

Usability Evaluation

Congratulations! You have made it to the last step of this deliverable: the usability evaluation phase. At this point, we hope that you :

- understand our project description and usability goals
- have successfully set up the prototype and read the manual
- have conducted at least three usability test sessions and collected all the raw data as instructed

You are now ready to begin the evaluation process, which consists of two parts. We have provided you some guidance regarding this process below, but feel free to deviate from this and come up with new ways to perform the evaluation, just make sure you document your process thoroughly in that case.

Part 1: Usability Testing

In usability testing, potential users try out the user interface with real tasks, and may or may not encounter problems. The problems found with usability testing are true problems in the sense that at least one user encountered each problem.

You have already conducted usability tests as observers and collected data. You will now analyze that data and evaluate the success or failure of the prototype against the usability goals and benchmark tests we previously defined. We recommend that you quickly review the Usability Goals + Benchmark Tests document at this point.

Review the data collection sheets and summarize the results in the following table.

“Succeeded”: completed the task with little to no help, with at most 2 errors.

“Failed”: unable to complete the task, or able to complete the task but after making 3 or more errors and/or asking the observer for instructions on “how” to complete the task.

Benchmark Tests	No. of users who succeeded	No. of users who failed	No. of users who did not attempt the task at all
Record a Bottle			
Listen to a Bottle before sharing it			
Rerecord a Bottle			
Discard a Bottle before sharing it			
Add a tag to a recorded Bottle			
Share a recorded Bottle			
Find a Bottle with a certain tag(s)			
Listen to a Bottle			
Return to the home screen after listening to a Bottle			

Next, fill in the following table:

Usability Goal	Quantifiable measurement	Success/Failure (S/F)
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Ease-of-use	At least 70% of users should be able to complete each benchmark task they attempt with at most 2 errors	
Feeling heard	All test users should indicate a higher-than-neutral response to “feeling heard” in the post-test questionnaire.	
Feeling that their thoughts are accurately represented	At least 1 in 3 test users should use the redo or playback buttons when performing the tests.	
Feeling less alone with their issues	All test users should indicate a higher-than-neutral response to “feeling empathetic” in the post-test questionnaire.	

Part 2: Heuristic Evaluation

In heuristic evaluation, an evaluator looks at the user interface and identifies problems. This evaluator is not necessarily the end user. The problems identified during heuristic evaluation are potential problems in the sense that the evaluator suspects that something may be a problem to actual users.

The prototype is available to you, as well as a manual which explains in detail all the features and functionality. We recommend that you quickly review the manual at this point, and then play around with the system and try out all the different features, explore all the screens, click on all the buttons etc. (we do not prescribe any particular order for this). While you do this, keep in mind the following heuristics from Nielsen's list of usability heuristics:

1. Match between system and the real world

The icons and symbols used in the system should be familiar to the users and follow real-world conventions, which makes the interface logical and natural to use.

2. User control and freedom

It is important that the users have the freedom to use the system how they want to. The users should be able to exit the current interaction with just one simple tap. As such, the users would not feel stressed or frustrated when they get stuck.

3. Consistency and standards

The experience we aim to provide is one that is soothing and comfortable, it is crucial that all the actions are consistent and clear so that the system would not introduce confusion or increase the users' cognitive load.

4. Recognition rather than recall

Every action, element, and option should be clearly labeled and visible to the users, icons are easily recognizable. The users are not required to remember how the system is used.

5. Aesthetic and minimalist design

We intend to help users express their feelings freely, it is important that the design is minimalist and non-distracting. The aesthetic of the design should make the users feel comfortable and help them express their feelings more accurately.

Once you are finished with the evaluation, fill out the following heuristic evaluation form. As you fill it out, you are allowed to go back and play around with the prototype some more. Alternatively, you may choose to keep the form with you while you initially play with the system, and fill out the form as you go.

[Here](#) is the heuristic evaluation form.