

Contribution Statement

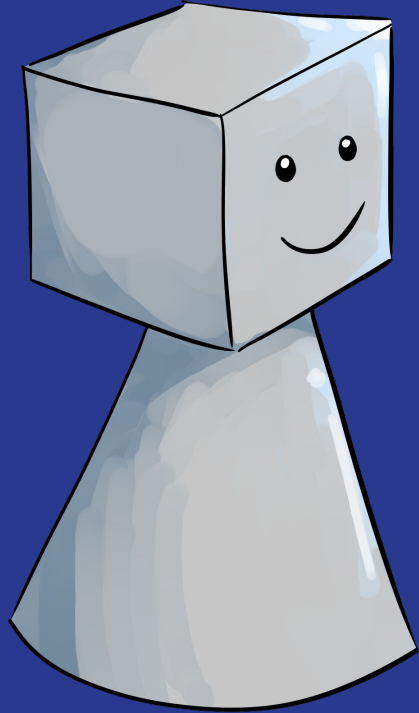
Zachary Chun 20% - Organized slides, constructed presentation feedback

Emily Leland 25% - Presented, created slide content

Kha Nguyen 20% - Created slide content, constructed presentation feedback

Saralyn Santos 35% - Presented, created slide content, directed slide deck visuals





Found in Translation

Zachary Chun Usability Testing, Writer, Prototyper

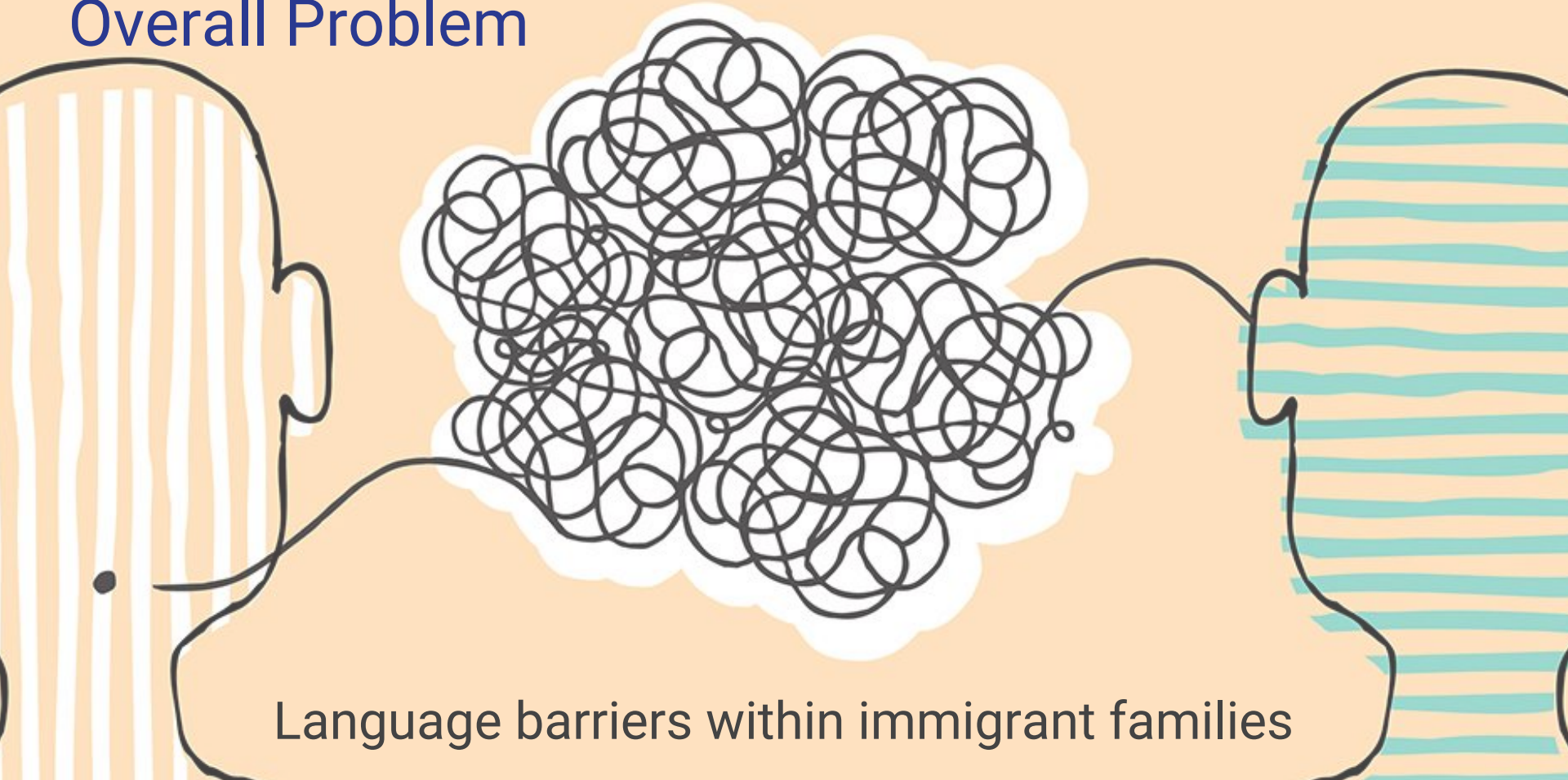
Emily Leland Usability Testing, Writer, Prototyper

Kha Nguyen Usability Testing, Writer, Prototyper

Saralyn Santos Usability Testing, Writer, Prototyper, Artist

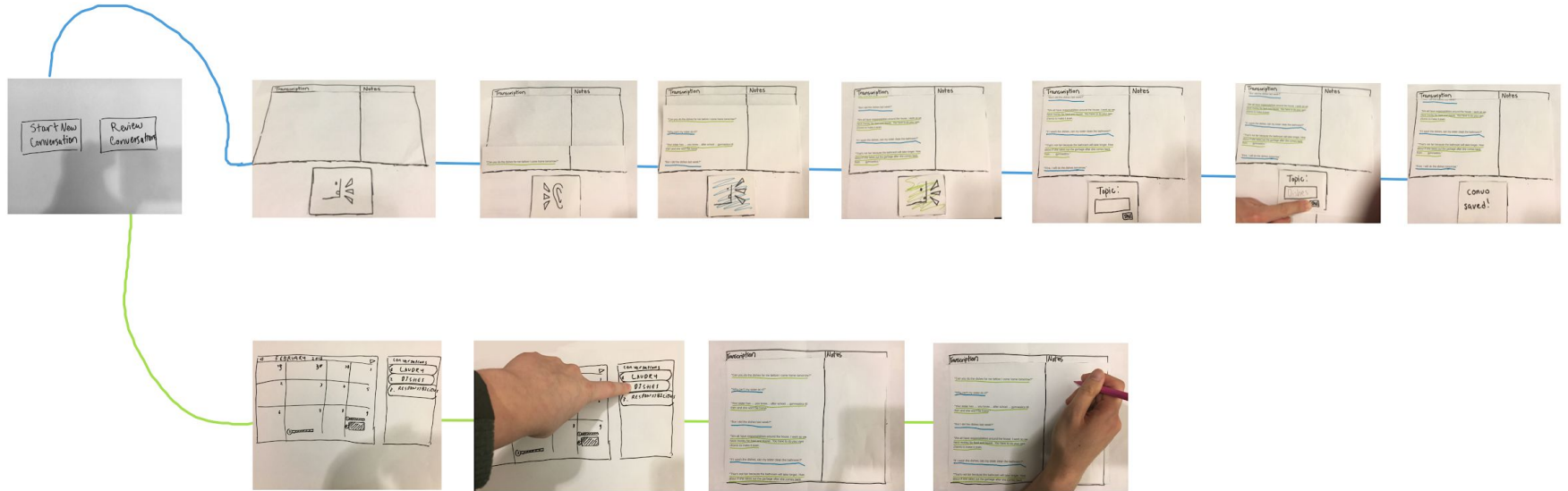
- In the US, 60 million people speak a language other than English at home.
- 59% of second-generation Asian Americans speak the language from their familial country of origin worse than 'pretty well'.

Overall Problem



Language barriers within immigrant families

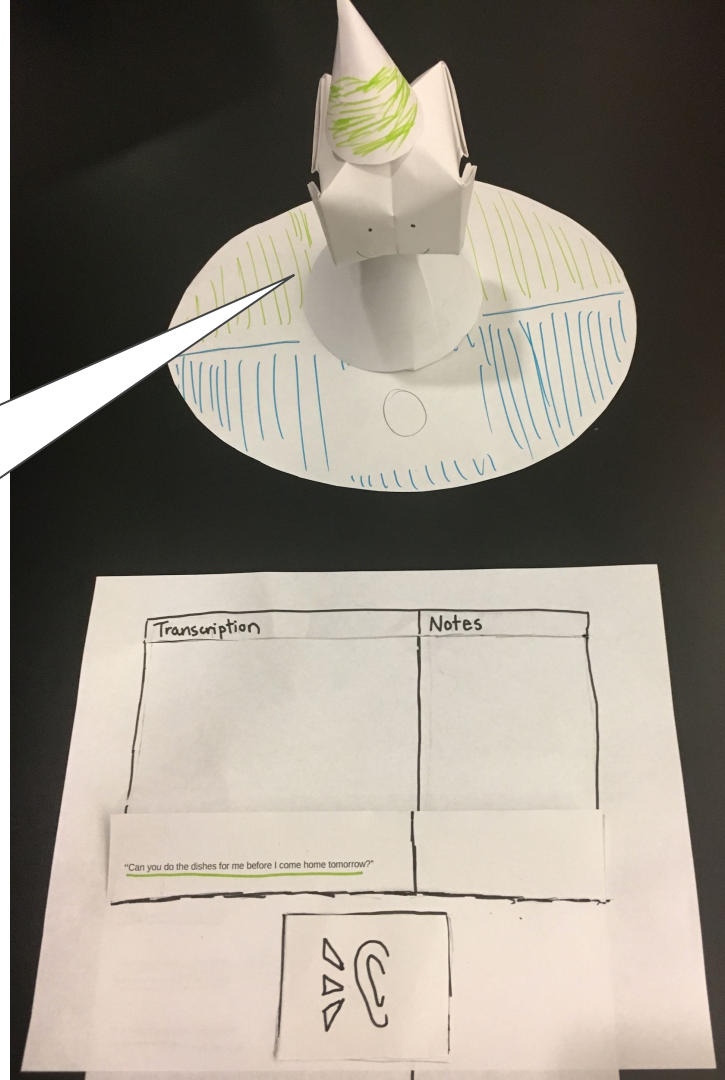
Initial Paper Prototype



Initial Paper Prototype

Nice to meet you! My name is Buddy. I'm a smart speaker that works with Found in Translation. I help record the audio and transcribe your conversation so you can access it through your tablet.

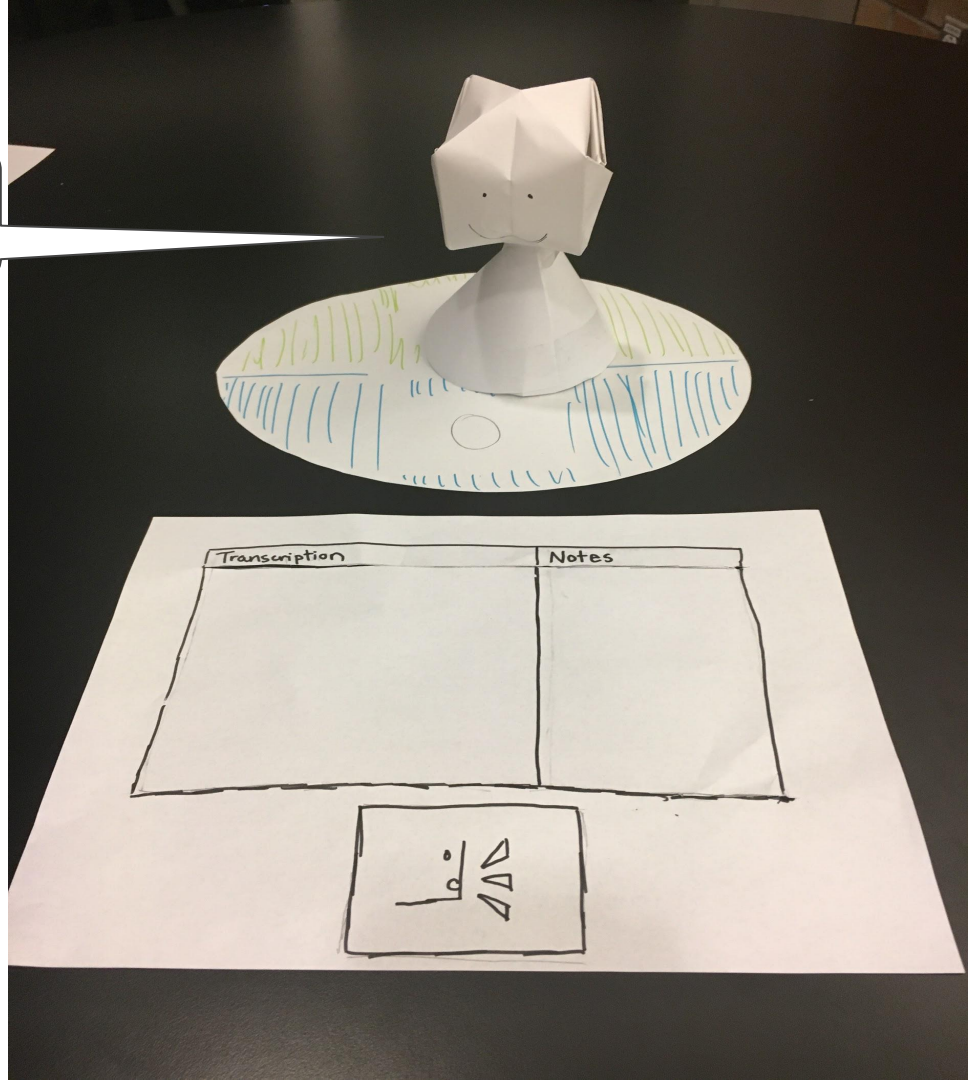
Each user should have their own tablet.



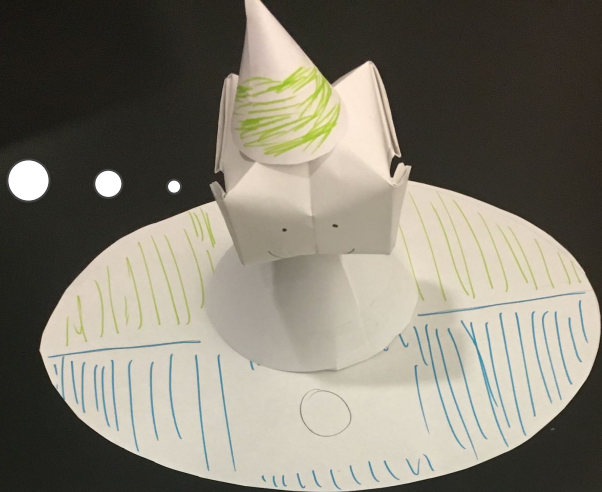
I'm ready to listen! Start your conversation anytime.

Holding a conversation

Task 1

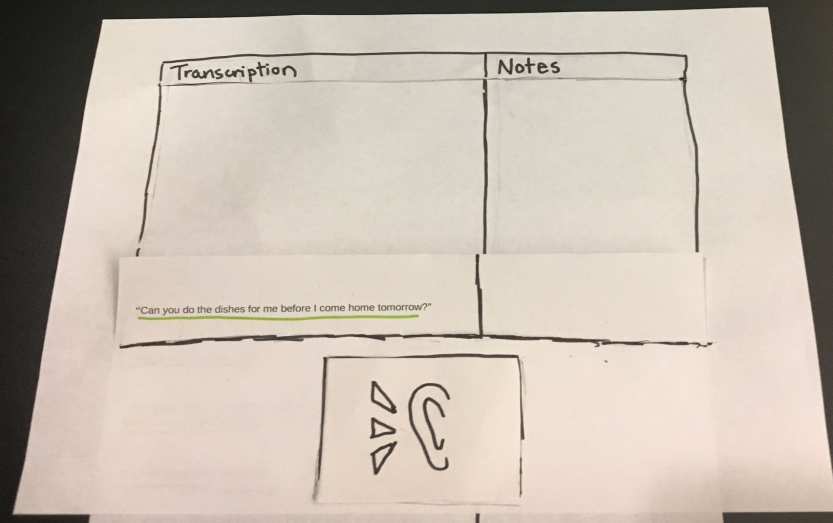


My hat changes color
depending on which
user is speaking!



Holding a conversation

Task 1

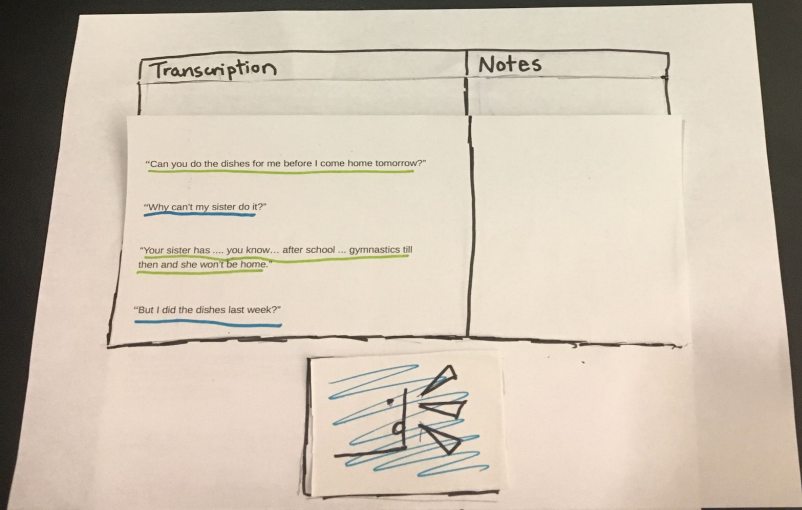
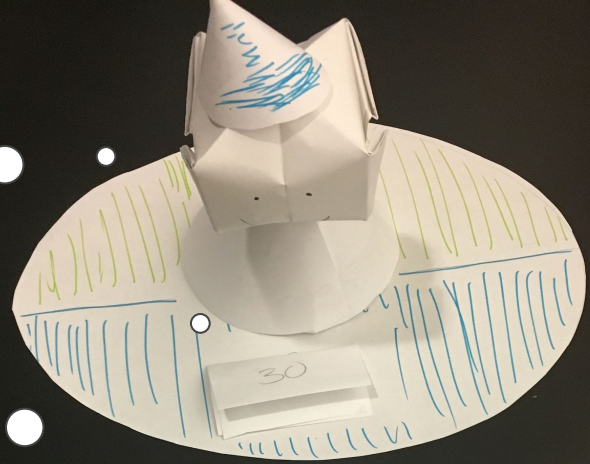


Since you're holding down the speaking button, I'm facing you and listening to what you have to say.

Holding a conversation

Task 1

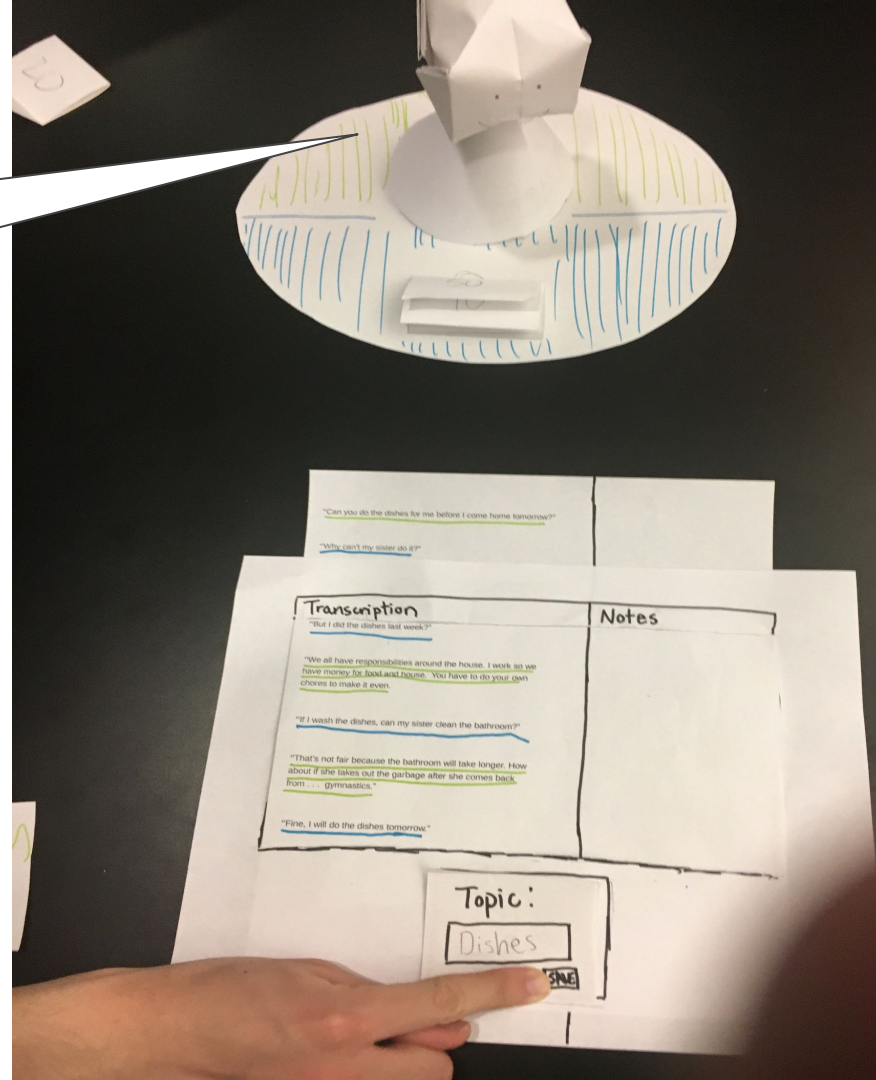
I'll also remember to update the group score because you helped contribute to the conversation!



If you're done with the conversation, go ahead and save it so you can review it later.

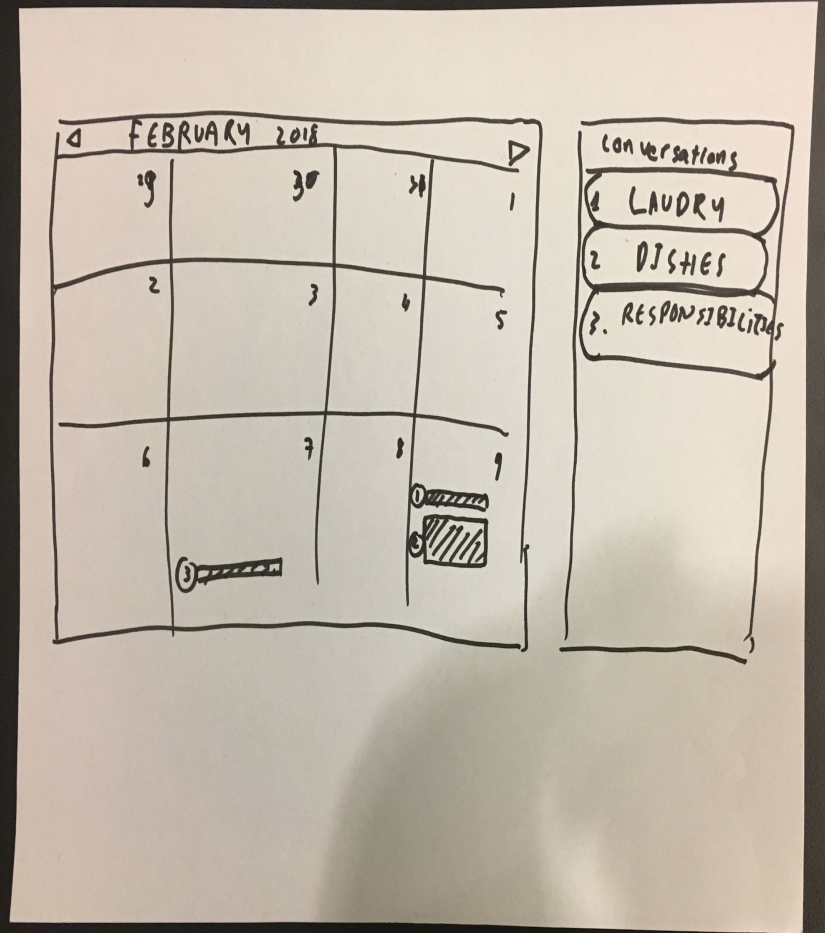
Holding a conversation

Task 1



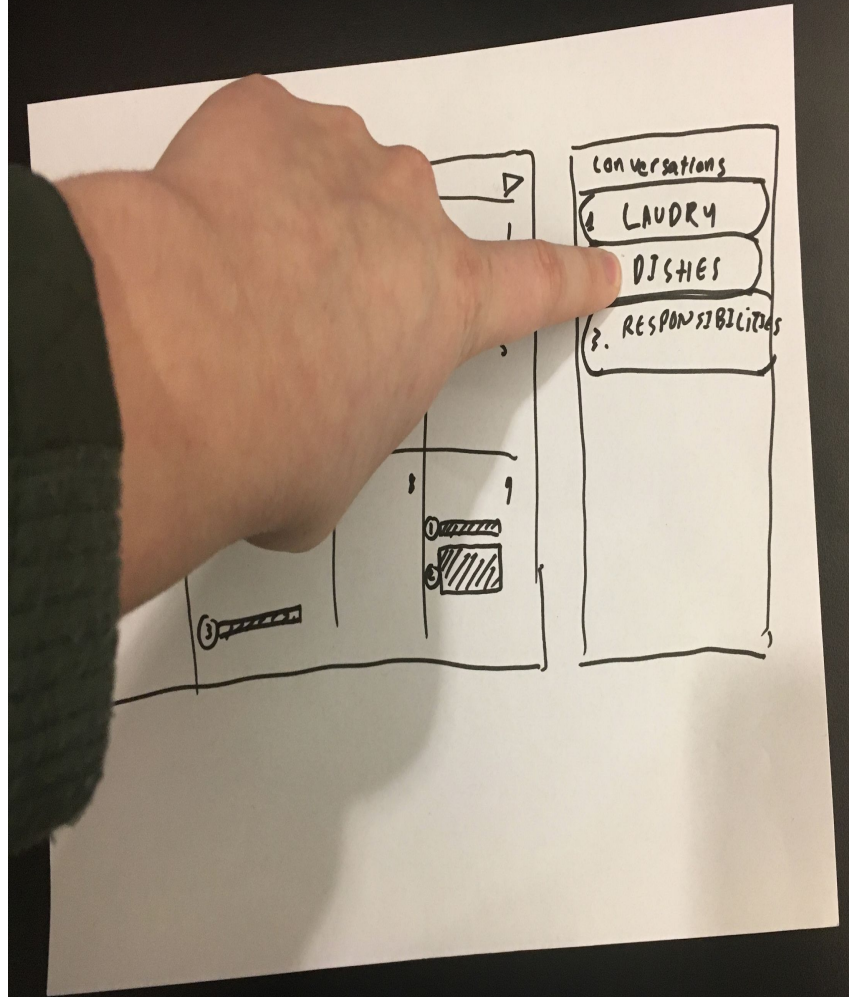
Reviewing a conversation

Task 2



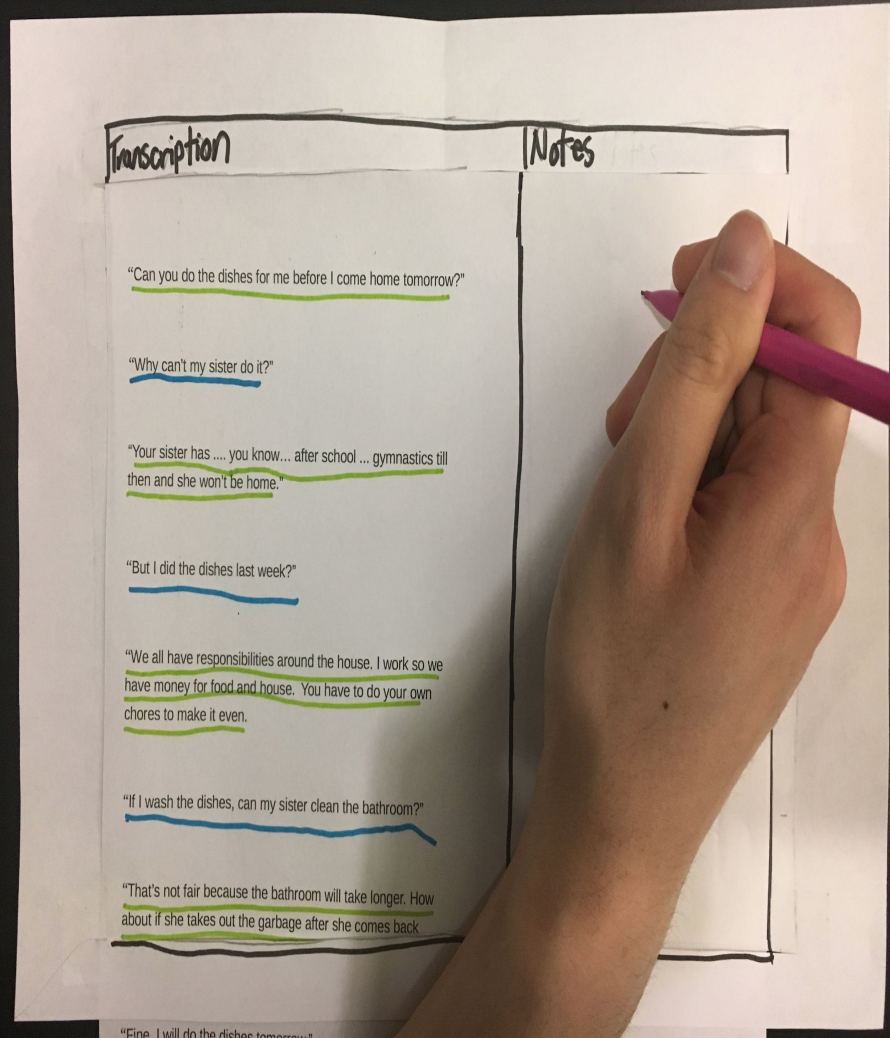
Reviewing a conversation

Task 2



Reviewing a conversation

Task 2



The image shows a hand holding a pink pen over a notebook page. The page is divided into two columns: "Transcription" on the left and "Notes" on the right. The transcription section contains several lines of text, each underlined in either green or blue ink. The notes section is currently blank.

Transcription	Notes
<u>"Can you do the dishes for me before I come home tomorrow?"</u>	
<u>"Why can't my sister do it?"</u>	
<u>"Your sister has you know ... after school ... gymnastics till then and she won't be home."</u>	
<u>"But I did the dishes last week?"</u>	
<u>"We all have responsibilities around the house. I work so we have money for food and house. You have to do your own chores to make it even."</u>	
<u>"If I wash the dishes, can my sister clean the bathroom?"</u>	
<u>"That's not fair because the bathroom will take longer. How about if she takes out the garbage after she comes back"</u>	
<u>"Fine. I will do the dishes tomorrow."</u>	

Testing Process

Meet the Testers



- College graduate
- Parents are immigrants from Mexico
- Fluent in both American English and Spanish



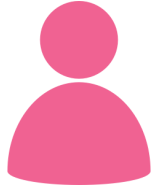
- College student majoring in social work
- Parents are immigrants from the Philippines
- Speaks American English, basic Tagalog



- College student majoring in physics
- Parents are immigrants from the Philippines
- Speaks American English, knows a few Tagalog vocabulary words



User Feedback



- Helped refine our testing procedure



- Gave us the idea for translation function



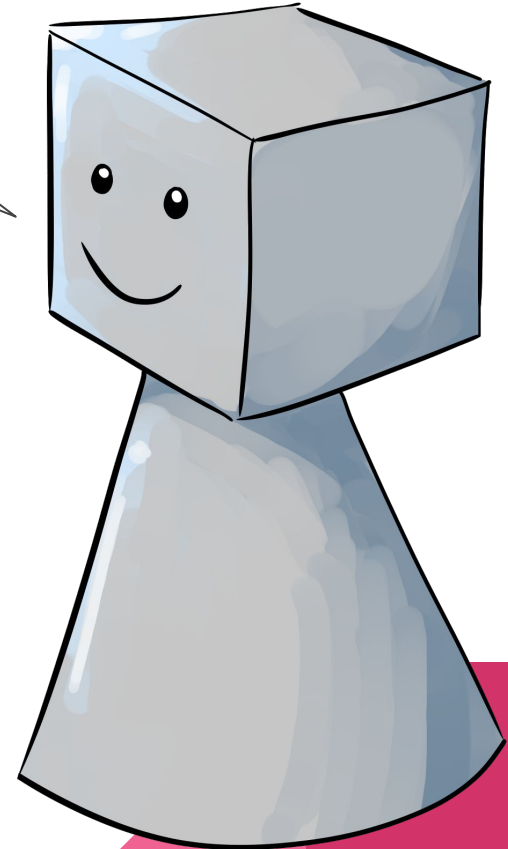
- Helped us clarify procedures for text insertion



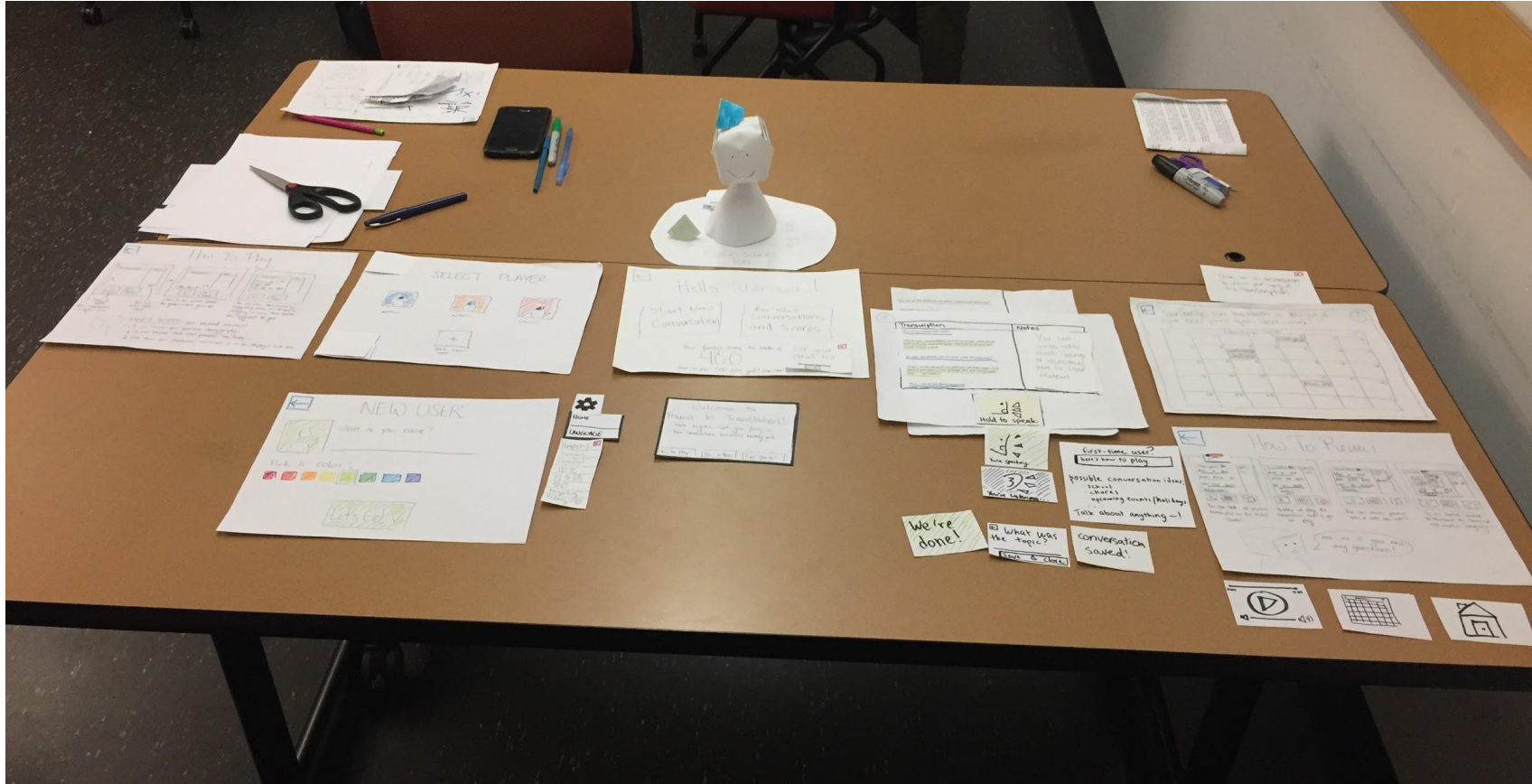
Testing Results

- Added
 - User selection screen
 - Text to buttons
 - Support for additional languages
 - Ability to backtrack
- Clarified smart speaker's role
 - Now acts as a game assistant
 - "Hey Buddy..."

What do you need?



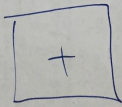
Final Paper Prototype



Holding a conversation

Task 1

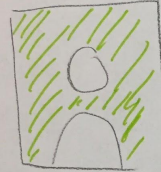
SELECT PLAYER



add another
user

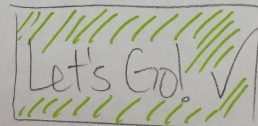


NEW USER



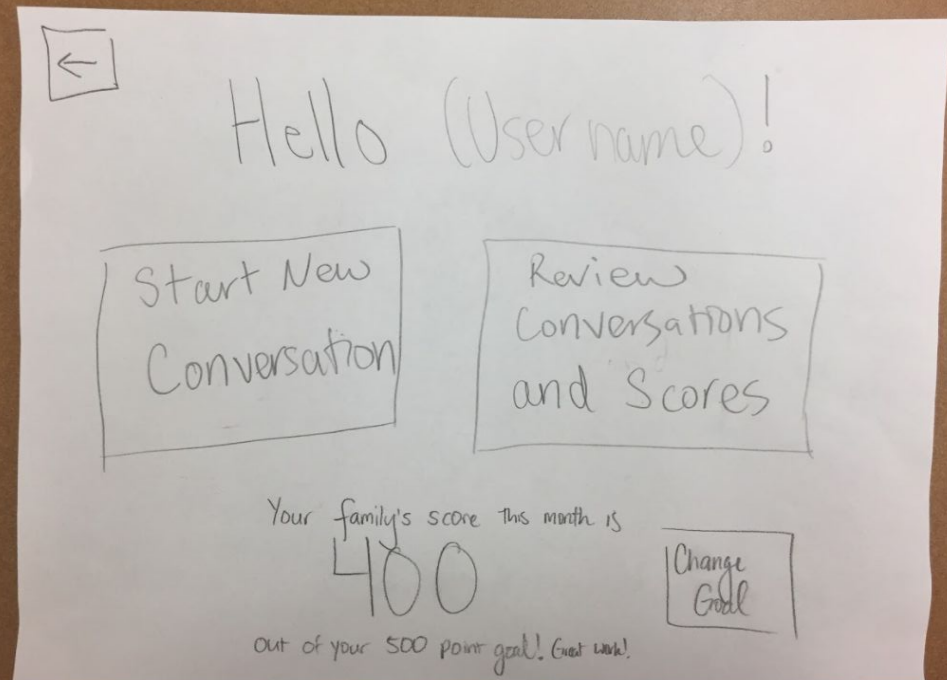
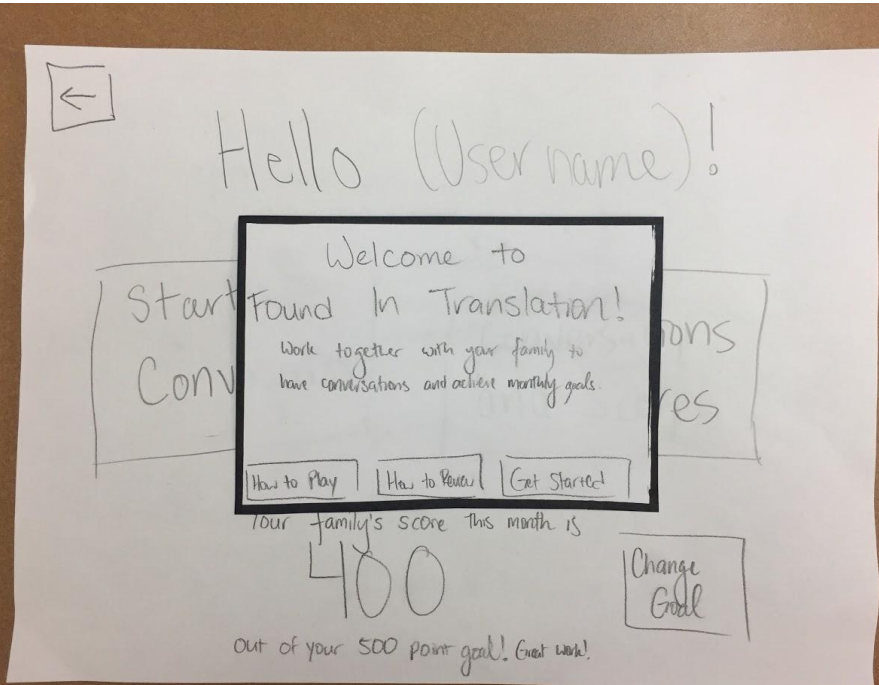
What is your name?

Pick a color:



Holding a conversation

Task 1



Holding a conversation

Task 1

?

Transcription	Notes
<p>first-time user? here's how to play</p> <p>possible conversation ideas:</p> <ul style="list-style-type: none">• school• chores• upcoming events/holidays• ... <p>Talk about anything ~!</p>	<p>You can write notes about feelings or vocabulary here for later review</p>

⚙️ ↩️

Hold to speak

We're done!

How To Play

1. Initial state: The app shows a 'Transcription' and 'Notes' section. A 'Hold to speak' button is visible. Below it, a 'We're Done!' button is shown with an arrow pointing to the transcription area. Text below: 'Press to speak. Your conversation will appear here.'

2. Action: A user speaks, and the transcription area shows a blue bar with a question mark. A 'Hold to speak' button is still present. Below it, a 'We're Done!' button is shown with an arrow pointing to the transcription area. Text below: 'You can take notes here.'

3. Result: The transcription area now contains text with green highlights and a 'Hold to speak' button. Below it, a 'We're Done!' button is shown. Text below: 'When a new person speaks, the group score goes up.'

You can also earn points by suggesting words when someone is struggling or using words someone else suggested to you.


MEET BUDDY: your personal assistant!
Buddy can answer your questions during gameplay.
Buddy can also translate words when prompted "Hey Buddy..."
Buddy will write down your conversation and record it so you can play it back later.

Holding a conversation

Task 1

?

Transcription	Notes
<p><u>"Can you do the dishes for me before I come home tomorrow?"</u></p> <p><u>"Why can't my sister do it?"</u></p>	

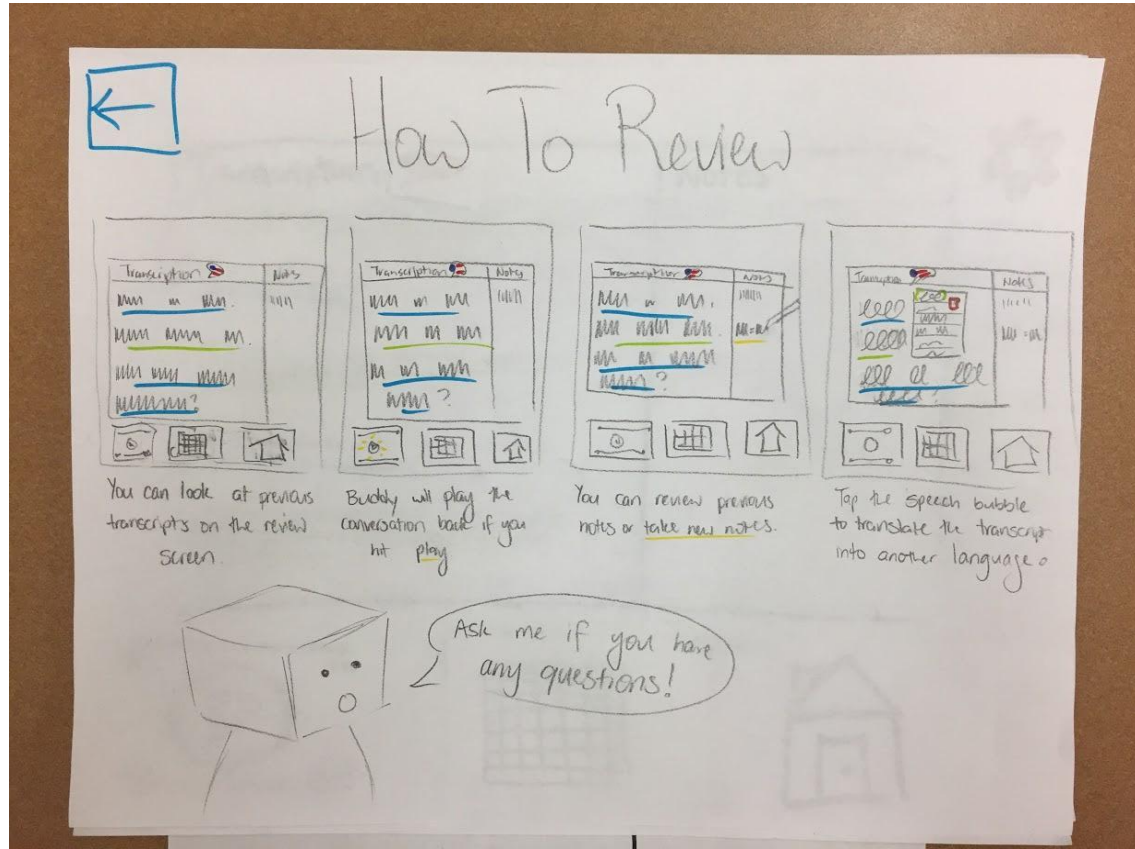


3
You're listening...

We're done!

Reviewing a conversation

Task 2



Reviewing a conversation

Task 2

← Your family's score this month is 400 out of your 500 point goal! Great work! (?)

February 2018

29	30	31	1 laundry 100pt	3	4	
5	6	7	8	9	10	11
	responsibility 50	school 120pt				
12	13	14	15	16	17	18
19	20	21	22	23	24	25
			dishes 100pt			
26	27	28				

← Your family's score this month is 400 out of your 500 point goal! Great work! (?)

February 2018



29	30	31	1 laundry 100pt	3	4	
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
					dishes 100pt	
26	27	28				

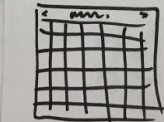
Click on a conversation to view your copy of the transcription

Reviewing a conversation



Task 2

?

Transcription 	Notes 
<u>"Can you do the dishes for me before I come home tomorrow?"</u>	
<u>"Why can't my sister do it?"</u>	
<u>"Your sister has you know... after school ... gymnastics till then and she won't be home."</u>	
<u>"But I did the dishes last week?"</u>	
<u>"We all have responsibilities around the house. I work so we have money for food and house. You have to do your own chores to make it even."</u>	

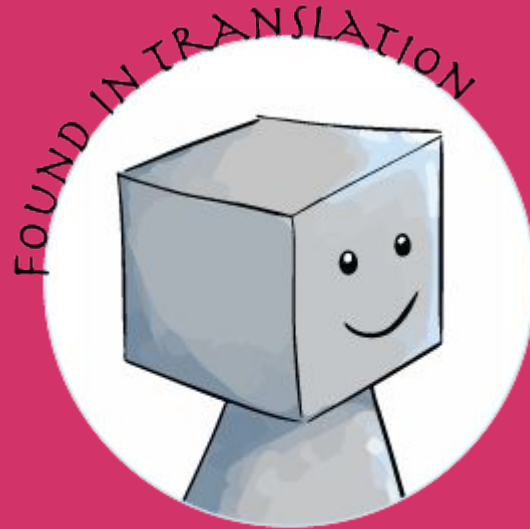


?

Transcription 	Notes 
<u>"Can you do the dishes for me t</u>	<p>[English] <input checked="" type="checkbox"/> row?"</p> <p>Français</p> <p>Español</p> <p>中文 s till</p> <p>日本語</p> <p>हिंदी</p> <p>tagalog</p> <p>Tiếng Việt we</p>
<u>"Why can't my sister do it?"</u>	
<u>"Your sister has you know... then and she won't be home."</u>	
<u>"But I did the dishes last week?"</u>	
<u>"We all have responsibilities around the house. I work so we have money for food and house. You have to do your own chores to make it even."</u>	



Digital Mockup





Hello, Emma!

What do you want to do today?

Start New Conversation

Review Conversations and Weekly Scores

Your family's score this week (2/19 to 2/24) is

990

out of your **800**-point goal! Great work!

Change Goal



Score: 80

We're done!



Transcript

- Gymnastics?
- Yes, gymnastics. She won't be home before me.
- But I did the dishes today.
- We all have responsibilities around the house. I make money so that we can have a house and food. You have to do chores to make it even.
- If I do the dishes can my sister clean the bathroom?
- That's not fair. The bathroom will take a lot longer. How about she takes out the trash when she comes back from... gymnastics?

Notes

· future topic - try to talk about sister's gymnastics with mom and sister to help mom practice vocab

· also remind sister to take out trash



Listening...



Transcript

Translate

Notes

- Can you do the dishes for me before I come home tomorrow?
- Why can't my sister do it?
- Because she has uhh you know... the thing after school... 停操
- Gymnastics?
- Yes, gymnastics. She won't be home before me.
- But I did the dishes today.
- We all have responsibilities around the house. I make money so that we can have a house and food. You have to do chores to make it even.



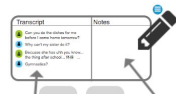
0:00



4:46



How to Play



Your conversation will appear here.

Press to speak.

You can take notes here.



When a new person speaks, the group score goes up.



You can also earn points by suggesting words when someone is struggling or using vocabulary someone else suggested to you.

NEXT: Meet Buddy!

Your family's score this week is **990** out of your **800**-point goal! Great work!



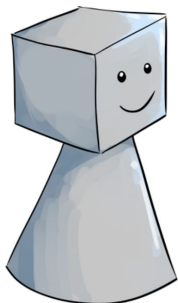
February 2018



S	M	T	W	T	F	S
18	19	20	21	22	23	24
					laundry 360 pt	dishes 100 pt
					band concert 530 pt	



Meet Buddy, your personal assistant!



Hi! I'm **Buddy**. I can answer your questions during gameplay.

I can also translate words when prompted, "Hey Buddy..."

I also record and write down your conversation so you can play it back and read it later!

Let's play!

Choose to view the transcription in another language

Transcript Translate **Notes**

Can you do the dishes for me before I come home tomorrow?

Why can't my sister do it?

Because she has uh you know... the thing after school... 体操

Gymnastics?

Yes, gymnastics. She won't be home before me.

0:00 [2] 4:46 [3]

A transcript of the completed conversation will appear here

View previous notes and add new ones here.

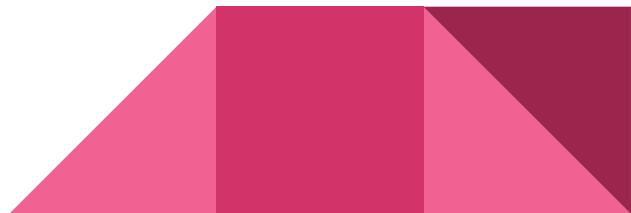
[1] Press play / pause to control the audio of this conversation.

[2] Select anywhere on this timeline bar to jump to that time in the conversation

[3] Open the volume controls with this button

Summary

- Examples and animations are a great alternative to text description when you want users to notice features
- Large amounts of features will require trimming and efforts to clarify how different features actually work and connect.
- It's never too late to change or shift important things



References

<http://www.pewsocialtrends.org/2013/02/07/chapter-3-identity/#fn-15968-25>

<https://www.census.gov/data/tables/2013/demo/2009-2013-lang-tables.html>

