Test 1:

User 1: Senior at UW. HCDE Major. Android enthusiast. Loves Material Design. No musical background.

Task 1: Record two tracks on top of each other

Successfully completed task 1, did not expect the first track to playback when recording the second track. Liked the simplicity and recognition of the FAB button as well as timer feedback.

Task 2: Play the tracks

Successfully played the tracks.

Task 3: Rename a Short Sound

First instinct was to click the title of the Short Sound, and the user was surprised that did not work. After trying that, the user then went to the Navigation drawer, then finally went to the Action overflow menu to successfully rename.

Task 4: Create a new Short Sound and record a single track

Successfully created a new Short Sound and recorded a single track.

Task 5: Load the previous Short Sound

Successfully loaded previous Short Sound

Playing with the app: The user first tried to reorder the tracks by dragging the cards, which is not a feature we plan to implement. Afterwards, the user decided to add effects to the recorded track. The user was unsure what a reverb effect would actually do, and suggested adding some sort of help in the application to explain what reverb does. The user also found the volume bar unclear, and stated it could be labeled better. Finally, the solo button was found to be very confusing, and the user did not know what to do with the button.

Feedback from the user:

- Renaming ShortSound should be done through clicking the title of the sound.
- New Shortsounds should be visible on action bar, and not be hidden in the overflow menu.
- Volume slider needs labels.

- Definition for Reverb and EQ would be helpful (possibly in the form of an overlay over the effect during first time use).
- Choosing colors for tracks.
- Solo button is unclear.

### **Usability Test 2:**

User 2: Junior at UW. BioChem major. New to Android OS. No Musical background.

Task 1: Record two tracks on top of each other

Successfully completed task 1, but was surprised when pressing the record button for the second time began to play back the first track.

Task 2: Play the tracks

Successfully played the tracks.

Task 3: Rename a Short Sound

Initially the user clicked on the title, but then went to the action bar menu button, and found the rename method.

Task 4: Create a new Short Sound and record a single track

Initially went to the Navigation drawer to create a Short Sound. After finding no new button there, the user then went to the action bar menu and found the new button and completed the task.

Task 5: Load the previous Short Sound

Successfully loaded the previous sound recorded and played.

Playing with the app: The user went to sharing and noticed that there was no option to share on facebook. When looking at the settings for a single track the user was completely lost, did not know what EQ or reverb meant, and did not know what to expect when pressing the solo button.

Feedback from the user:

- Said it would be cool to have waveforms representing the tracks.
- Clicking the title to change the name.
- Renaming the tracks through a click and hold on the track name.

### **Usability Test 3:**

User 3: Junior at UW. EE Major. Records music as a hobby with professional tools. Android user.

Task 1: Record two tracks on top of each other

Successfully performed task 1, but noticed that the sounds recorded were out of sync.

Task 2: Play the tracks

Successfully performed task 2

Task 3: Rename a Short Sound

Immediately went to action bar menu and found rename there, and successfully performed task.

Task 4: Create a new Short Sound and record a single track

Same as task 3, immediately knew what to do.

Task 5: Load the previous Short Sound

Successfully performed task 5.

Playing with the app: The user immediately went to play with the effects, said it would be nice to be able to hear the effects in real time, instead of having to save them, then see the changes. The user also found sharing very simple and intuitive, and appreciated that it compressed the tracks into a single mp3.

Feedback from the user:

- Label the Axis of the effects, as to give context about what the effects actually do.
- Solo button is not intuitive since multiple tracks can be soloed.
- Thought solo button enabled the volume bar.
- Assumed correctly for volume bar, but said a label would have been nice.
- Wished for renaming and deletion of tracks.

### **What we learned**

The most obvious change needed after user testing is the way we are renaming Short Sounds. Clicking the title of the Short Sound should open the same dialog box that selecting rename in the overflow menu does. Another apparent UI element which needs to be adjusted is the view when expanding a track. First, the volume slider needs a label to make it more apparent that it is the volume adjuster. Also some help about the EQ and reverb effects so that the users know what they're getting with those effects.

User Testing also revealed that a good way to implement the renaming of an individual track would be to implement a click-and-hold on the track name, as that is how two of the testers attempted to change the name while they were messing around with the app after they finished their tracks.

For functional changes, Syncing up recorded sounds with the playback needs to be more precise. Also, the solo button should be changed to work with only a single track at a time.