# User Research Plan

by
Team 360
<<2021S2\_REG\_WE\_54>>

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#### Introduction

The project is about re-building some functionalities and User Interfaces of the existing app "Easy Kids Learning" and gain a better User experience with the final product. The main goal of the user research is to identify the user's needs and pain points.

In terms of testing, we planned to test out the user experience of two different tasks which are relatable to the functions that we hope to rebuild. The reason behind the allocating tasks for the users is to find out what are the effortless points and difficulties the users face during the tasks.

Since we are planning to rebuild the functionalities of the existing app and add new functions, with the usability testing it is easy to gather the points where we need to add or remove existing app's functionalities.

### **Test Objectives**

We hope to achieve the following objectives at the end of the usability testing:

- Gather the effortless points of the users with the allocated task.
- Gather the difficulties when using the app for the task.
- Point out the tasks which gain better and less user experiences.
- Identify areas where the users encounter usability issues

### Methodology

The user research has been conducted with the use of interviews and questionnaires.

For the interview sessions we interviewed two users according to the personas. Their user role types were parent and teacher. We conducted the interviews via Zoom platform with the use of the laptops and internet connections of both group members and the interviewees. The interview questions were structured questions.

For the questionnaires we got responses from seven individuals from different age groups. We used Google Forms to collect data from the questionnaires. The question type was simple, structured and easy to understand.

#### Interviewing

We conducted the interview online via Zoom platform. We had two separate interviews with the presence of all the four members and the interviewee.

Following is the interview script:

- 1. Tell us about yourself.
- 2. As a Teacher/Parent, have you ever used or selected to use any kids learning apps for your students/ kids?
- 3. Can you please tell us about some frequently used apps among them?
- 4. Have you heard of or used the app, "Easy Kids Learning"?
- 5. What are the differences between the apps that you mentioned before and the Easy Kids Learning app?
- 6. Now, we want you to do a little task ...
- 7. In order to increase the user friendliness and the benefits of this app we are planning to add some more functionalities. Can we get feedback for that particular function?
- 8. Give feedback about app we are going to implement (from interviewee side)

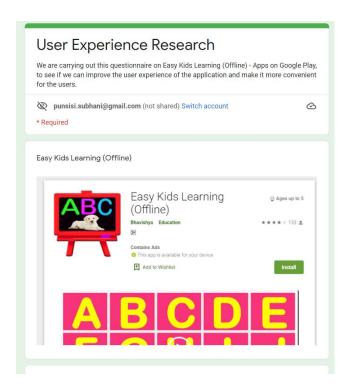
Link to the interview recording:

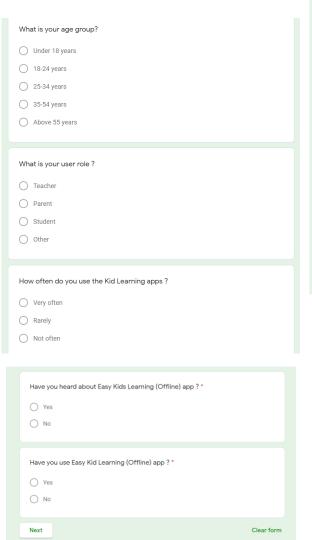
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#### Questionnaire

We conducted the questionnaire via online platforms. The questionnaire was built with the online tool Google Forms where we could collect the responses there by itself. We managed to distribute the questionnaire in frequently used social media platforms which are Whatsapp and Messenger.

Following is the conducted questionnaire:





punsisi.s	ubhani@gr	nail.com (not	shared) Switc	h account		0
How useful b	elow featı	ures for a kic	ds learning a	op?		
Rate 1 to 5						
Quizzes for t	he kids *					
	1	2	3	4	5	
	0	0	0	0	0	
Stories and s	ongs for k	ids *				
	1	2	3	4	5	
	0	0	0	0	0	
Activities ba	sed on ch	apters *				
	1	2	3	4	5	
	0	0	0	0	0	
New words le	earning fe	ature *				
	1	2	3	4	5	
	0	0	0	0	0	
How would you rate a kids learning app with above features? *						
	1	2	3	4	5	

# Link to questionnaire:

https://forms.gle/gYhDfYyZpBptRV5E7

# **Participant Profiles**

Name	Demography	Location, Date and Time
Mr. Sudeep	Age: 32	Date: 8/15/2021
Rodrigo	Race: Sinhalese	
	Gender: Male	
	Religion: Buddhism	Time: 8.30 pm
	Education: BBA (Hons) Specializing in Business Management in California State University	
	Marital Status: Married	
Mr. Athulya	Age: 28	Date:8/16/2021
Rathnayake	Race: Sinhalese	
	Gender: Male	
	Religion: Buddhism	Time: 8.15 pm
	Education: BSc (Hons) in Information Technology Specializing in Information Technology in University of Peradeniya	
	Marital Status: Single	

#### **User Research – Tasks/Scenarios**

#	Task	Target	Probes
1	Open the app, then tap on the menu icon, after that choose the "numbers" category from the side menu and perform any action as preferred	To choose a number from the available numbers in the app and tap it	<ul> <li>User not satisfied with the landscape only orientation in the app</li> <li>User struggled when choosing the category</li> <li>User not satisfied with the pronunciations of the words in the app</li> </ul>
2	Open the app, tap on the menu icon, after that choose the "communicate" category from the side menu and perform any action as preferred	To choose any particular option from the category and perform it	<ul> <li>User not satisfied with the user interfaces</li> <li>The user struggled to find the "Communicate" category</li> <li>The user found that the options available in the "Communicate" category are not very useful</li> </ul>

<sup>\*\*\*</sup>Other functionalities are not available in the current application and we are planning to implement them in the future, because of that we were not able to provide tasks for users using other functions. Instead of that, we told them about other functionalities that we are going to implement and ask them to provide feedback about each function. \*\*\*

# **Plan for Data analysis**

# Interviews

Interview	Qualitative	Quantitative
1st Interviews	User interfaces are not interactive.	Used an Easy kid learning app one or two times.
	Less Understandability of interfaces	Give one-star feedback for an easy kid learning app.
	Not User-Friendly interfaces	With new functionality give four-star feedback.
	Some of the functionalities are complicated.	
2nd Interview	Not use frequently,	With the new functionalities move the app into 1st or 2nd
	Not very attractive	priority.
	Some functionalities are not very useful.	
	With new applications, it gets more interactive.	
	Introducing language function is very useful.	

#### Detail analysis plan

- According to the qualitative data, user interfaces are not very interactive and not very useful so we have to rebuild the user interfaces to be more interactive and more user-friendly.
- According to the quantitative data, one of the users mentioned only two times he used the app, because of the less attractiveness of the app, So we need to create the application more attractively.
- According to the qualitative data, some functionalities are not very useful so that we have to introduce new useful functions to the application.
- According to the qualitative data, users expect multiple language functionality for the app so that we have to implement that function to the current app.

Link to the interview recording:

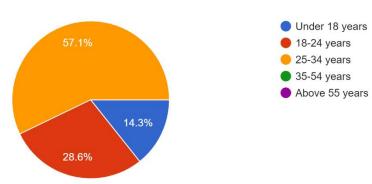
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### Questionnaires

### **Collected Quantitative Data**

Variable	Responses
Age Group	
Below 18 yrs	1
18-24 yrs	2
25-34 yrs	4
35-54 yrs	0
Above 55 yrs	0





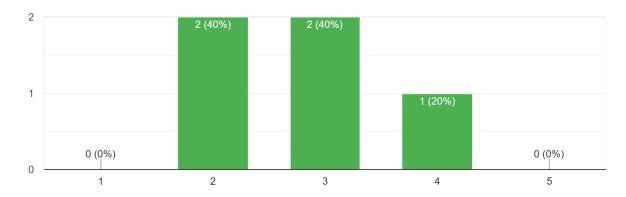
Rate to Recommend this app this app to others (Between 1-5)

1 0

2 2

3	2
4 5	1
5	0

How would are you rate to recommend this app to others? 5 responses



#### Detail analysis plan:

According to the above chart analysis by the currently available feature of the app from that user give recommendation to basically these features with app good or bad. But we can easily get an idea of only one response to this app. Other responses are medium and bad. Therefore, we can get an idea of this overall excellent app to recommend to other users.

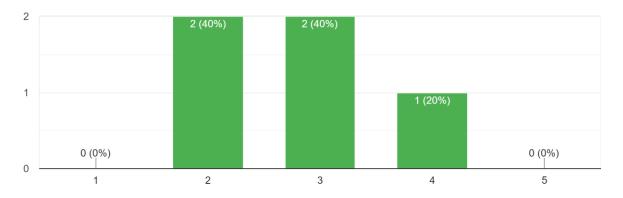
Rating for new Features (Between 1-5)

#### 1. Quizzes for kids:

1	0
2	1
3	1
4	1
5	4

How would are you rate to recommend this app to others?

5 responses



# 2. Stories and songs for kids:

1 0

2 1

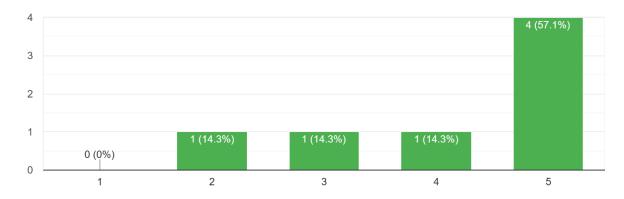
3

4

#### Stories and songs for kids

5

7 responses



4

# 3. Activity based on chapters :

1

2 1

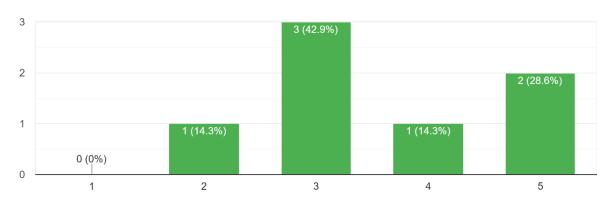
3

4 1

#### Activities based on chapters

5

7 responses



3

0

2

# 4. New words learning feature :

5

1 0

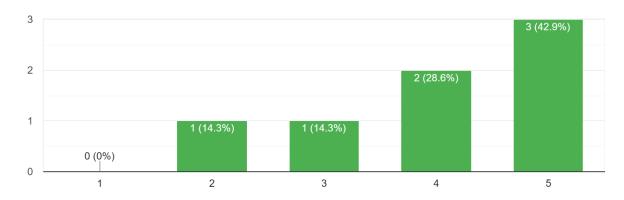
2 1

3 1

4 1

#### New words learning feature

7 responses

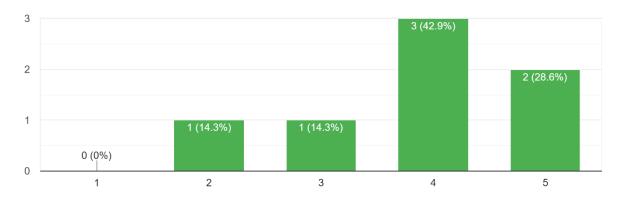


# Overall rating for newly added feature

1	0
2	1
3	1
4	3
5	2

How would you rate a kids learning app with above features?

7 responses



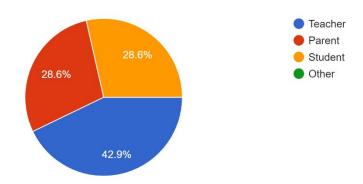
#### Detail analysis plan:

In above mentioned features we are planning to add to this app when implementing User Interfaces and Functions. When talking about feature/function 1 it is very useful to get a teacher to connect with students. Teachers can add quizzes and give answers for those quizzes. Talking about function 2 Stories and songs are also very good features. We can agree that according to user response most users give high ratings for that. As well as function 3 and function 4 all functions get a good response from users. We can see overall new features/functions from that above chart perfectly. Because the overall rating for this app response is higher, on the above chart we can see it.

#### **Collected Qualitative Data**

Variable	Responses
User role	
Teacher	3
Parent	2
Student	2
Other	0

What is your user role? 7 responses



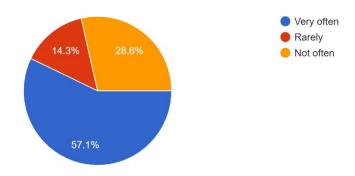
#### Detail analysis plan:

according to the above chart we can get an idea of most of the teacher and parent response to the form. Because this kid learning app is most commonly used by teachers and parents. Parents used this kind of app to teach their students in this pandemic situation.

### How Often used Kid learning apps



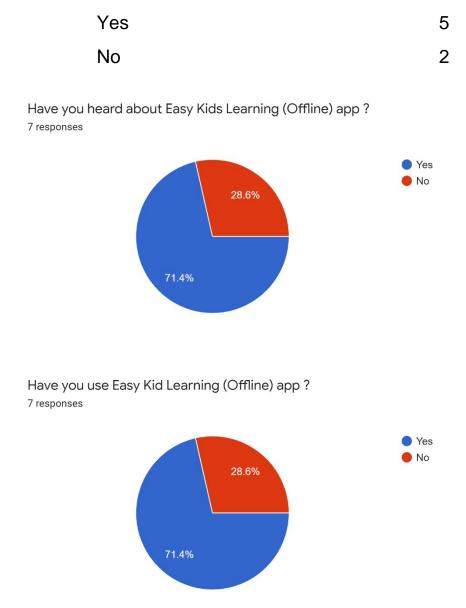
How often do you use the Kid Learning apps? 7 responses



### Detail analysis plan:

according to the above chart we can get an idea how often overall peoples used these kinds of apps. For example, countries like Sri Lanka do not often use these kinds of learning apps compared with other countries. Because we share this around Sri Lanka only.

Know about Easy Kid Learning (Offline) app Use Easy kid Learning app



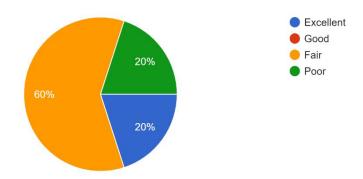
### Detail analysis plan:

According to the above chart we can see 71.4% users' response to as heard about this app. Because this is developed by an Indian app development team and also its offline app does not need any data to use this app. That's the main reason users heard about this app.

#### User Interaction of the app

Excellent 1
Good 0
Fair 3
Poor 1

What do you think about User Interaction of this app? 5 responses



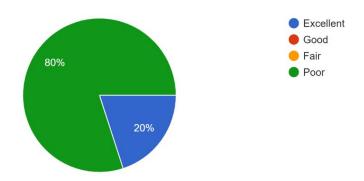
### Detail analysis plan:

According to the above chart we can see most of the user's response as this app user interfaces are preferment. Because only 1 response for this app is excellent and all responses are Fair and Poor. Therefore, we can get an idea that app user interfaces are not very interactive to users.

#### Word Pronunciation Feature

Excellent	1
Good	0
Fair	0
Poor	4

What do you think about current word pronunciation feature of this app? 5 responses



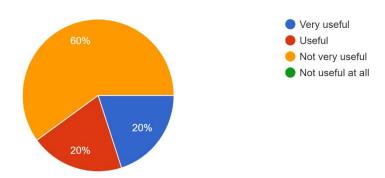
#### Detail analysis plan:

This Feature is an already available feature of this app. If a student clicks some picture on this app that picture content we can hear in voice. For example, if a student or parent clicks an apple picture the apple word is pronounced. According to the above chart we can easily understand that this feature is not perfect. Because most of the responses are in the poor category.

### Options available in this app

Very useful	1
Useful	1
Not very useful	4
Not useful at all	0

What do you think about the available options in this app?  $_{\rm 5\,responses}$ 

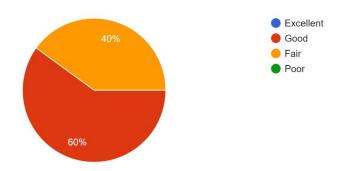


Detail analysis plan: according to the above chart we can see this app available some options are not useful to users and some options need to be in the app. For example in this app there is a feature to change the theme color but in that feature colors are not user friendly. That's why users give higher rate responses for not being very useful.

#### Overall experience with app

Excellent	0
Good	3
Fair	2
Poor	0

How would you rate your overall experience with the app? 5 responses



### Detail analysis plan:

When talking about overall experience about this app the user gives as basically a good app. Because this app has good features as well as bad features and user interfaces. According to the above chart we can get an idea of an overall good experience. Because this app user interface is not perfect for users. For example, in this app there is only landscape mode. That is not user friendly and also not categorization is not good. Because of those reasons the overall experience is fair.

Link to questionnaire:

https://forms.gle/gYhDfYyZpBptRV5E7