

Usability Testing: Figaro

Participants

Target population:

- Professional actors
- Amateur and professional singers

Remarks on participants:

- users must be already familiar with the vocal exercise we are recreating, this is **not** an application that substitutes a training, it just enhances its portability. (This implies that by “amateur singer” we mean somebody that has some kind of training, but does not practice singing in a professional way, **not** somebody who “would like to learn to sing”)
- All participants can understand written english easily

Age: 15-40

Expertise with singing exercises: done at least once

Gender: Even mix of male and female

Expertise with Figaro: none

Usage of smartphone: uses a smartphone or a computer daily

Where

Possibly in person, at one team member's house, otherwise remotely

Equipment

A smartphone

Artifacts

Informed consensus document

Post-test questionnaire (SUS)

Single Ease Question (SEQ)

Tasks

#	Text of the task	Success criteria	Methodology	Follow-up question
T1	Select an exercise to perform	The task is successful if the user gets roughly what the exercise is about. Specifically, that he/she will have to sing a set of notes, singing vowels ("aaa", "ooo", "laa")	Think-aloud	Do you understand which kind of notes you will be asked to sing by just looking at the name of the exercise? (To check the consistency exercise's name)
T2	Perform an exercise (Crucial)	<p>The user is able to understand when to sing within the first attempt by observing the UI, without the help of the facilitator AND without opening the tutorial.</p> <p>The success of this task will be measured by a number from 1 to 5 that marks the repetition in which the user is able to understand when he/she has to sing. Let us call it N.</p> <p>Maximum iteration is 5.</p> <p>If $N == 1$ the user was able to immediately understand how the exercise works</p> <p>If $N == 5$ the user was not able to understand how the exercise works by the end of all repetition in the given exercise)</p> <p>If we get to 5, we go to T6</p>	Think-aloud	Did you understand which notes you sung right?
T3	Exit an exercise during execution	The user is able to stop the exercise in the middle of execution without the help of the facilitator in less than 1 second from the beginning of the exercise	none	
T4	Find the just executed exercise record	The user navigates to the statistics page and says out loud what those statistics mean. It is then asked whether those statistics provide value in	Think-aloud	

		their daily activities		
T5	Find your (hypothetically) weakest passages	The user navigates to the statistics page and says out loud what those statistics mean.	Think-aloud	
T6	Find the day you (hypothetically) practised more in the last week	The user navigates to the statistics page and says out loud what those statistics mean.	Think-aloud	Do all these statistic provide value to your routine? (maybe at the end)
T7	Add an exercise to your favorites (go to favorite section, remove from favorite section)	User navigate successfully to the exercise list page and adds an exercise to the favorite list.		
T8	Add your picture to your profile, change your vocal range	The participant navigates to the profile page and uploads a new picture with the camera. Then he/she sets his/her own vocal range	none	
OT1	Go through the tutorial (optional)	Navigate to tutorial and go through it, the users states out loud if the exercise flow is clear	Think-aloud	
OT2	Perform the exercise after having gone through the tutorial (optional)	Same as T2. If result == 5 again go to T8	Think-aloud	
OT3	Perform the exercise with the help of the facilitator (optional)	The facilitator explains and eventually performs one exercise as an example.	Cooperative Evaluation	

Metrics

Exercise performance (as per T2)

Number of non-critical errors (only for tasks T2, ... T6)

Recording medium

Notes

Photos

Script

SEQ = Overall this task was? 1 - 7 (from very difficult to very easy)

IF SEQ <= 3 ask why they find the task hard.

Introduction

Hi, <name of the participant>. I am <name of the facilitator> and today we want to test Figaro application.

Please, fill out this document for giving us permission to... before starting the session.

<handling the pre-test questionnaire>

Before starting, we would like to clarify the goal of this testing session. The test is not about you as a user: we are **not** testing you, but the usability and the clarity of our application.

We also would like to repeat that this session is recorded.

The testing session will last approximately 20 minutes.

Q1: Do you have any questions before starting?

Test starts

I will now show you the main page of the application. You may look for a few seconds, then I will ask you some questions. You don't have to click anything now. Understood?

Participant looks at the page for ~10 seconds

Q1: what is your first impression of the website? What do you think it is for?

T1

Let's start with the first task. I want you to browse the list of available exercises, choose one and explicitly state what the exercise might look like.

Participant executes the task. Expected duration: 1-2 minutes.

Q2: Are the names of the exercises clear to you? Do you usually call exercises similarly in singing class?

SEQ1

T2

Next, I want you to select an exercise, start it and execute it.

Participant executes the task. Expected duration: 1-2 minutes.

Measurement taken: **M1** = index of repetition at which the participant sings **WHEN** he/she is supposed to

Q3: How was executing the exercise? Do you think it resembles accurately a real exercise with your teacher? Could you understand which notes did you sing accurately and which not?

SEQ2

Optional branch #1: the participant could not understand the exercise (do not run if user can execute the exercise)



OT1

No problem, let's move on to the next task. Find the tutorial and go through it.

Participant executes the task. Expected duration: 1-2 minutes.

OQ1: Was the tutorial clear? Do you understand now what you have to do? Do you think the tutorial format was appropriate?

OSEQ1

OT2

Now, try again to execute the exercise.

Participant executes the task. Expected duration: 1-2 minutes.

OQ2: How was executing the exercise? Do you think it resembles accurately a real exercise with your teacher? Could you understand which notes did you sing accurately and which not?

OSEQ2

Optional branch #2 (nested): the participant could not understand the exercise after going through the the tutorial (do not run if user can execute the exercise after going through the tutorial)

OT2

No problem. I will show you now an example and explain thoroughly the exercise flow.

Facilitator executes the exercise and explain thoroughly the exercise flow

Participant executes the task, possibly with the help of the facilitator. Expected duration: 1-2 minutes.

QQ3: How was executing the exercise? Do you think it resembles accurately a real exercise with your teacher? Could you understand which notes did you sing accurately and which not?

OSEQ3

End of optional branch #2 (nested)

End of optional branch #1

T3

Very well. Now I want you to restart the exercise and to stop it.

Participant executes the task. Expected duration: a few seconds.

Measurement taken: **M2** = time to execute the task

SEQ3

T4

Very well. Now I would like you to find the record of the exercise you just executed on the application.

Participant executes the task. Expected duration: a few seconds.

Measurement taken: **M3** = time to execute the task

Q4: Can you tell me the information you deduce from the record?

SEQ4

T5

Moving on, I would like you to find the weakest passages in the application. Of course this data is static and does not represent what your real weakest point are, but try to imagine you used the application for a while and that the data you find represent your progress.

Participant executes the task. Expected duration: a few seconds.

Q5: What do you think a “passage” represents?

If the participant is not sure about the answer the facilitator explains what the application mean by passage.

Passage explanation:

A passage is a couple or a series of notes that a singer may find difficult to execute. Usually passages can be difficult because they involve notes of very different pitch (a low note after a really high note), notes from different scales or sudden and non-obvious change in tonality.

Q5-2: Do you think the name “passage” is appropriate? Would you suggest a better word to describe such concept?

SEQ5

T6

Now I would like you to find the day of the week in which you practiced more in the last week. As before, keep in mind this data does not represent your real data.

Participant executes the task. Expected duration: a few seconds.

SEQ6

T7

Now add an exercise to your favorites list.

Participant executes the task. Expected duration: a few seconds.

SEQ7

Now browse your favorites list.

Participant executes the task. Expected duration: a few seconds.

T8

Now I would like you to update your profile picture and your vocal range.

Participant executes the task. Expected duration: a few seconds.

SEQ8

Questionnaires

System Usability Scale (SUS)

Answer: from 1 to 5 (strongly disagree to strongly agree)

1. I think that I would like to use this system frequently.
2. I found the system unnecessarily complex.
3. I thought the system was easy to use.
4. I think that I would need the support of a technical person to be able to use this system.
5. I found the various functions in this system were well integrated.
6. I thought there was too much inconsistency in this system.
7. I would imagine that most people would learn to use this system very quickly.
8. I found the system very cumbersome to use.
9. I felt very confident using the system.
10. I needed to learn a lot of things before I could get going with this system.

Final thoughts

Q6: The test is over. Do you have any comments on the app functionality? What did you like and what not?