

IMA 2 - Usability Testing Report

DUOLINGO



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Introduction

Duolingo is a language learning application that is available for both IOS and Android systems. It offers fun and engaging language learning courses such as Spanish, French, German, Chinese, English, Japanese, Korean, Italian, Portuguese, Dutch, Irish, Danish, etc. Its high accessibility, usability, and many language options attract many foreign language learners. The application offers basic courses for the beginner users who are new to the target language, and for learners who have some knowledge of the target language. The non-beginner language learners take a placement test before they can begin a course. Duolingo also offers progressive lessons with vocabularies and translation practices with pictures.

The test on the usability of Duolingo was conducted and reported by Sahar Alyahya, Imelda Bangun, Amal Barzanji, Anna Lara, Basma Moreb, collaboratively. To gather the data of the usability of Duolingo, each member of this group interviewed two participants, with a total of ten participants. The group utilized varied materials during the interviews such as, the usability testing simulation script, seven tasks, the end-of-session questionnaire, and the satisfaction survey to better ensure the quality of this report. Based on the data collected, both pros and cons about the Duolingo mobile application is also included, as follows:

Pros:

1. Users can use Google and Facebook accounts to set up Duolingo account.
2. Appealing interfaces.
3. Allowing users to choose various languages.
4. Allowing users to progress through easy vocabulary and translation tests.
5. Allowing users to learn vocabulary words through pictures.
6. Immediate feedback when mistakes are committed.

Cons:

1. Difficult to find the interface for creating a new account.
2. The app's interface organization change for some languages.
3. The participants first language limits the number of languages they can learn.
4. The tasks do not end on time if there are mistakes made by the user.

Above all, the involved participants considered Duolingo to be an easy and useful application for language learning. Duolingo provides users with many options in language study with an attractive interface and friendly operating system.

Methodology

Sessions

The test administrators contacted and recruited participants via different methods such as text messages, online, and face-to-face interaction at the university's library and/or off campus. The test administrators informed the participants of the process and what they should expect before starting the session. Each individual session lasted approximately half an hour, and the tasks took up to 16 minutes to complete.

During each session, the test administrators explained the test session and asked the participant to fill out a brief background questionnaire. In addition, the test administrators encouraged participants to speak out loud and ask questions while doing the tasks. The participants were told their questions would be answered after they finished the tasks.

Test administrators observed the number of times each participant made a click or tap; the approximate duration of each task; and the participants thinking process, questions, expressions, and remarks about each task. After all the tasks were completed by the participants, the administrator asked the participants to fill out two questionnaires that rate the language learning app interface and experience: an end-of-session questionnaire and a satisfaction questionnaire. The end of session questionnaire incorporated a 5-point Likert Scale with measures ranging from "super easy" to "super hard"; while the satisfaction survey incorporated a 7-point Likert Scale with measures ranging from "Strongly Disagree" to "Strongly Agree."

Participants

10 participants were scheduled over the period of the testing dates. Ten participants were involved in testing from February 10 - 21, 2018. Of the ten participants, seven were male and three were female. The participants' backgrounds, native languages, occupations, and nationalities were different. Most of the participants were students, except for two. One of them was a doctor and the other one was a teacher's assistant.

The participants' native language included Arabic, Turkish, English, Spanish, and Urdu. All the participants said that they use mobile applications in their daily lives, especially social media apps (e.g., What's up, YouTube, Snapchat, Google translate, Google maps, and Twitter). The participants mentioned that they use their mobiles for communication, health tracking, language learning, school work, games, and translation purposes.

Evaluation Tasks/Scenarios

There are seven tasks that the participants will be asked to complete, as follows:

Task 1 - Complete the steps necessary to create a new account. Stop after your account has been created.

Task 2 - Now, find one language you like to learn and add it to your profile / account.

Task 3 - Change the language to other language you like to learn.

Task 4 - Turn off and turn on auditory sound.

Task 5 - Go to a setting / preference and change a setting option.

Task 6 - Complete a 5 minutes task.

Task 7 - Sign out.

Results

Task Completion Success Rate

There were ten participants, in totality. The following people observed the participants performing the tasks without the aid of prompting: Anna (Participants 1 & 2), Sahar (Participants 3 & 4), Amal (Participants 5 & 6), Basma (Participants 7 & 8), and Imelda (Participants 9 & 10). All participants successfully completed Task 1 (create a new profile), Task 2 (add a language to the profile), Task 3 (change the language to another language the participant would like to learn), Task 4 (Turn off and turn on auditory sound), Task 5 (go to a setting / preference and change a setting option), Task 6 (complete a 5-minute task), and Task 7 (sign out). All the 10 participants (100%) completed all the tasks. The participants used a variety of devices in this usability test, and this did not affect the completion of the tasks.

Task Completion Rates

Participant	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7
1	√	√	√	√	√	√	√
2	√	√	√	√	√	√	√
3	√	√	√	√	√	√	√
4	√	√	√	√	√	√	√
5	√	√	√	√	√	√	√
6	√	√	√	√	√	√	√
7	√	√	√	√	√	√	√
8	√	√	√	√	√	√	√
9	√	√	√	√	√	√	√
10	√	√	√	√	√	√	√

Success	10	10	10	10	10	10	10
Completion Rates	100%	100%	100%	100%	100%	100%	100%

Learnability: Time to complete a task successfully

Each team member recorded the time on task for each participant. Some tasks were more difficult to complete than others, which is shown by the average time on task. Task 1 required participants to create an account, including email address and password and took a long time to complete (mean = 5.1 minutes). Task 2 (adding a language) was easy to complete for all the participants and therefore the time spent on this task was the lowest (mean= 0.95 seconds). Tasks 3 (changing the language), 4 (turning sound off and on), & 5 (changing a setting option) were also easy to complete. The time spent on these tasks was relatively similar (mean3= 1.3, mean4= 1.1, & mean5= 1.25 minutes). Not surprisingly, Task 6 took the highest amount of time (mean= 5.3) since the task requirement was to complete a 5-minute task. Thus, the time spent on Task 6 is related to the nature of the task, which is the learning practice, not to a drawback in the app interface. Lastly, Task 7 (signing out) was also relatively easy to accomplish (mean=1.55).

Time on Task

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	Total	Avg.
Task 1	10	3	4	1	7	8	6	1	5	6	51	5.1
Task 2	1	1	2	.5	1	1	.5	.5	1	1	9.5	0.95
Task 3	3	2	.5	.5	1	.5	.5	1	3	1	13	1.3
Task 4	1	2	.5	.5	1	1	2	1	1	1	11	1.1
Task 5	4	2	.5	.5	1	.5	.5	.5	2	1	12.5	1.25
Task 6	7	4	6	5	5	5	5	5	5	6	53	5.3
Task 7	5	1	.5	.5	1	1	1	.5	1	4	15.5	1.55

Errors

Each team member recorded the number of errors participants made while trying to complete the seven tasks. The maximum number of errors (9) was made during Task 6, which nine out of the ten participants were unable to complete (for a mean of 0.9 errors per participant). A total of eight errors were made for each of Task 1 (which involved setting up a profile by inputting an email address and password). A total of five errors were made for each of Task 7, which is to sign out of Duolingo. A total of three errors were made for each of Task 3 (change the language to the other language you like to learn). A total of two errors were made for each of Task 4 (turn off and on auditory sound) and Task 5 (go to a setting/preference and change a setting option); the average for these two tasks was 0.2 errors per participant. The remaining tasks had 0.00 error (Task 2), which is to find one language the participant would like to learn and add to his/her profile. Apart from the highest errors in some of the tasks (Tasks 6 and 1), the errors were non-critical.

Errors

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	Total	Avg.
Task 1	0	0	1	1	1	1	1	1	1	1	8	0.8
Task 2	0	0	0	0	0	0	0	0	0	0	0	0
Task 3	0	0	0	0	1	1	0	1	0	0	3	0.3
Task 4	0	0	0	0	0	0	1	1	0	0	2	0.2
Task 5	0	0	0	0	0	0	0	0	1	1	2	0.2
Task 6	1	1	1	1	1	1	1	1	0	1	9	0.9
Task 7	1	1	0	0	0	0	1	0	1	1	5	0.5

Summary of Data

The table below displays a summary of the test data. All tasks are completed, therefore, there is no rate in completion. Low errors and time on tasks rates are in bold font.

Summary of Completion, Learnability (Time on Task), Errors

Task	Task Completion	Learnability (Time on Task)	Errors
1	10	5.1	0.8
2	10	0.95	0
3	10	1.3	0.3
4	10	1.1	0.2
5	10	1.25	0.2
6	10	5.3	0.9
7	10	1.55	0.5

Task and Satisfaction Questionnaires Results

When questioned on the ease of the seven tasks, all respondents agreed that Task 1 and Task 2 were either easy or super easy; 90% of the participants agreed on it. 80% of the participants agreed that tasks 3, 4, 5, 6, and 7 were either easy or super easy. In general, the applicants agreed that the application was easy to use, that the interface was pleasant, that information provided was easy to understand, and felt comfortable using the application. However, the percentage of the overall satisfaction is mostly below 50%. The participants agreed that it was easy to find the information they needed, the efficacy of the information was helpful in completing the tasks, although most of the participants were not satisfied with Duolingo. Nevertheless, 32% of the participants believed that they were not able to efficiently complete the tasks; 50% believed that

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they could become productive quickly; and the information provided with the application was not that clear. More than half of the participants (less than 40%) thought the organization of information was not clear, that the application was not as simple to use, that they were not able to recover easily and quickly from mistakes, or that the application gave appropriate error messages to help fix a problem. Overall, the participants appreciated the ease-of-use of the application, but they were not satisfied with some aspects of Duolingo.

Task Questionnaire Table

	1 Super easy	2 Easy	3 Not easy or hard	4 Hard	5 Super hard	Mean Rating	Percent Agree
Task 1	5	4	1	0	0	1.7	90%
Task 2	8	1	1	0	0	1.3	90%
Task 3	5	3	1	1	0	1.8	80%
Task 4	4	4	1	0	1	2.0	80%
Task 5	5	3	1	1	0	1.8	80%
Task 6	3	5	2	0	0	1.9	80%
Task 7	7	1	0	1	1	1.8	80%

**Percent Agree (%) = Easy & Super Easy Responses combined*

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Satisfaction Questionnaire Table

	1 Strongly Disagree	2	3	4 Do not agree or disagree	5	6	7 Strongly Agree	Mean Rating	Percent Agree
1. Overall, I am satisfied with how easy it is to use this language learning app.		2	1	1	2	2	2	4.7	26%
2. It was simple to use this language learning app.			1	1	2	5	1	5.4	37%
3. I could effectively complete the tasks using this language learning app.		1		2	2	3	2	5.2	32%
4. I was able to complete the tasks quickly using this language learning app.			1		1	5	3	5.9	51%
5. I was able to efficiently complete the tasks using this language learning app.			2	1		3	4	5.6	46%
6. I felt comfortable using this language learning app.		1	1	2	3		3	4.9	21%
7. It was easy to learn to use this language learning app.			1	2		5	2	5.5	44%
8. I believe I could become productive quickly using this language learning app.	1		1	3	1	2	2	4.7	26%
9. This language learning app gave error messages that clearly told me how to fix problems.			1	3	1	2	3	5.3	33%
10. Whenever I made a mistake using the language learning app, I could recover easily and quickly.			1	2		6	1	5.4	43%
11. The information (such as on-line help, on-screen messages and other documentation) provided with this language learning app was clear.				3	3	2	2	5.3	26%
12. It was easy to find the information I needed.	1		2	1	2	2	2	4.7	26%
13. The information provided for this language learning app was easy to understand.		1	1	2	1	4	1	4.9	31%

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	1 Strongly Disagree	2	3	4 Do not agree or disagree	5	6	7 Strongly Agree	Mean Rating	Percent Agree
14. The information was effective in helping me complete the tasks.		2			2	5	1	5.1	37%
15. The organization of information on the language learning app screens was clear.		2			2	4	2	5.2	38%
16. The interface of this language learning app (buttons, menus, graphics) was pleasant.			2	2	1	3	2	5.1	32%
17. I liked using the interface of this language learning app (buttons, menus, graphics).	1	1		2		4	2	4.9	38%
18. This language learning app has all the functions and capabilities I expect it to have.	2	1		2	3	1	1	4	13%
19. Overall, I am satisfied with this language learning app.	1	1	1	2	2	2	1	4.3	19%

*Percent Agree (%) = Agree & Strongly Agree Responses combined

Discussion

Based on the Duolingo usability test report data by team Charlie, the **score** of the quality of the app regarding Learnability, Errors, and Satisfaction of the mobile application includes:

Learnability: The Duolingo app offers fun and engaging language learning courses in many languages to foreign language learners from all levels of instruction, from beginner to more advanced learners. The operating system provided a self-explanatory design allowing participants an ease-of-operation in such tasks as creating an account and selecting a language.

Consensus: Overall, "Learnability" of Duolingo is considered satisfactory, based on overall positive responses on the Satisfaction Questionnaire and overall quality score.

Errors:

1. Difficulty in finding the interface for creating a new account.
2. The app's interface changes for some languages.
3. The first language of the participant limits the number of languages they may learn.
4. The tasks do not end on time if mistakes are made by the user.

Consensus: Overall, the "Errors" rating of Duolingo is considered average, based on overall mediocre responses on the Satisfaction Questionnaire and overall quality score.

Satisfaction: Participants found Duolingo useful and comprehensive. Having a mobile application for learning foreign languages for free was a very positive advantage over other apps available today.

Consensus: Overall, the “Satisfaction” rating of Duolingo is considered satisfactory, based on overall responses on the Satisfaction Questionnaire and overall quality score, with twenty percent not recommending the Duolingo app to others learning a foreign language.

Recommendations

In response to both the survey responses and the open-ended commentary by the ten participants, we would make several recommendations of changes to improve the usability of the Duolingo language learning application:

Change	Justification	Severity
Add an icon in the interface for signing up (creating a new account).	Based on our observation, we found that it was difficult for the participants to create an account. In this task, the participants made a lot of errors, and accordingly spent a long time to complete it.	High
Add a notification or tip for users to download the keyboard of the language they are about to learn.	Based on the participant’s recommendation, she faced some difficulties while doing the language practice task. The app was not recognizing her typing since she was using English keyboard and learning Spanish.	Average
Increase the languages offered under all native languages.	Based on our observation, we found that some native languages, for example Arabic, have limited options for the number of languages the participants can learn.	Average
Offer a basic level that is suitable for beginners.	Based on our observation, we found that some participants found difficulty to learn the basics of the languages they chose to learn, which means that content of the basic level offered in the app is not suitable for beginners.	Average

Change	Justification	Severity
Add (switch users) option.	Based on the observation, some users started the app with completing what the previous user was doing. The app did not take them to the homepage at the beginning.	Average
Block advertisements.	Based on the participants responses, we found that in some devices the participants had to deal with a lot of advertisements that interfered with their tasks' completion time.	Average

Conclusion

Most of the participants found Duolingo to be comprehensive, useful, and easy to use. Having a mobile application that offers short lessons to practice a second language for free is an advantage for this application. The overall experience of the participants was not as satisfying as they are comfortable with the use of it. We also found a discrepancy between our observation and the participants' responses.

Although the participants found difficulty in using some of the features, most of them recommended the app for language learning. Only two participants out of ten did not recommend this application, taking into consideration the changes mentioned in this report, would probably improve the value of the application.

Appendices

Appendix A – Completed observation sheets

Appendix B – Completed end-of-session task questionnaires

Appendix C – Completed satisfaction questionnaires

APPENDIX A – Observation Sheets

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Observation Sheet

Participant name: D iPhone

You will be given 7 tasks to complete. We will answer any questions you may have about the usability test before you start, with the exception of how-to questions. Please, be aware that we do not want to risk leading you through the tasks, so although we strongly encourage you to think out loud and ask questions during the process, we will not answer your questions during testing. We will, however, jot your questions down and answer them after you have completed all 7 tasks.

TASK	START	STOP	CLICKS	TOTAL TIME	COMMENTS
Task 1. Complete the steps necessary to create a new account. Stop after your account has been created.	9:00	9:10	10	10	- "Many questions in assessment" - "Very rapid speaker, very different accent" - "When writing the translation, you have to enter the exact words or you will get it incorrect" - "Many cookies (about 5)"
Task 2. Now, find one language you like to learn and add it to your profile / account.	9:10	9:11	1	1	-
Task 3. Change the language to other language you like to learn.	9:10	9:13	3	3	
Task 4. Turn off and turn on auditory sound.	9:13	9:14	1	1	- "Volume on phone"
Task 5. Go to a setting / preference and change a setting option.	9:14	9:16	4	2	
Task 6. Complete a 5-minute task.	9:16	9:21	7	5	- When asking to record to translate, but was too slow - Incorrect answer if omit period - Many attempts - Not clear on what button to press after recording
Task 7. Sign out.	9:22	9:23	5	1	

Lastly, study the app for about 3 minutes and tell me your experience (imagine that your friend just emailed you to ask about this app. What would you tell your friend?

Probably recommend another app.

Anna

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Observation Sheet

Participant name: _____ J _____ iPhone

You will be given five tasks to complete. We will answer any questions you may have about the usability test before you start, with the exception of how-to questions. Please, be aware that we do not want to risk leading you through the tasks, so although we strongly encourage you to think out loud and ask questions during the process, we will not answer your questions during testing. We will, however, jot your questions down and answer them after you have completed all five tasks.

TASK	START	STOP	CLICKS	TOTAL TIME	COMMENTS
Task 1. Complete the steps necessary to create a new account. Stop after your account has been created.	11:07	11:10	4-5	3	-
Task 2. Now, find one language you like to learn and add it to your profile / account.	11:10	11:11	1	1	-
Task 3. Change the language to other language you like to learn.	11:11	11:13	3	2	- Hmm, OK
Task 4. Turn off and turn on auditory sound.	11:13	11:15	4	2	- Can't find setting at all
Task 5. Go to a setting / preference and change a setting option.	11:15	11:17	4	2	-
Task 6. Complete a 5 minuets task.	11:17	11:21	8	4	- To purchase more "health" – you have certain amount of chances to participate in order to keep participating - Once chances are diminished, you can no longer participate until you purchase more. - Not a good way to learn
Task 7. Sign out.	11:21	11:22	5	1	- No sign out - You have to go to "Clubs," "profile," "settings," then scroll down

Lastly, study the app for about 3 minutes and tell me your experience (imagine that your friend just emailed you to ask about this app. What would you tell your friend?

- Didn't teach me anything
- More of a game, less instructional way to learn
- Better if taught alphabet, structure, grammar

Anna

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Observation Sheet

P.B

Participant name: Assem

You will be given five tasks to complete. We will answer any questions you may have about the usability test before you start, with the exception of how-to questions. Please, be aware that we do not want to risk leading you through the tasks, so although we strongly encourage you to think out loud and ask questions during the process, we will not answer your questions during testing. We will, however, jot your questions down and answer them after you have completed all five tasks.

TASK	START	STOP	CLICKS	TOTAL TIME	COMMENTS
Task 1. Complete the steps necessary to create a new account. Stop after your account has been created.	10:10		10 70	4:07 min	could not create account
Task 2. Now, find one language you like to learn and add it to your profile / account.	10:27		5	2 min	
Task 3. Change the language to other language you like to learn.			4	38 sic	
Task 4. Turn off and turn on auditory sound.			4	30 sic	
Task 5. Go to a setting / preference and change a setting option.			2	20 sic	
Task 6. Complete a 5 minuet task.			160	6:09 min	it did not stop after 5min
Task 7. Sign out.			3	30 sic	

Lastly, study with the app for about 3 minutes (time) and tell me your experience (imaging that your friend just emailed you to ask about this app. What would you tell your friend?

its nice and easy, I recomend it.

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Observation Sheet

Participant name: Indian

You will be given five tasks to complete. We will answer any questions you may have about the usability test before you start, with the exception of how-to questions. Please, be aware that we do not want to risk leading you through the tasks, so although we strongly encourage you to think out loud and ask questions during the process, we will not answer your questions during testing. We will, however, jot your questions down and answer them after you have completed all five tasks.

TASK	START	STOP	CLICKS	TOTAL TIME	COMMENTS
Task 1. Complete the steps necessary to create a new account. Stop after your account has been created.			57	1:08	The second user will see the same page of the user installing the app
Task 2. Now, find one language you like to learn and add it to your profile / account.			15	23 sec	
Task 3. Change the language to other language you like to learn.			1	11 sec	
Task 4. Turn off and turn on auditory sound.			6	15 sec	
Task 5. Go to a setting / preference and change a setting option.			4	10 sec	
Task 6. Complete a 5 minutes task.			20	5 min run	8 mins didn't finish with mistakes
Task 7. Sign out.			9	18 sec	

Lastly, study with the app for about 3 minutes (time) and tell me your experience (imaging that your friend just emailed you to ask about this app. What would you tell your friend?

you try it it is easy to use it.

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Observation Sheet

Participant name: Ahmad Al-tukhami

You will be given five tasks to complete. We will answer any questions you may have about the usability test before you start, with the exception of how-to questions. Please, be aware that we do not want to risk leading you through the tasks, so although we strongly encourage you to think out loud and ask questions during the process, we will not answer your questions during testing. We will, however, jot your questions down and answer them after you have completed all five tasks.

TASK	START	STOP	CLICKS	TOTAL TIME	COMMENTS
Task 1. Complete the steps necessary to create a new account. Stop after your account has been created.	7:59	8:07	24	7	- Confused at the beginning - took some time before creating an account - difficult test
Task 2. Now, find one language you like to learn and add it to your profile / account.	8:08	8:09	7	1	no Spanish didn't find it available to Spanish easy
Task 3. Change the language to other language you like to learn.	8:10	8:11	5	1	not what I thought
Task 4. Turn off and turn on auditory sound.	8:11	8:12	5	1	lost - looked
Task 5. Go to a setting / preference and change a setting option.	8:12	8:12	3	1	easy
Task 6. Complete a 5 minutes task.	8:13	8:21	23	5	looking for a way not needed
Task 7. Sign out.	8:21	8:22	3	1	easy - setting -

Lastly, study with the app for about 3 minutes (time) and tell me your experience (imagining that your friend just emailed you to ask about this app. What would you tell your friend?

I think it's useful, especially for beginners they can learn from it, but they need to be consistent and practice every day it has tracking - daily goals so I found it motivating.

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Observation Sheet

Participant name: Ayşe Canır

You will be given five tasks to complete. We will answer any questions you may have about the usability test before you start, with the exception of how-to questions. Please, be aware that we do not want to risk leading you through the tasks, so although we strongly encourage you to think out loud and ask questions during the process, we will not answer your questions during testing. We will, however, jot your questions down and answer them after you have completed all five tasks.

TASK	START	STOP	CLICKS	TOTAL TIME	COMMENTS
Task 1. Complete the steps necessary to create a new account. Stop after your account has been created.	1:48	1:50	5	8	easy love it
Task 2. Now, find one language you like to learn and add it to your profile / account.	1:50	1:51	5 6	1	English Korean
Task 3. Change the language to other language you like to learn.	1:51	1:53	14 5	15	advertisement not responsive not very mobile
Task 4. Turn off and turn on auditory sound.	1:53	1:53	5	1	easy
Task 5. Go to a setting / preference and change a setting option.	1:53	1:54	3	5	easy
Task 6. Complete a 5 minutes task.	1:54	1:58	24	5	so slow stopped suddenly hard to hear
Task 7. Sign out.	1:58	1:59	3	1	not clear

Lastly, study with the app for about 3 minutes (time) and tell me your experience (imaging that your friend just emailed you to ask about this app. What would you tell your friend?

slow - advertisement
maybe but not that good.
didn't like it - Turnent is better

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Participant (P-7)

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Observation Sheet

Participant name: Vale

The app was in Spanish / iPhone IOS 11.2.6

You will be given five tasks to complete. We will answer any questions you may have about the usability test before you start, with the exception of how-to questions. Please, be aware that we do not want to risk leading you through the tasks, so although we strongly encourage you to think out loud and ask questions during the process, we will not answer your questions during testing. We will, however, jot your questions down and answer them after you have completed all five tasks.

overall 30 min
15-16 min

TASK	START	STOP	CLICKS	TOTAL TIME	COMMENTS
Task 1. Complete the steps necessary to create a new account. Stop after your account has been created.	11:04	11:10	42	6min	she was confused how to create an account
Task 2. Now, find one language you like to learn and add it to your profile / account.	11:10	11:10	3	7sec	chose English
Task 3. Change the language to other language you like to learn.	11:11	11:11	3	7sec	chose French
Task 4. Turn off and turn on auditory sound.	11:12	11:14	15	2min	she couldn't find it
Task 5. Go to a setting / preference and change a setting option.	11:15	11:15	2	5sec	Since she was already in settings this step was easy.
Task 6. Complete a 5 minutes task.	11:16	11:21	—	5min	she said she likes it. it didn't stop.
Task 7. Sign out.	11:21	11:22	5	1min	ok.

Lastly, study with the app for about 3 minutes (time) and tell me your experience (imaging that your friend just emailed you to ask about this app. What would you tell your friend?

It's an easy app, but you need to take some time to get used to where the settings & how to create an account about 5-10 mins.
This app helps you practice a language, but not learn a language.
It's nice because it doesn't have ads.

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Participant (P-8)

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Observation Sheet

Participant name: Helal

You will be given five tasks to complete. We will answer any questions you may have about the usability test before you start, with the exception of how-to questions. Please, be aware that we do not want to risk leading you through the tasks, so although we strongly encourage you to think out loud and ask questions during the process, we will not answer your questions during testing. We will, however, jot your questions down and answer them after you have completed all five tasks.

The app was in English / Android 7.0 Motorola

Overall 24 min. 15-16 min

TASK	START	STOP	CLICKS	TOTAL TIME	COMMENTS
Task 1. Complete the steps necessary to create a new account. Stop after your account has been created.	11:44	11:45	7	1 min	used google account
Task 2. Now, find one language you like to learn and add it to your profile / account.	11:46	11:46	5	7 sec	chose Spanish
Task 3. Change the language to other language you like to learn.	11:47	11:48	7	1 min	took some time to choose a lang.
Task 4. Turn off and turn on auditory sound.	11:49	11:50	8	1 min	Is that the sound.
Task 5. Go to a setting / preference and change a setting option.	11:50	11:50	3	5 sec	ok.
Task 6. Complete a 5 minuets task.	11:51	11:50	—	5 min	oh it counts it wrong!
Task 7. Sign out.	11:56	11:57	4	6 sec	Done

Lastly, study with the app for about 3 minutes (time) and tell me your experience (imaging that your friend just emailed you to ask about this app. What would you tell your friend?

It's cool, but make sure you have the keyboard for the language you want to practice or learn. you need to download the keyboard otherwise it might count it wrong. ex. e → e Spanish english ⇒ if you put e it counts it wrong

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Observation Sheet

Participant name: Ahmad Alqrashi

You will be given five tasks to complete. We will answer any questions you may have about the usability test before you start, with the exception of how-to questions. Please, be aware that we do not want to risk leading you through the tasks, so although we strongly encourage you to think out loud and ask questions during the process, we will not answer your questions during testing. We will, however, jot your questions down and answer them after you have completed all five tasks.

10 min

TASK	START	STOP	CLICKS	TOTAL TIME	COMMENTS
Task 1. Complete the steps necessary to create a new account. Stop after your account has been created.	9:13	9:18	20	5 min	Not able to create a new account at first
Task 2. Now, find one language you like to learn and add it to your profile / account.	9:19	9:20	5	1 min	✓
Task 3. Change the language to other language you like to learn.	9:20	9:23	6	3 min	✓
Task 4. Turn off and turn on auditory sound.	9:23	9:24	2	1 min.	✓
Task 5. Go to a setting / preference and change a setting option.	9:24	9:26	3	2 min	✓
5-minute task. Task 6. Complete a 5 minutes task.	9:26	9:31	65	5 min.	The translation is wrong ✓
Task 7. Sign out.	9:31	9:32	4	1 min	✓

Lastly, study the app for about 3 minutes and tell me your experience (imagine that your friend just emailed you to ask about this app. What would you tell your friend?)

It might be useful if you want to learn conversational language, but not to acquire a language at a professional level.

The instruction wasn't clear

My dogs water (Duol^{ing}) -> incomplete sentence
's beer ?
wine ?

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Observation Sheet

Participant name: Ahmed Alomani

You will be given five tasks to complete. We will answer any questions you may have about the usability test before you start, with the exception of how-to questions. Please, be aware that we do not want to risk leading you through the tasks, so although we strongly encourage you to think out loud and ask questions during the process, we will not answer your questions during testing. We will, however, jot your questions down and answer them after you have completed all five tasks.

TASK	START	STOP	CLICKS	TOTAL TIME	COMMENTS
Task 1. Complete the steps necessary to create a new account. Stop after your account has been created.	12:15 12:20	12:21	22	6 min	✓
Task 2. Now, find one language you like to learn and add it to your profile / account.	12:21	12:22	6	1 min	✓
Task 3. Change the language to other language you like to learn.	12:22	12:23	6	1 min	✓
Task 4. Turn off and turn on auditory sound.	12:23	12:24	2	1 min	✓
Task 5. Go to a setting / preference and change a setting option.	12:24	12:24	4	4 min	✓
Task 6. Complete a 5-minute task.	12:24	12:30	70	6 min	✓
Task 7. Sign out.	12:30	12:31	4	1 min	

Lastly, study the app for about 3 minutes and tell me your experience (imagine that your friend just emailed you to ask about this app. What would you tell your friend?)

The app has lots of languages to learn for beginners. It could help build sentences. There are some options (unclear, but helpful) once you understand. The questions are repeated when you're not able to answer correctly and they provide the right answer.

APPENDIX B – End-of-Session Questionnaire

End-of-session questionnaire – D / iPhone

Task

- 1) How easy or hard was it to complete the steps necessary to create a new account.
1 - Super easy **2 - Easy** 3 - Not easy or hard 4 - Hard 5 - Super hard
- 2) How easy or hard was it to find one language you like to learn and add it to your profile / account?
1 - Super easy 2 - Easy 3 - Not easy or hard 4 - Hard 5 - Super hard
- 3) How easy or hard was it to change the language to other language you like to learn.
1 - Super easy 2 - Easy 3 - Not easy or hard 4 - Hard 5 - Super hard
- 4) How easy or hard was it to turn off and turn on auditory sound.
1 - Super easy 2 - Easy 3 - Not easy or hard 4 - Hard 5 - Super hard
- 5) How easy or hard was it to go to a setting / preference and change a setting option.
1 - Super easy **2 - Easy** 3 - Not easy or hard 4 - Hard 5 - Super hard
- 6) How easy or hard was it to complete a 5-minute task.
1 - Super easy 2 - Easy 3 - Not easy or hard 4 - Hard 5 - Super hard
- 7) How easy or hard was it to go to sign out.
1 - Super easy 2 - Easy 3 - Not easy or hard **4 - Hard** 5 - Super hard

Anna

End-of-session questionnaire – J / iPhone

Task

- 1) How easy or hard was it to complete the steps necessary to create a new account.

1 - **Super easy** 2 - Easy 3 - Not easy or hard 4 - Hard 5 - Super hard

- 2) How easy or hard was it to find one language you like to learn and add it to your profile / account?

1 - **Super easy** 2 - Easy 3 - Not easy or hard 4 - Hard 5 - Super hard

- 3) How easy or hard was it to change the language to other language you like to learn.

1 - Super easy 2 - Easy 3 - **Not easy or hard** 4 - Hard 5 - Super hard

- 4) How easy or hard was it to turn off and turn on auditory sound.

1 - Super easy 2 - Easy 3 - Not easy or hard 4 - Hard 5 - **Super hard**

- 5) How easy or hard was it to go to a setting / preference and change a setting option.

1 - Super easy 2 - Easy 3 - Not easy or hard 4 - **Hard** 5 - Super hard

- 6) How easy or hard was it to complete a 5-minute task.

1 - **Super easy** 2 - Easy 3 - Not easy or hard 4 - Hard 5 - Super hard

- 7) How easy or hard was it to go to sign out.

1 - Super easy 2 - Easy 3 - Not easy or hard 4 - Hard 5 - **Super hard**

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End-of-session questionnaire

Task

1. How easy or hard was it to complete the steps necessary to create a new account.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
2. How easy or hard was it to find one language you like to learn and add it to your profile / account?
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
3. How easy or hard was it to change the language to other language you like to learn.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
4. How easy or hard was it to turn off and turn on auditory sound.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
5. How easy or hard was it to go to a setting / preference and change a setting option.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
6. How easy or hard was it to complete a 5 minuets task.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
7. How easy or hard was it to sign out.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard

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End-of-session questionnaire

Task

- 1

 How easy or hard was it to complete the steps necessary to create a new account.
1. ☒ Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
- 2

 How easy or hard was it to find one language you like to learn and add it to your profile / account?
1. ☒ Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
- 3

 How easy or hard was it to change the language to other language you like to learn.
1. ☒ Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
- 4

 How easy or hard was it to turn off and turn on auditory sound.
1. Super easy 2. ☒ Easy 3. Not easy or hard 4. Hard 5. Super hard
- 5

 How easy or hard was it to go to a setting / preference and change a setting option.
1. ☒ Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
- 6

 How easy or hard was it to complete a 5 minuets task.
1. Super easy 2. ☒ Easy 3. Not easy or hard 4. Hard 5. Super hard
- 7

 How easy or hard was it to sign out.
1. ☒ Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard

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Ahmad Al-tuhami

End-of-session questionnaire

Task

1. How easy or hard was it to complete the steps necessary to create a new account.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
2. How easy or hard was it to find one language you like to learn and add it to your profile / account?
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
3. How easy or hard was it to change the language to other language you like to learn.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
4. How easy or hard was it to turn off and turn on auditory sound.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
5. How easy or hard was it to go to a setting / preference and change a setting option.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
6. How easy or hard was it to complete a 5 minuets task.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard

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How easy or hard was it to sign out.

9

1.

Super easy

2. Easy

3. Not easy or hard

4. Hard

5. Super hard

End-of-session questionnaire

Task

1. How easy or hard was it to complete the steps necessary to create a new account.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
2. How easy or hard was it to find one language you like to learn and add it to your profile / account?
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
3. How easy or hard was it to change the language to other language you like to learn.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
4. How easy or hard was it to turn off and turn on auditory sound.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
5. How easy or hard was it to go to a setting / preference and change a setting option.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
6. How easy or hard was it to complete a 5 minuet task.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard

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How easy or hard was it to sign out.

1.

Super easy

2. Easy

3. Not easy or hard

4. Hard

5. Super hard



End-of-session questionnaire

Task

1. How easy or hard was it to complete the steps necessary to create a new account.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
2. How easy or hard was it to find one language you like to learn and add it to your profile / account?
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
3. How easy or hard was it to change the language to other language you like to learn.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
4. How easy or hard was it to turn off and turn on auditory sound.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
5. How easy or hard was it to go to a setting / preference and change a setting option.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
6. How easy or hard was it to complete a 5 minuets task.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
7. How easy or hard was it to sign out.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard

End-of-session questionnaire

Task

1. How easy or hard was it to complete the steps necessary to create a new account.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
2. How easy or hard was it to find one language you like to learn and add it to your profile / account?
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
3. How easy or hard was it to change the language to other language you like to learn.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
4. How easy or hard was it to turn off and turn on auditory sound.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
5. How easy or hard was it to go to a setting / preference and change a setting option.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
6. How easy or hard was it to complete a 5 minuet task.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
7. How easy or hard was it to sign out.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard

End-of-session questionnaire

Task

1. How easy or hard was it to complete the steps necessary to create a new account.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
2. How easy or hard was it to find one language you like to learn and add it to your profile / account?
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
3. How easy or hard was it to change the language to other language you like to learn.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
4. How easy or hard was it to turn off and turn on auditory sound.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
5. How easy or hard was it to go to a setting / preference and change a setting option.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
6. How easy or hard was it to complete a 5-minute task.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
7. How easy or hard was it to go to sign out.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard

End-of-session questionnaire

Task

- 1 How easy or hard was it to complete the steps necessary to create a new account.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
- 2 How easy or hard was it to find one language you like to learn and add it to your profile / account?
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
- 3 How easy or hard was it to change the language to other language you like to learn.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
- 4 How easy or hard was it to turn off and turn on auditory sound.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
- 5 How easy or hard was it to go to a setting / preference and change a setting option.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
- 6 How easy or hard was it to complete a 5-minute task.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard
- 7 How easy or hard was it to go to sign out.
1. Super easy 2. Easy 3. Not easy or hard 4. Hard 5. Super hard

APPENDIX C – Satisfaction Questionnaire

Satisfaction

This questionnaire, which starts on the following page, gives you an opportunity to tell us your reactions to the app you used. Please read each statement and indicate how strongly you agree or disagree with the statement by circling a number on the scale. If a statement does not apply to you, indicate with "N/A".

1. Overall, I am satisfied with how easy it is to use this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

2. It was simple to use this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

3. I could effectively complete the tasks using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

4. I was able to complete the tasks quickly using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

5. I was able to efficiently complete the tasks using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

6. I felt comfortable using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

Anna

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7. It was easy to learn to use this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

8. I believe I could become productive quickly using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

9. This language learning app gave error messages that clearly told me how to fix problems.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

10. Whenever I made a mistake using the language learning app, I could recover easily and quickly.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

11. The information (such as on-line help, on-screen messages and other documentation) provided with this language learning app was clear.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

12. It was easy to find the information I needed.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

13. The information provided for this language learning app was easy to understand.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

Anna

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14. The information was effective in helping me complete the tasks.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

15. The organization of information on the language learning app screens was clear.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

16. The interface of this language learning app (buttons, menus, and graphics) was pleasant.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

17. I liked using the interface of this language learning app (buttons, menus, and graphics).

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

18. This language learning app has all the functions and capabilities I expect it to have.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

19. Overall, I am satisfied with this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

Anna

Satisfaction

This questionnaire, which starts on the following page, gives you an opportunity to tell us your reactions to the app you used. Please read each statement and indicate how strongly you agree or disagree with the statement by circling a number on the scale. If a statement does not apply to you, indicate with "N/A".

1. Overall, I am satisfied with how easy it is to use this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

2. It was simple to use this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

3. I could effectively complete the tasks using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

4. I was able to complete the tasks quickly using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

5. I was able to efficiently complete the tasks using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

6. I felt comfortable using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

Anna

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7. It was easy to learn to use this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

8. I believe I could become productive quickly using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

9. This language learning app gave error messages that clearly told me how to fix problems.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

10. Whenever I made a mistake using the language learning app, I could recover easily and quickly.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

11. The information (such as on-line help, on-screen messages and other documentation) provided with this language learning app was clear.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

12. It was easy to find the information I needed.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

13. The information provided for this language learning app was easy to understand.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

Anna

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14. The information was effective in helping me complete the tasks.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

15. The organization of information on the language learning app screens was clear.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

16. The interface of this language learning app (buttons, menus, and graphics) was pleasant.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

17. I liked using the interface of this language learning app (buttons, menus, and graphics).

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

18. This language learning app has all the functions and capabilities I expect it to have.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

19. Overall, I am satisfied with this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

Anna

P3

Satisfaction

This questionnaire, which starts on the following page, gives you an opportunity to tell us your reactions to the app you used. Please read each statement and indicate how strongly you agree or disagree with the statement by circling a number on the scale. If a statement does not apply to you, indicate with "N/A".

1. Overall, I am satisfied with how easy it is to use this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

2. It was simple to use this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

3. I could effectively complete the tasks using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

4. I was able to complete the tasks quickly using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

5. I was able to efficiently complete the tasks using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

6. I felt comfortable using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

7. It was easy to learn to use this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

8. I believe I could become productive quickly using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

9. This language learning app gave error messages that clearly told me how to fix problems.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

10. Whenever I made a mistake using the language learning app, I could recover easily and quickly.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

11. The information (such as on-line help, on-screen messages and other documentation) provided with this language learning app was clear.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

12. It was easy to find the information I needed.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

13. The information provided for this language learning app was easy to understand.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

14. The information was effective in helping me complete the tasks.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

15. The organization of information on the language learning app screens was clear.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

16. The interface of this language learning app (buttons, menus, graphics) was pleasant.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

17. I liked using the interface of this language learning app (buttons, menus, graphics).

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

18. This language learning app has all the functions and capabilities I expect it to have.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

19. Overall, I am satisfied with this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

P.4

Satisfaction

This questionnaire, which starts on the following page, gives you an opportunity to tell us your reactions to the app you used. Please read each statement and indicate how strongly you agree or disagree with the statement by circling a number on the scale. If a statement does not apply to you, indicate with "N/A".

1. Overall, I am satisfied with how easy it is to use this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

2. It was simple to use this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

3. I could effectively complete the tasks using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

4. I was able to complete the tasks quickly using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

5. I was able to efficiently complete the tasks using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

6. I felt comfortable using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

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7. It was easy to learn to use this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

8. I believe I could become productive quickly using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

9. This language learning app gave error messages that clearly told me how to fix problems.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

10. Whenever I made a mistake using the language learning app, I could recover easily and quickly.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

11. The information (such as on-line help, on-screen messages and other documentation) provided with this language learning app was clear.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

12. It was easy to find the information I needed.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

13. The information provided for this language learning app was easy to understand.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

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14. The information was effective in helping me complete the tasks.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

15. The organization of information on the language learning app screens was clear.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

16. The interface of this language learning app (buttons, menus, graphics) was pleasant.

1	2	3	4	5	6	7
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17. I liked using the interface of this language learning app (buttons, menus, graphics).

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18. This language learning app has all the functions and capabilities I expect it to have.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

19. Overall, I am satisfied with this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

P. 5

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Satisfaction

This questionnaire, which starts on the following page, gives you an opportunity to tell us your reactions to the app you used. Please read each statement and indicate how strongly you agree or disagree with the statement by circling a number on the scale. If a statement does not apply to you, indicate with "N/A".

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1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

2. It was simple to use this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

3. I could effectively complete the tasks using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

4. I was able to complete the tasks quickly using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

5. I was able to efficiently complete the tasks using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

6. I felt comfortable using this language learning app.

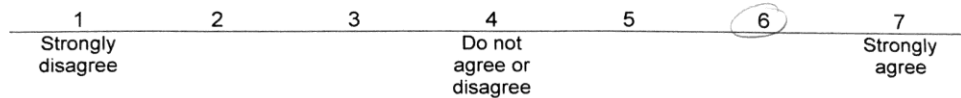
1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

EME6208 Interactive Media - IMA2: Usability Testing Report

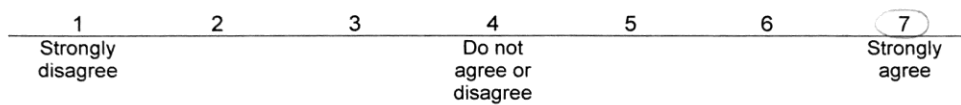
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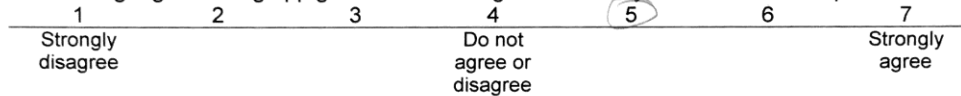
7. It was easy to learn to use this language learning app.



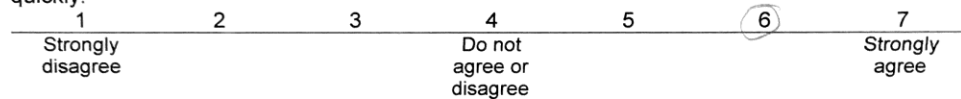
8. I believe I could become productive quickly using this language learning app.



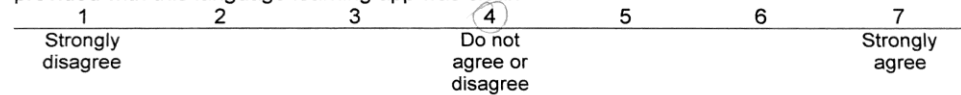
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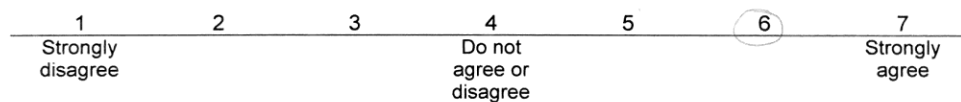
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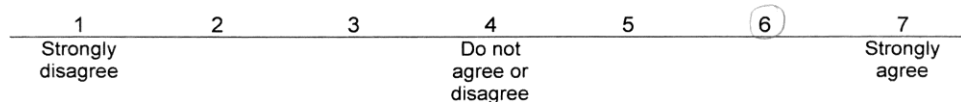
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12. It was easy to find the information I needed.



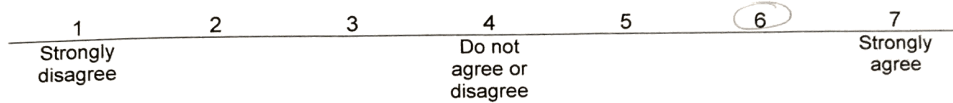
13. The information provided for this language learning app was easy to understand.



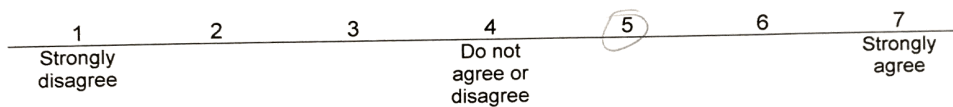
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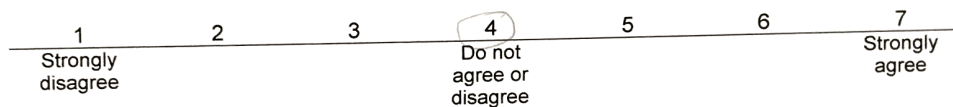
14. The information was effective in helping me complete the tasks.



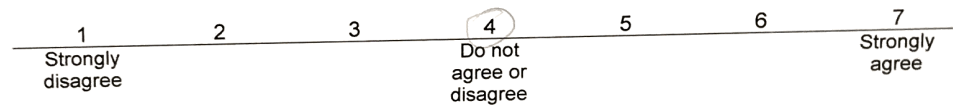
15. The organization of information on the language learning app screens was clear.



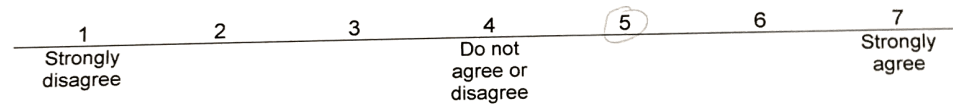
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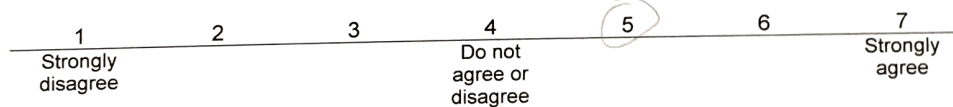
17. I liked using the interface of this language learning app (buttons, menus, graphics).



18. This language learning app has all the functions and capabilities I expect it to have.



19. Overall, I am satisfied with this language learning app.



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Satisfaction

This questionnaire, which starts on the following page, gives you an opportunity to tell us your reactions to the app you used. Please read each statement and indicate how strongly you agree or disagree with the statement by circling a number on the scale. If a statement does not apply to you, indicate with "N/A".

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1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

2. It was simple to use this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

3. I could effectively complete the tasks using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

4. I was able to complete the tasks quickly using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

5. I was able to efficiently complete the tasks using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

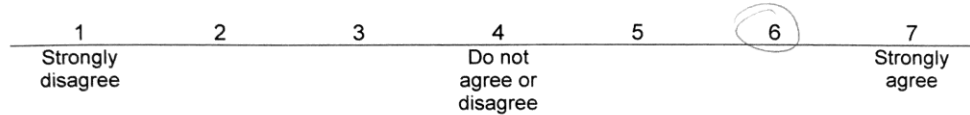
6. I felt comfortable using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

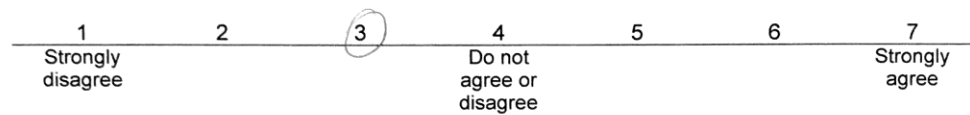
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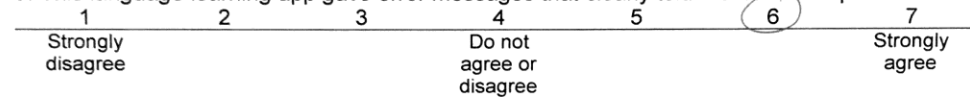
7. It was easy to learn to use this language learning app.



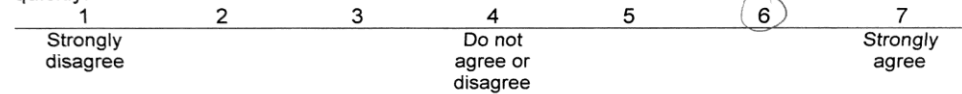
8. I believe I could become productive quickly using this language learning app.



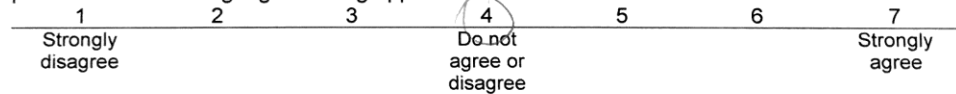
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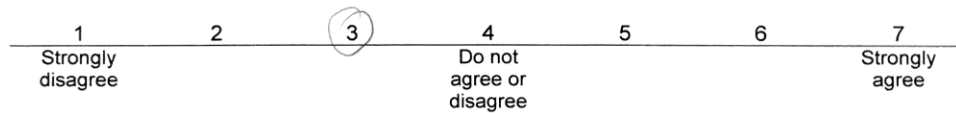
10. Whenever I made a mistake using the language learning app, I could recover easily and quickly.



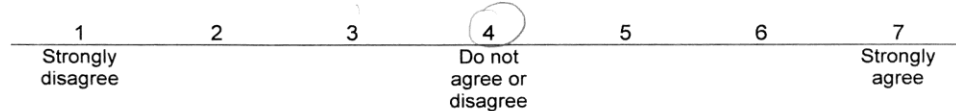
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12. It was easy to find the information I needed.



13. The information provided for this language learning app was easy to understand.

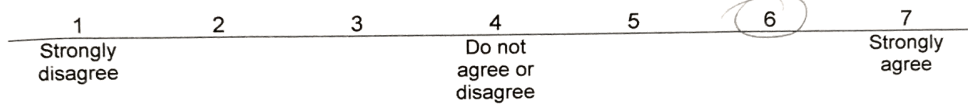


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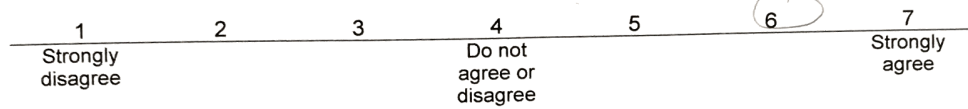
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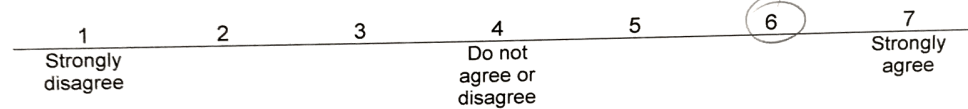
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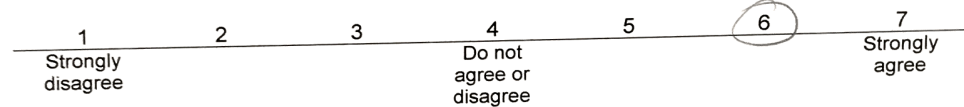
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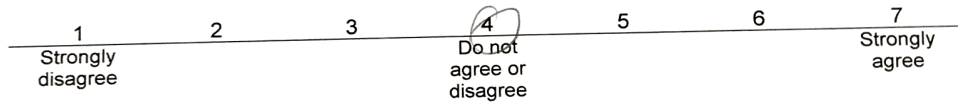
16. The interface of this language learning app (buttons, menus, graphics) was pleasant.



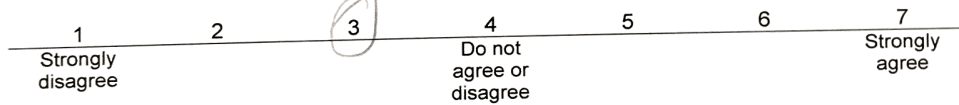
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18. This language learning app has all the functions and capabilities I expect it to have.



19. Overall, I am satisfied with this language learning app.



Satisfaction

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1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

2. It was simple to use this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

3. I could effectively complete the tasks using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

4. I was able to complete the tasks quickly using this language learning app.

1	2	3	4	5	6	7
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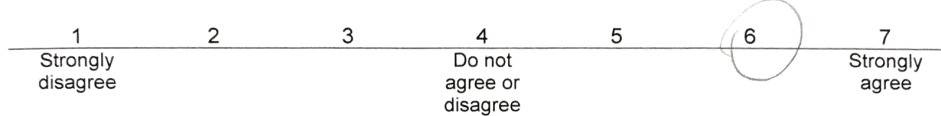
6. I felt comfortable using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

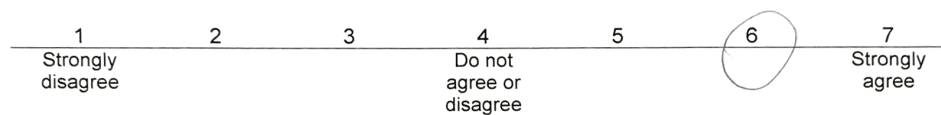
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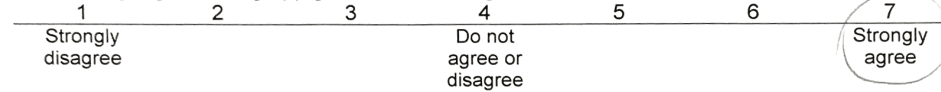
7. It was easy to learn to use this language learning app.



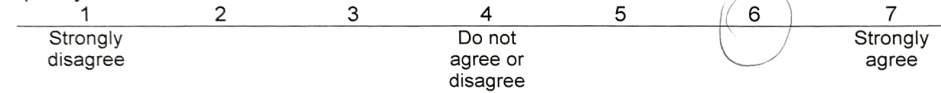
8. I believe I could become productive quickly using this language learning app.



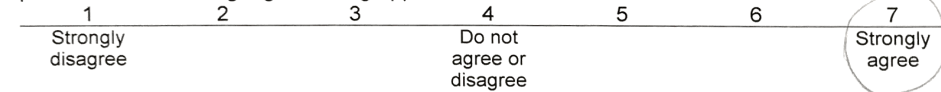
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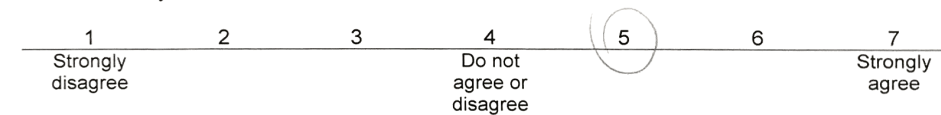
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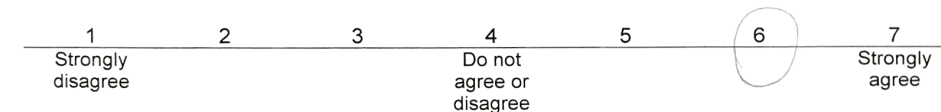
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12. It was easy to find the information I needed.



13. The information provided for this language learning app was easy to understand.



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14. The information was effective in helping me complete the tasks.

1	2	3	4	5	6	7
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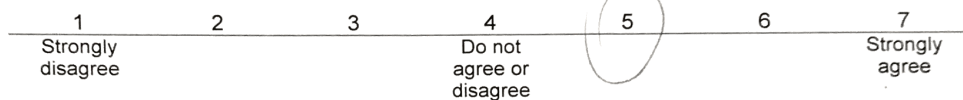
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Strongly disagree			Do not agree or disagree			Strongly agree

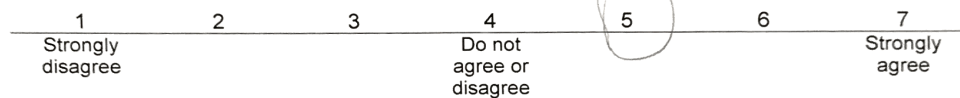
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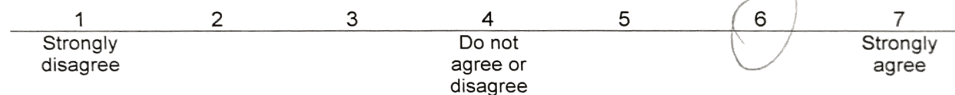
1. Overall, I am satisfied with how easy it is to use this language learning app.



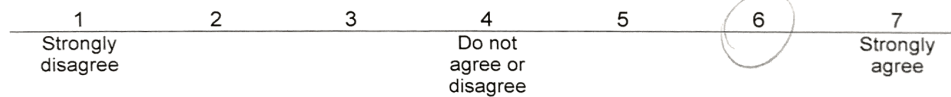
2. It was simple to use this language learning app.



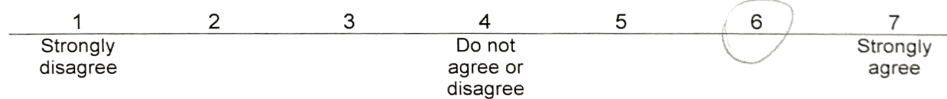
3. I could effectively complete the tasks using this language learning app.



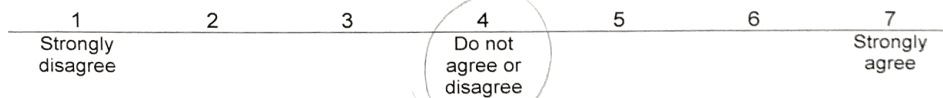
4. I was able to complete the tasks quickly using this language learning app.



5. I was able to efficiently complete the tasks using this language learning app.



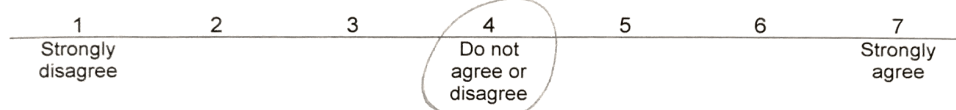
6. I felt comfortable using this language learning app.



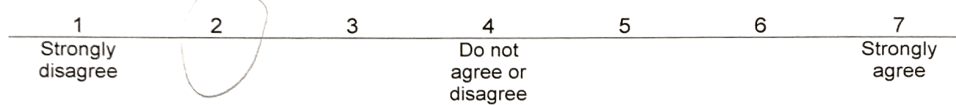
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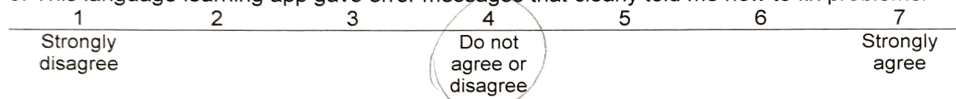
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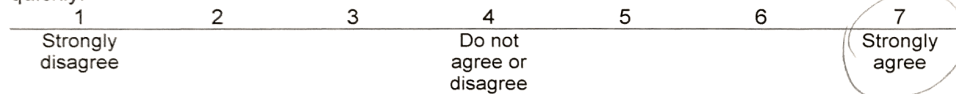
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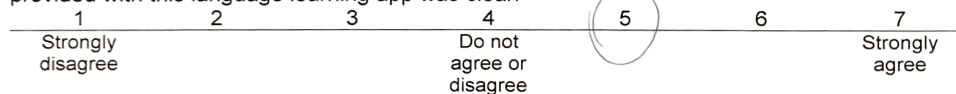
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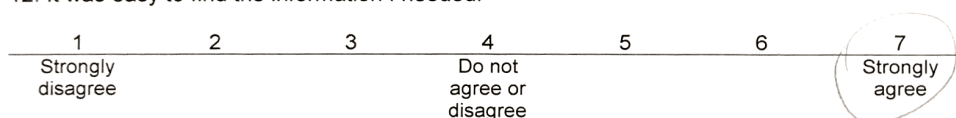
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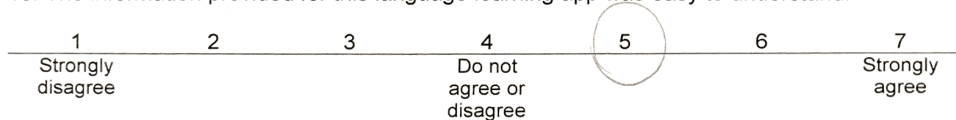
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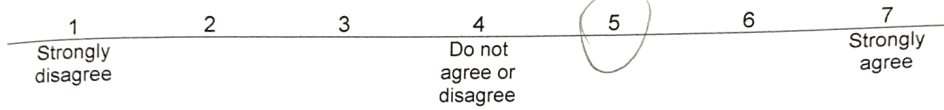
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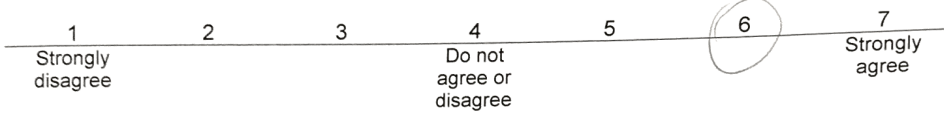
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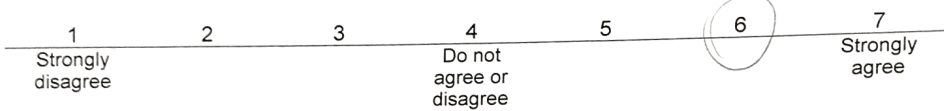
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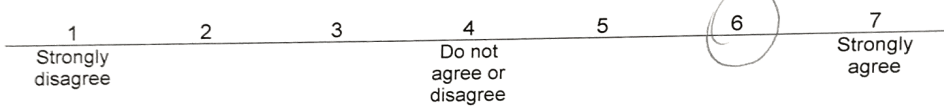
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1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

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1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

3. I could effectively complete the tasks using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

4. I was able to complete the tasks quickly using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

5. I was able to efficiently complete the tasks using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

6. I felt comfortable using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

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7. It was easy to learn to use this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

8. I believe I could become productive quickly using this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

9. This language learning app gave error messages that clearly told me how to fix problems.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

n.a

10. Whenever I made a mistake using the language learning app, I could recover easily and quickly.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

11. The information (such as on-line help, on-screen messages and other documentation) provided with this language learning app was clear.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

12. It was easy to find the information I needed.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

13. The information provided for this language learning app was easy to understand.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

14. The information was effective in helping me complete the tasks.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

15. The organization of information on the language learning app screens was clear.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

16. The interface of this language learning app (buttons, menus, and graphics) was pleasant.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

17. I liked using the interface of this language learning app (buttons, menus, and graphics).

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

18. This language learning app has all the functions and capabilities I expect it to have.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

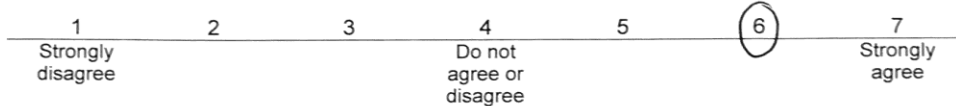
19. Overall, I am satisfied with this language learning app.

1	2	3	4	5	6	7
Strongly disagree			Do not agree or disagree			Strongly agree

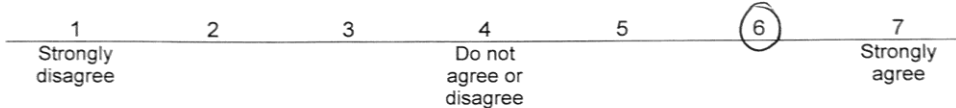
Satisfaction

This questionnaire, which starts on the following page, gives you an opportunity to tell us your reactions to the app you used. Please read each statement and indicate how strongly you agree or disagree with the statement by circling a number on the scale. If a statement does not apply to you, indicate with "N/A".

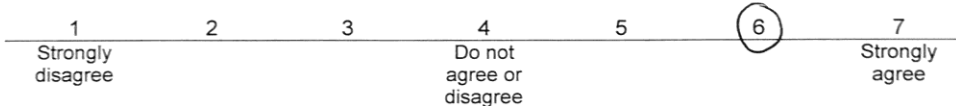
1. Overall, I am satisfied with how easy it is to use this language learning app.



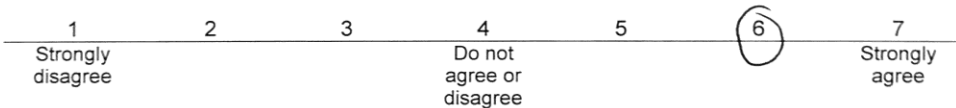
2. It was simple to use this language learning app.



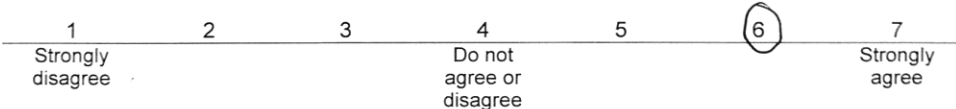
3. I could effectively complete the tasks using this language learning app.



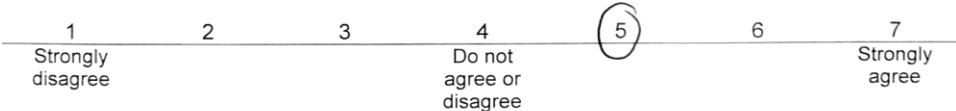
4. I was able to complete the tasks quickly using this language learning app.



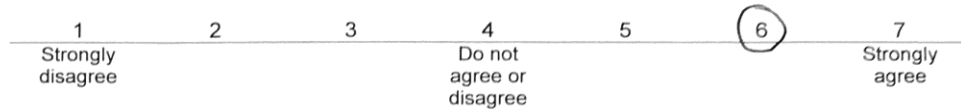
5. I was able to efficiently complete the tasks using this language learning app.



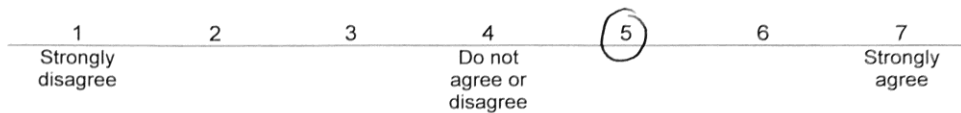
6. I felt comfortable using this language learning app.



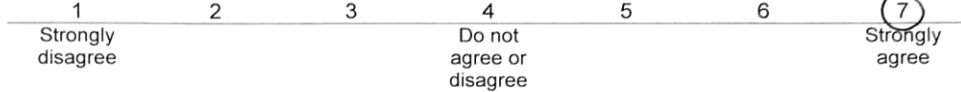
7. It was easy to learn to use this language learning app.



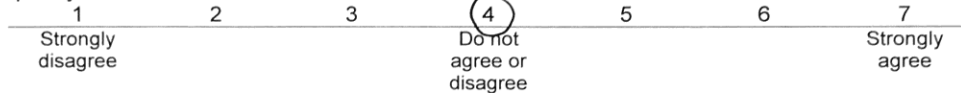
8. I believe I could become productive quickly using this language learning app.



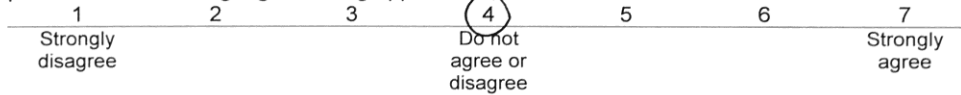
9. This language learning app gave error messages that clearly told me how to fix problems.



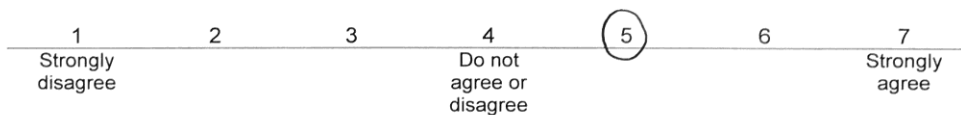
10. Whenever I made a mistake using the language learning app, I could recover easily and quickly.



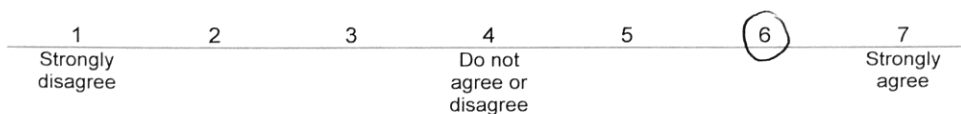
11. The information (such as on-line help, on-screen messages and other documentation) provided with this language learning app was clear.



12. It was easy to find the information I needed.



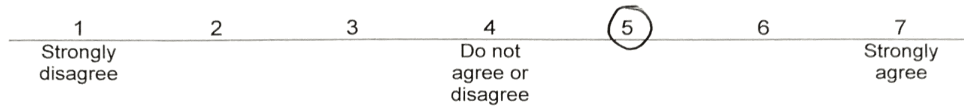
13. The information provided for this language learning app was easy to understand.



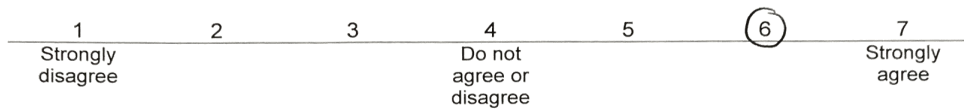
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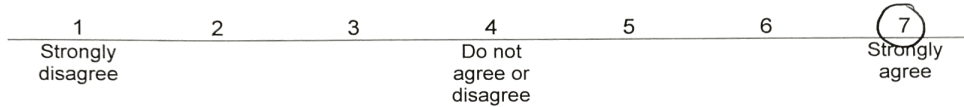
14. The information was effective in helping me complete the tasks.



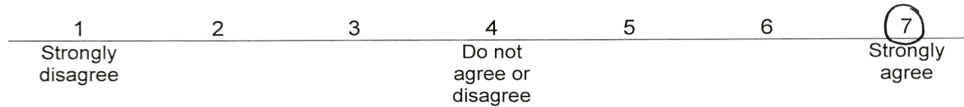
15. The organization of information on the language learning app screens was clear.



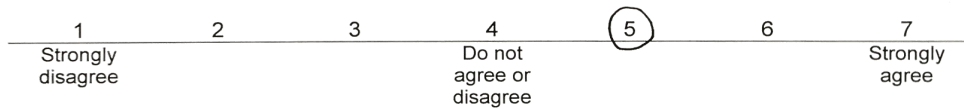
16. The interface of this language learning app (buttons, menus, and graphics) was pleasant.



17. I liked using the interface of this language learning app (buttons, menus, and graphics).



18. This language learning app has all the functions and capabilities I expect it to have.



19. Overall, I am satisfied with this language learning app.

