

# **User Requirements Study Interview Script & Observation Activity Script**

## Screenener

Participants were selected based on a simple screener that consisted of 5 questions:

1. Are you aged over 18?
2. What is your background regarding work and/or studying?
3. Do you enjoy listening to, or playing, music?
4. Are you at all interested in creating musical compositions or sounds?
5. Have you ever used/interacted with MIDI (Musical Instrument Digital Interface)?

## Interview Script

First, I introduce myself and the participant introduces themselves.

1. Do you play any musical instruments?
  1. If so, which instruments do you play?
    1. Why do you enjoy playing those instruments?
    2. Are there any other instruments you would be interested to start playing or try? Why?
2. What genre(s) of music do you enjoy listening to (or playing (depends on previous answer to Q1))?
  1. What specific aspects of that genre capture your attention? Do you focus on the melody/chord progressions/rhythm/lyrics? Explain further.
  2. What happens when you listen/play that music? Take me inside your brain/body and describe what's going on.
  3. Have you ever noticed your instinctive/natural reactions when you listen to/play those genres of music?
    1. Do you naturally react physically by dancing/gesturing?
    2. Do you naturally react emotionally/mentally by thinking of certain memories/thoughts?
  4. What are some of your favourite songs? How would you convey these songs/genre(s) of music we discussed before to a deaf person? We can play the music to give you a reference.
    1. How would you do this without your hands? How effective do you feel it is to not use your hands?
3. Have you ever attempted to create an original musical composition, song, or lyrics?
  1. If so, can you take me through the process you employ to create the song/composition?
    1. What was enjoyable about that process?
    2. What was productive/rewarding about that process?
    3. What was not enjoyable about that process?
    4. What was frustrating/counter-productive about that process?
    5. Did you ever feel like your creativity was encouraged and/or hindered during that experience? Explain further.
  2. If not, can you describe the steps you would take to create a new musical composition/song?
    1. Which of these steps do you feel is most important to accomplish?
    2. Which of these steps do you feel is most challenging to accomplish?
    3. Which of these steps do you feel is most straightforward to accomplish?
4. What form of technology do you use most on a daily basis?
  1. What function is that technology used for? Explain.
  2. What do you like about that technology? Explain.
  3. What do you dislike about that technology? Explain.

5. Can you recall any particularly notable interactions with technology within recent memory?
  1. Any particularly enjoyable interactions with technology within recent memory?
  2. Why was it so enjoyable/memorable?
  3. Any particularly frustrating interactions with technology within recent memory?
  4. Why was that experience so frustrating?
6. Similarly, can you recall any notable interactions with everyday objects within recent memory?
  1. How did your body interact/achieve the desired task?
  2. Why was that experience enjoyable?
  3. Why was that experience so frustrating?
  4. Examples of prompts to give if participants are not giving any examples: Do you drive? How does your body operate while driving? Do you sow? How does your body operate a traditional sowing machine? What do you enjoy about this? What frustrates you about this?
7. While thinking of your previous experiences with technology, can you ever recall a scenario where you wished for a certain feature in the moment, but it was not available?
  1. Elaborate further on this experience, what your desired feature was, and how it relates to the problem.
8. Have you ever used technology for the purpose of producing/playing music? Music technology includes playing sounds on a computer, or using a MIDI keyboard etc.?
  1. If so, can you describe the most enjoyable aspects of this experience? Why? Explain further.
  2. If so, can you describe the least enjoyable aspects of this experience? Why? Explain further.
  3. If not, that is absolutely fine! You will have the opportunity to interact with music production tech etc later (a digital audio workstation) later. In the meantime, could elaborate on any features/interactions you would wish to see in such a system?
9. Have you ever interacted with technology via only gestures? Have you ever interacted with a Kinect etc...?
  1. If so, what did you enjoy about it?
  2. If so, what did you not enjoy about it?

If this participant is doing the observation activities on another day, conclude the session, thank them for their time, answer any questions, and agree on a later time to do the observation activities.

### Observation Activities Script

These activities are designed to allow the interviewer (me) some insight into what a user actually does and experiences when interacting with existing MIDI interfaces for music production.

Furthermore, these observation exercises will allow users to explain to me what they are thinking at all times when going through a certain process, as I will prompt them to do so. If a user mentions an interesting topic spontaneously during the activity, it would also be possible for this exercise to take on the same style of an interview about that topic on the spot.

If a user ever has any difficulty to do something, take that as an opportunity for them to explain why it's difficult, and what they would want in this situation instead. Make the participant feel comfortable with this notion as well.

### **Activity 1 (Convey music visually, as if you're conveying it to a deaf person):**

I have a selection of music and songs that I'm going to play for you. The five songs I will play are: Piano Man by Billy Joel, Chariots of Fire by Vangelis, Summer by Calvin Harris, Peer Gynt Suite No. 1 by Edvard Grieg, and Take Five by Dave Brubeck. I would like you to try and convey that

music to a deaf person. What movements, colours, or moods would you use to convey it? Get creative with it.

### **Activity 2 (Recreate the melody to Happy Birthday and Twinkle Twinkle Little Star in Logic by drawing the melody):**

We're going to open up a digital audio workstation application called Logic. Are you familiar with what a DAW is? (If not explain). Go to the piano roll. If they can't find it, show them where it is. Get an idea of the participant's initial feeling for the application. Do they know where the project tempo is? Do they know where to get instrument sounds etc?

Now that you are familiar with the piano roll, can you recreate the melody behind Twinkle twinkle little star? Do you know the song? Shall I play the melody for you? If you want to add chords, show me how you would do that.

Now repeat this process with Happy Birthday.

Continuously ask the participant to elaborate on what they like/dislike about the workflow.

If the participant is getting on really well at this stage, perhaps invite them to recreate melodies of their favourite songs as well.

### **Activity 3 (Recreate the melody to another famous song of the participant's choice using a MIDI keyboard):**

You now have a MIDI keyboard in front of you. This is another popular way of entering music notes/MIDI data to the computer. Play around with the keyboard and tell me if you notice any cool features with it.

What happens when you press harder on the keys? Do the notes in the piano roll change colour?

Prompt the user to play with features like the pitch bend wheel if they don't seem to notice it.

Continuously ask the participant to elaborate on what they like/dislike about the workflow.

Now, pick a famous song, any song that you have in mind and attempt to recreate its melody/chord progression with the MIDI keyboard.

### **Activity 4 (Create your own musical composition):**

Now that you have attempted to recreate some famous melodies using either the Logic application on its own, or the MIDI keyboard, let's have a go at creating an original composition/song? You can use any workflow you like? Ask the participant why they are using or not using certain pieces of equipment during this process.

Ask the participant to always explain what they are thinking out loud when creating the music or interacting with aspects of the application/MIDI keyboard. This way, I hope to notice trends that people subconsciously follow when creating/producing music with these forms of technology.

### **Conclusion**

Thank you so much for taking part in this study, and I hope you had fun along the way as well! Formally conclude the session, thank the participant for their time. Any questions? Answer any questions the participant may have.