

Low-Fi Prototyping & Usability Testing



Team



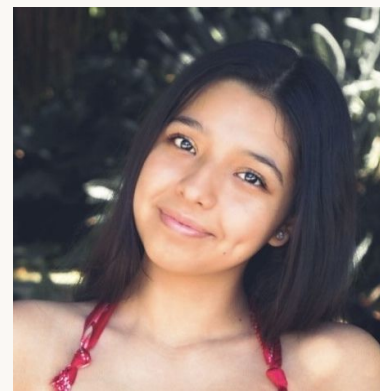
Daryl Budiman



Angel Rivera



Lisette Malacon

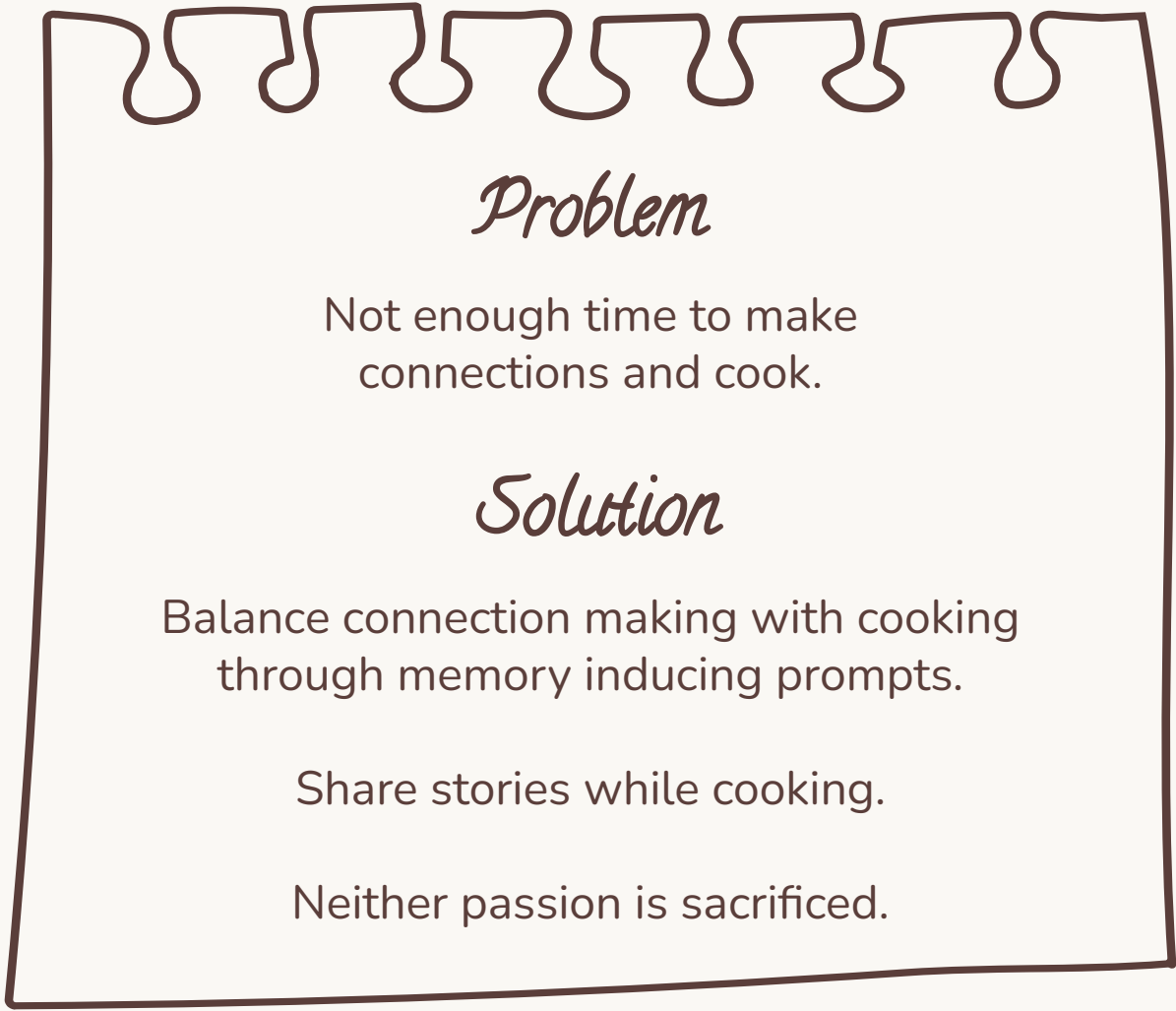


Jaylene Martinez

StoreaTime

Cook up a story, serve it to others





Problem

Not enough time to make connections and cook.

Solution

Balance connection making with cooking through memory inducing prompts.

Share stories while cooking.

Neither passion is sacrificed.

Outline

01 Sketching Exploration

Concept sketches & realizations

02 Low-Fi Prototype

Construction & task flows

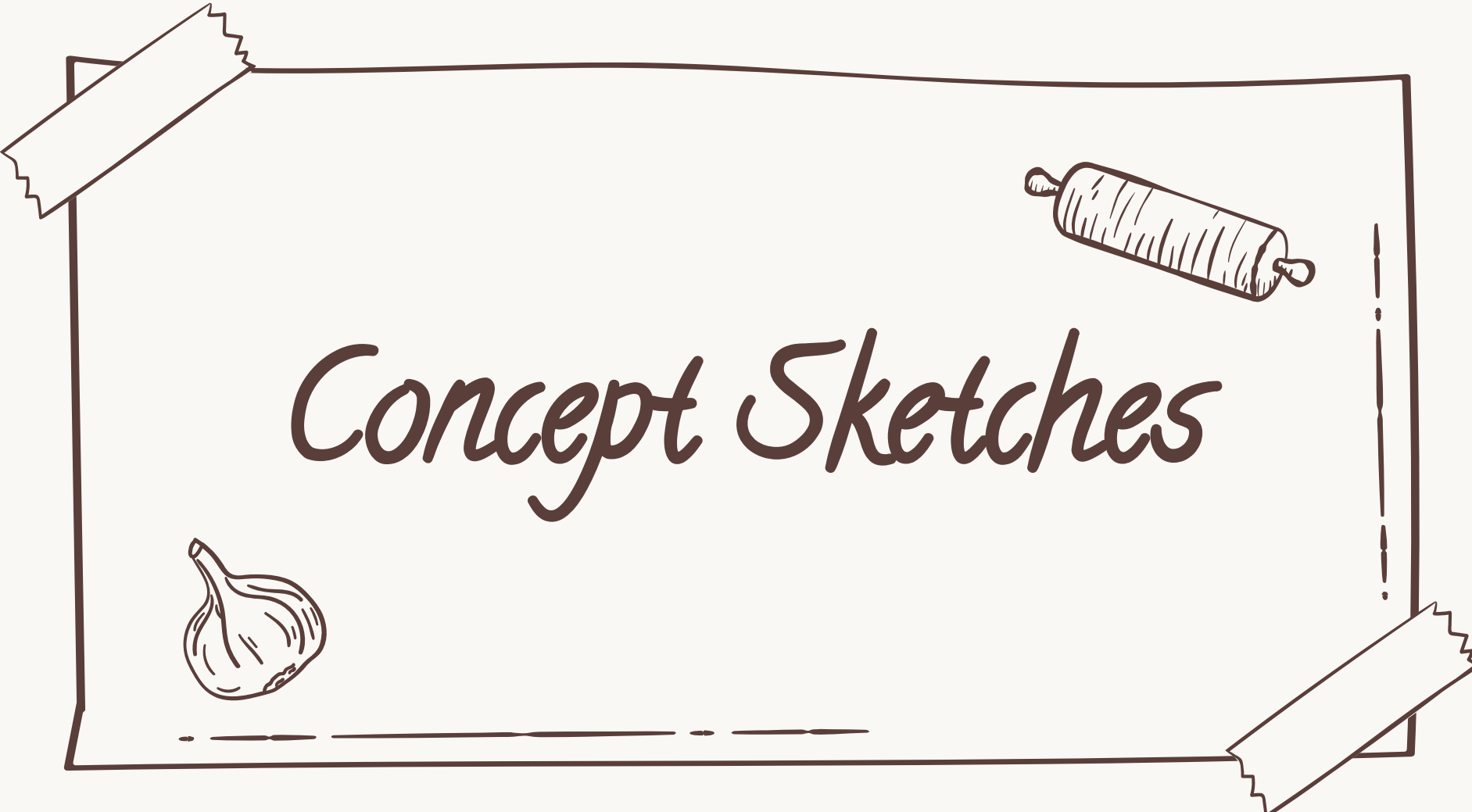
03 Usability Testing

Methodology & results

04 Discussion

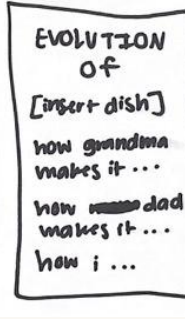
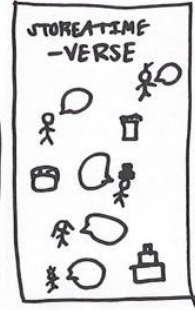
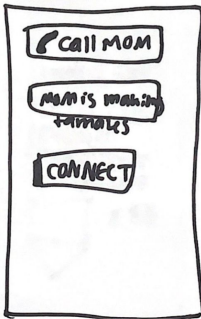
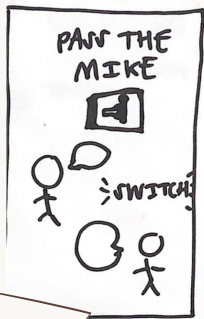
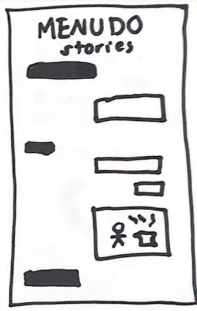
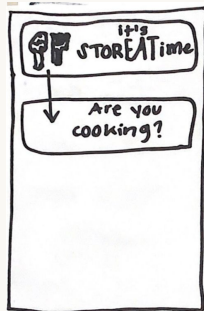
Implications, changes, & shortcomings





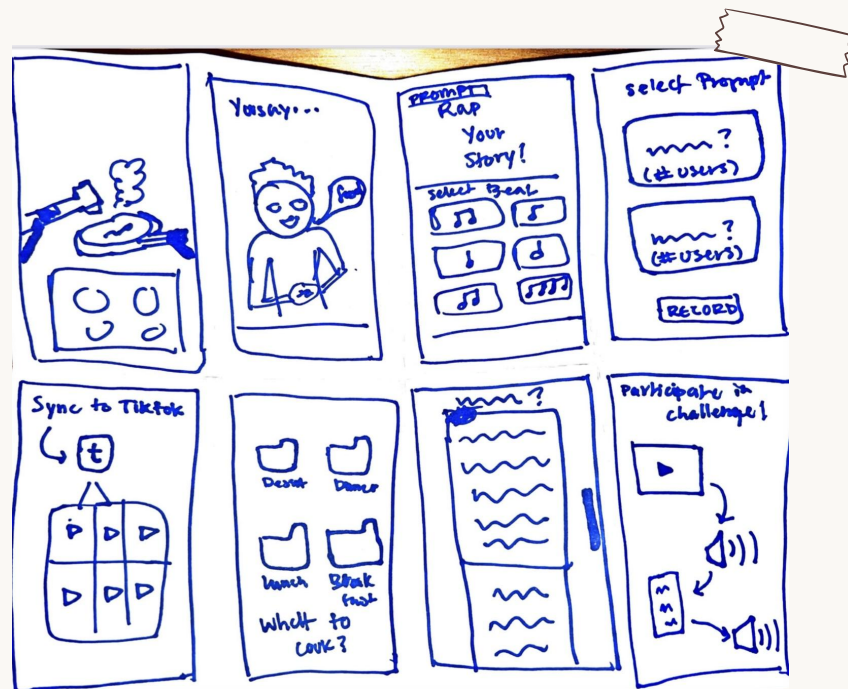
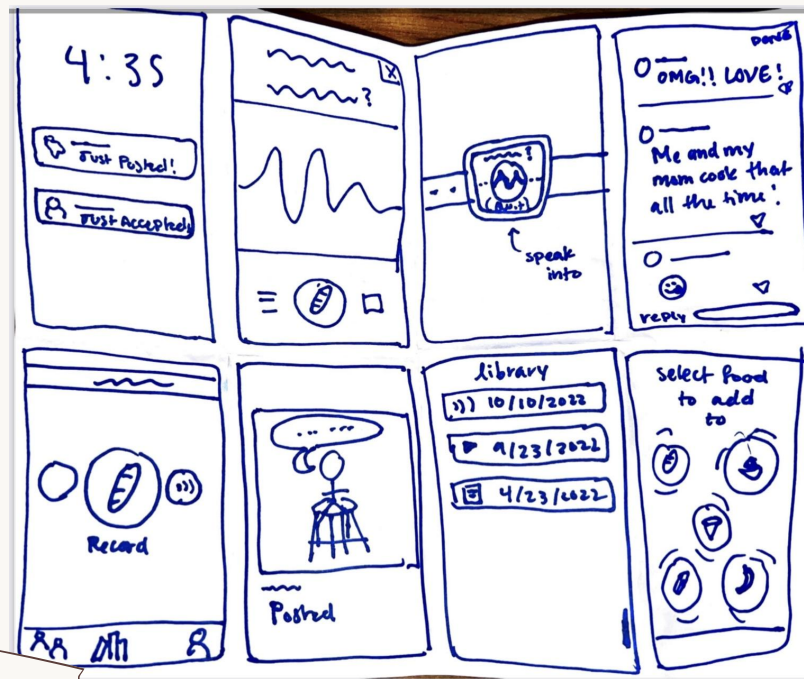
Concept Sketches

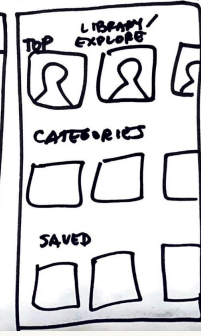
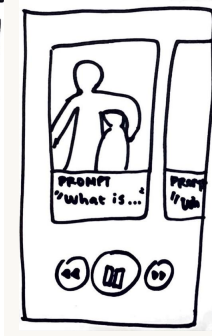
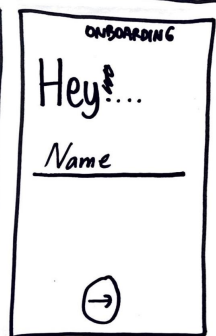
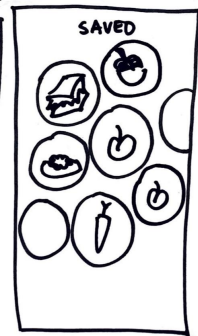
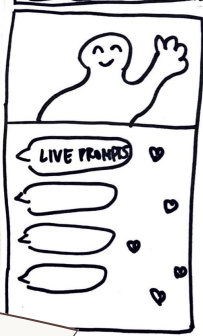
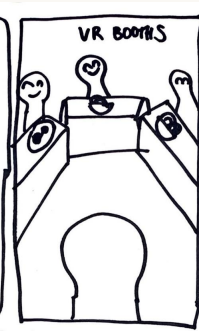
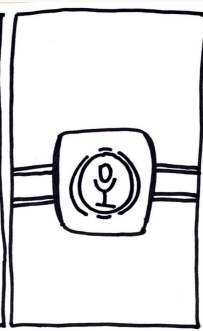
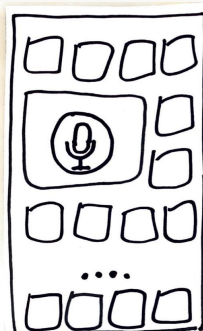




When was the first time you had this dish? Record I'M COOKING	(I'm listening) Out Loud: When was the first time you had	(Based on time of day or inputted usual cooking time, however, store sounds etc.) Art you cooking?	My StoryTime I'm cooking!: When was the first time... Record
What are you cooking? Sandwich When was the 1st...	I want to hear about <u>tamales</u> Listen to: Elvira's story Read: Oscar's 	My mom made that every time I + and old out.	Topic: Chicken Caesar Salad

Me & mom cooking!	"I first made tamales tamales with my mom when I was 3..." Record	My Stories ▶ Tamales > My Recipe ▶ Gnoc > My Recipe	Discover Mexican Food Asian Cuisine Appetizers
Make a Prompt Prompt How often do you want to be asked this? 1 2 3 4 5 Always	Add Friends + Mom Mom's Stories Kyle Kyle's Stories	When was the first time you had this dish? Record Skip	Customize Your Story Background Music: Filter: ☐ ☐ ☐ ☐ Prompt Frequency: 1 2 3 4 5 Time Limit: X 5 10 -

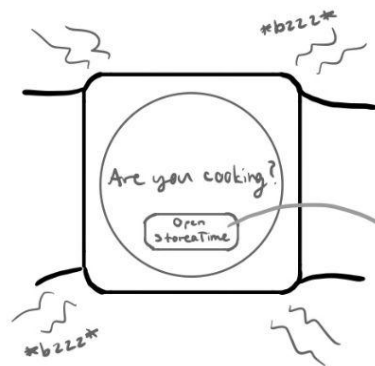




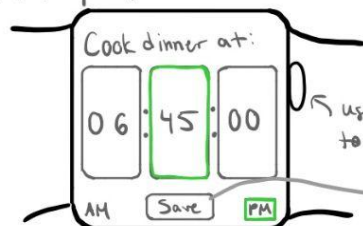


Chosen Realizations

Motion Detection pop-up:

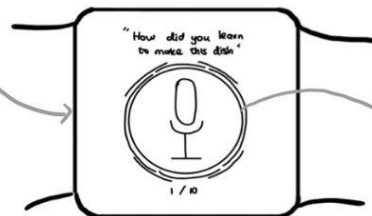


Input what time of day
you want to be prompted:



*green for current
selection

Story Prompt
& Record:



Press to
record

Play back audio
for each prompt
or share:

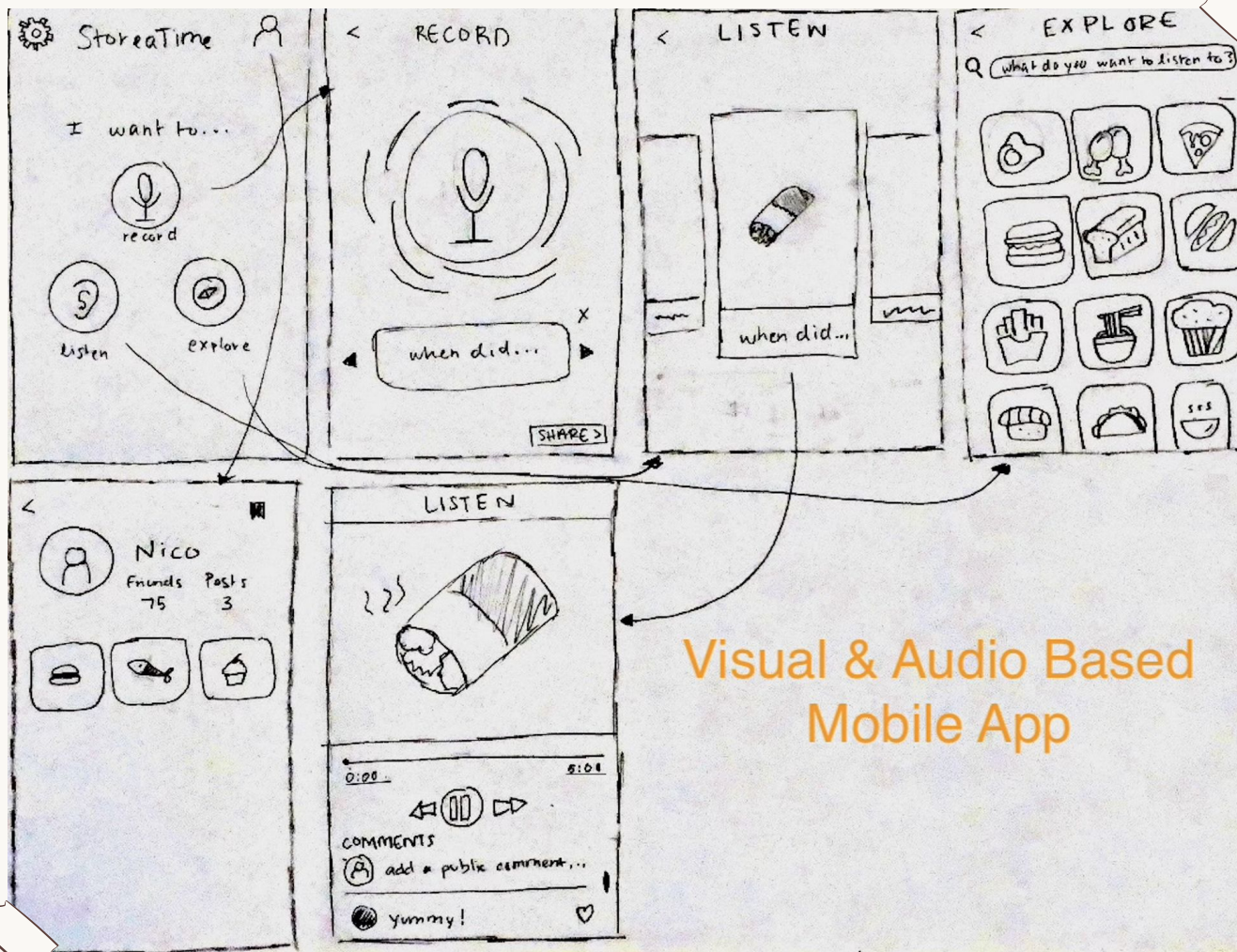


swipe
between
prompts

Select who you
want to share with:



Wearable Apple Watch



Visual & Audio Based
Mobile App

Wearable Apple Watch

PROS

- ✓ Easy reminders
- ✓ Easy to talk into wrist*

CONS

- ✗ Difficult connection building
- ✗ Less accessibility for the hearing and vision impaired

Visual & Audio Based

PROS

- ✓ Better connection building
- ✓ Fuller and completer UI*

CONS

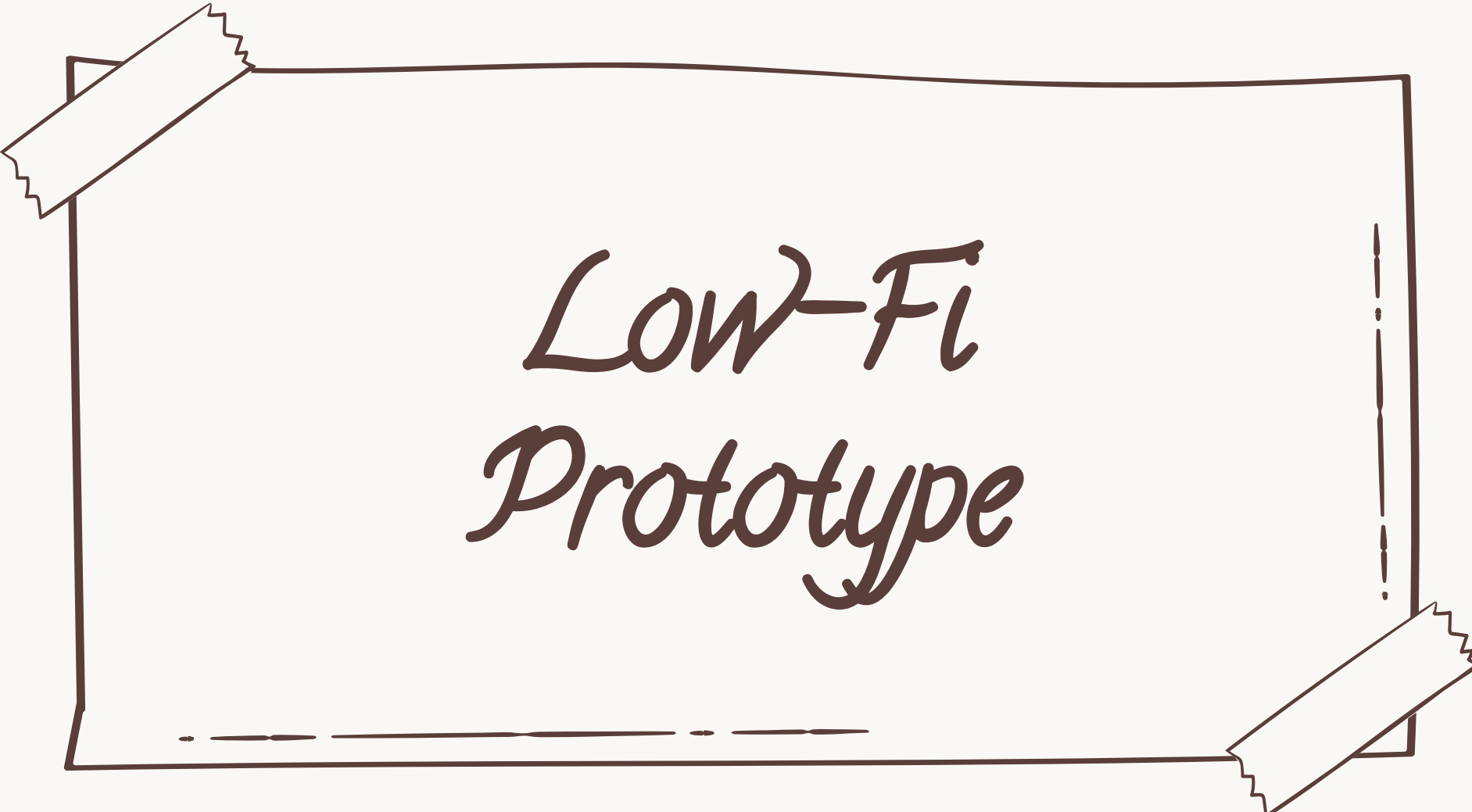
- ✗ More distracting UI
- ✗ Inconvenience of recording moving self



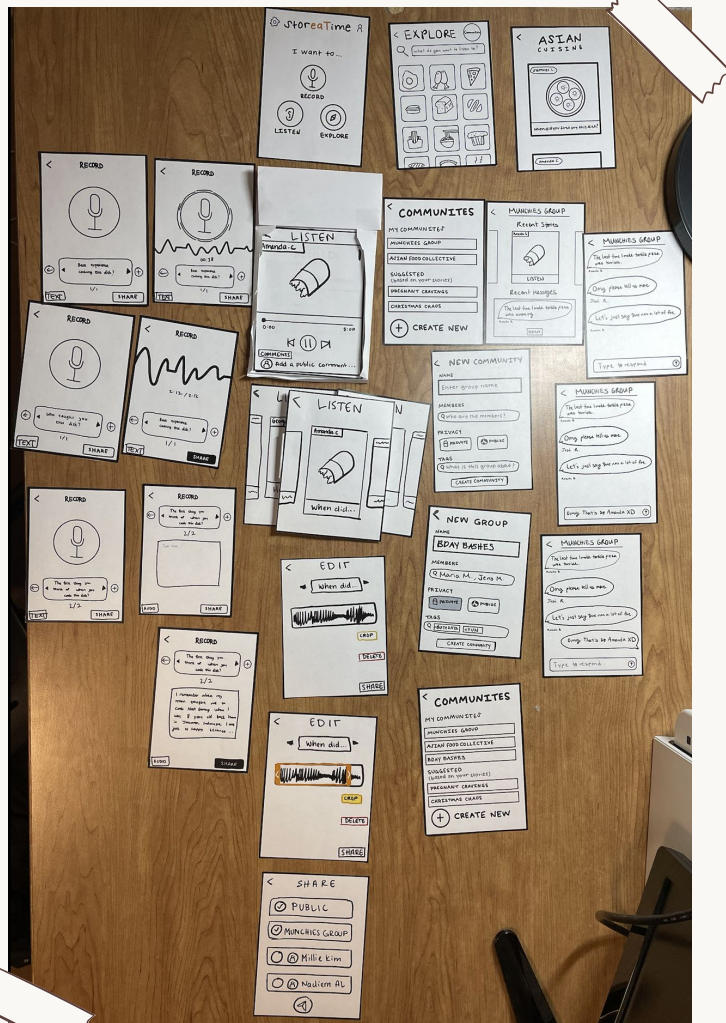
Visual & Audio Based Mobile App

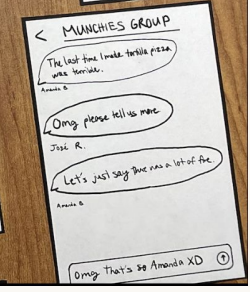
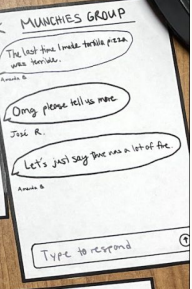
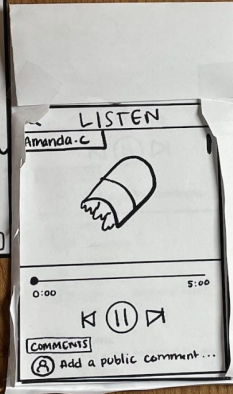


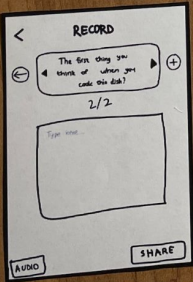
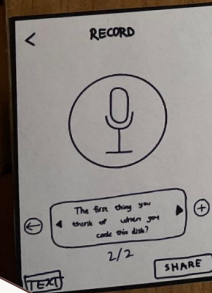
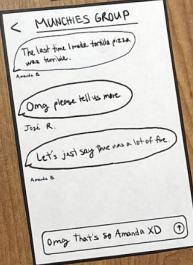
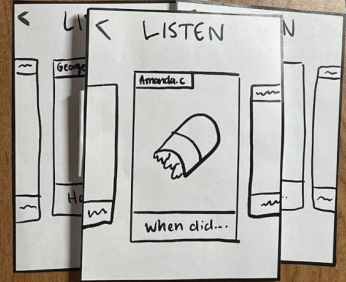
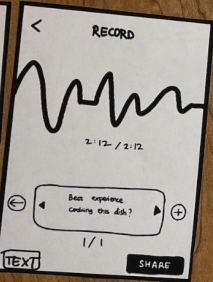
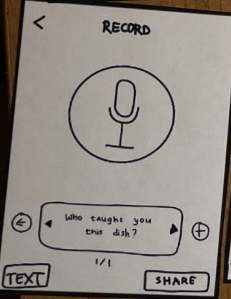
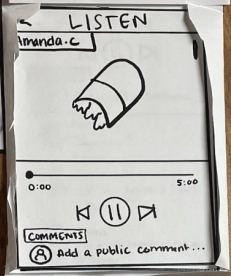
While effectively capturing people's stories is an important part of our solution, it must be done in tandem with making connections.

A hand-drawn rectangular note with a dark brown border. The text 'Low-Fi Prototype' is written in a dark brown, cursive script in the center. The top-left corner is secured by a piece of white tape with a jagged edge. The bottom-right corner is also secured by a piece of white tape with a jagged edge. A dashed line runs horizontally across the bottom of the note, and a dashed line runs vertically down the right side of the note.

Low-Fi Prototype







Microphone icon

The first thing you think of when you wake this day?

2/2

TEXT SHARE

The first thing you think of when you wake this day?

2/2

Type text...

AUDIO SHARE

EDIT

When did...

Waveform icon

CROP DELETE SHARE

RECORD

The first thing you think of when you wake this day?

2/2

I remember when my mom brought me to Cebu Road during when I was 8 years old back then in "Jember, Indonesia. I was just so happy because ...

AUDIO SHARE

EDIT

When did...

Waveform icon

CROP DELETE SHARE

SHARE

☒ PUBLIC

☒ MUNCHIES GROUP

☐ @ Millie Kim

☐ @ Nadiem AL

Back arrow icon

NEW GROUP

NAME

BDAY BASHES

MEMBERS

@ Maria M., Jens M.

PRIVACY

☐ PRIVATE ☒ PUBLIC

TAGS

@ Birthday @ Fun

CREATE COMMUNITY

COMMUNITIES

MY COMMUNITIES

MUNCHIES GROUP

ASIAN FOOD COLLECTIVE

BDAY BASHES

SUGGESTED (based on your stories)

PREGNANT CRAVINGS

CHRISTMAS CHAOS

+ CREATE NEW

MUNCHIES GROUP

The last time I made terrible pizza was terrible.

Amelia B.

Omig, please tell us more

Just A.

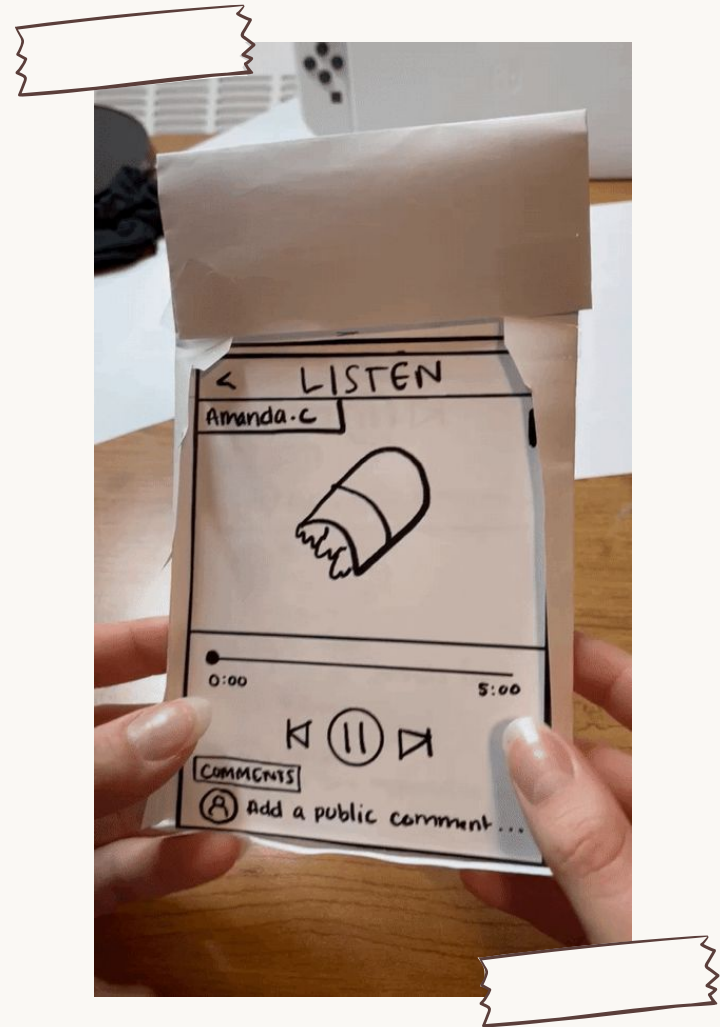
Let's just say there was a lot of fire

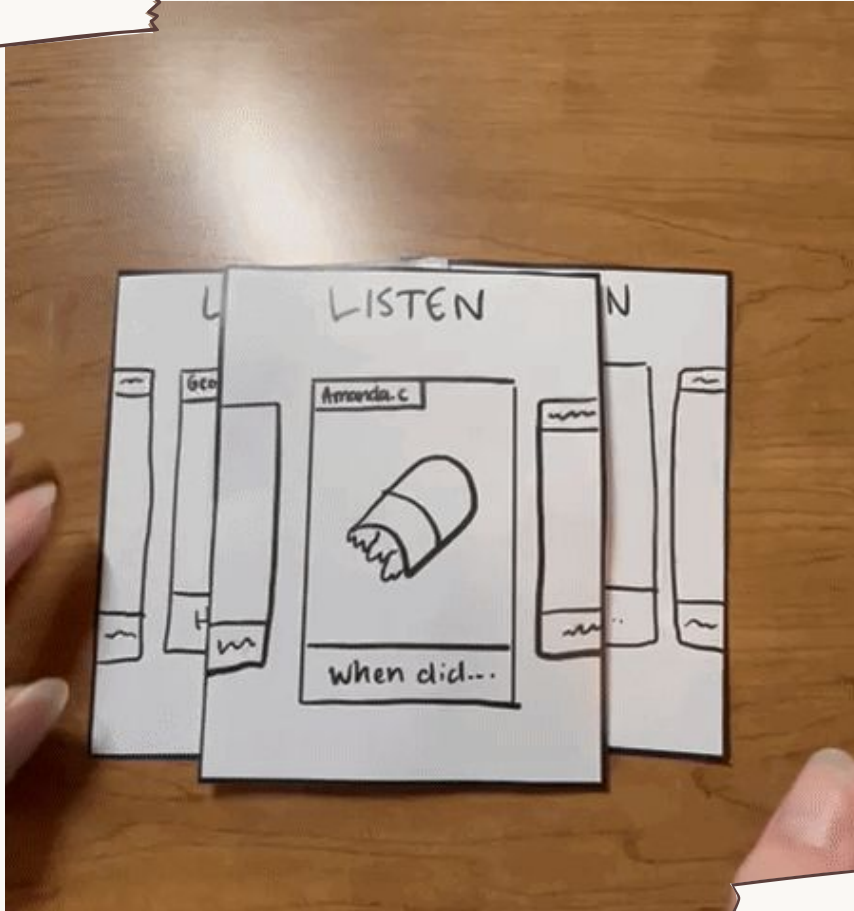
Amelia B.

Omig, That's so Amanda XD

Type to record

Scrolling mechanism
to see comments on
someone's shared
audio story.



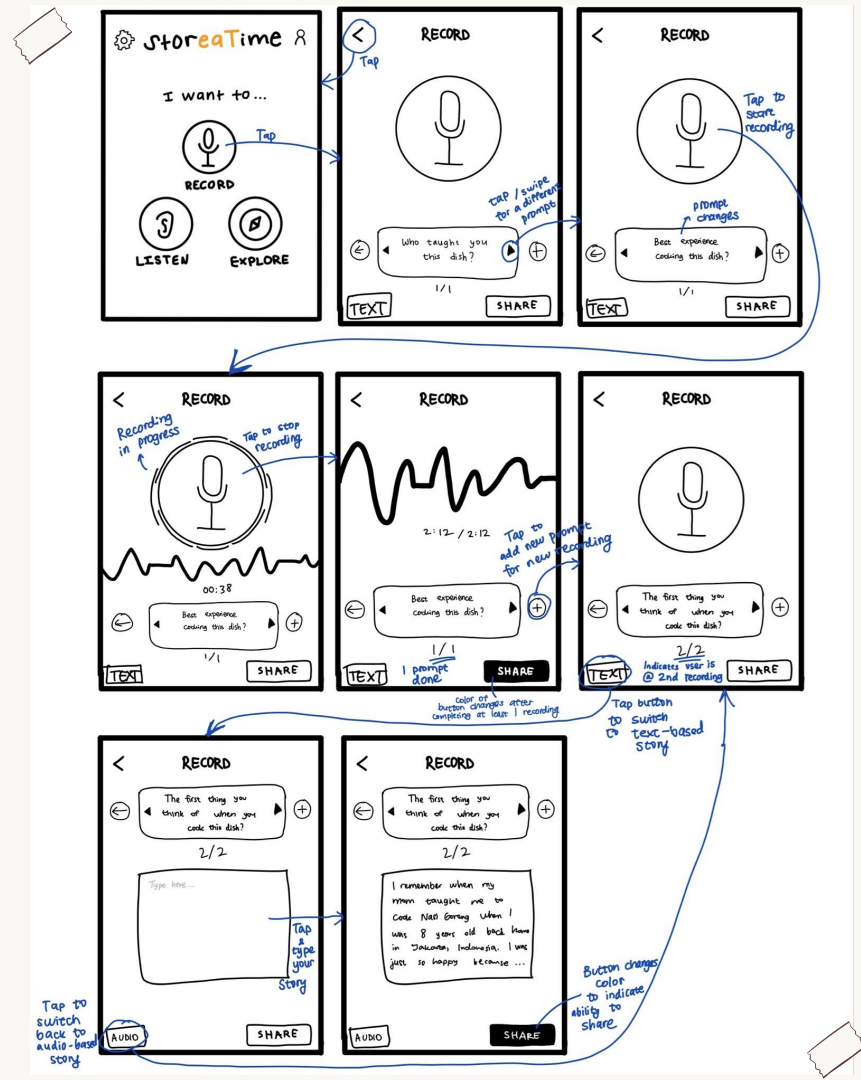


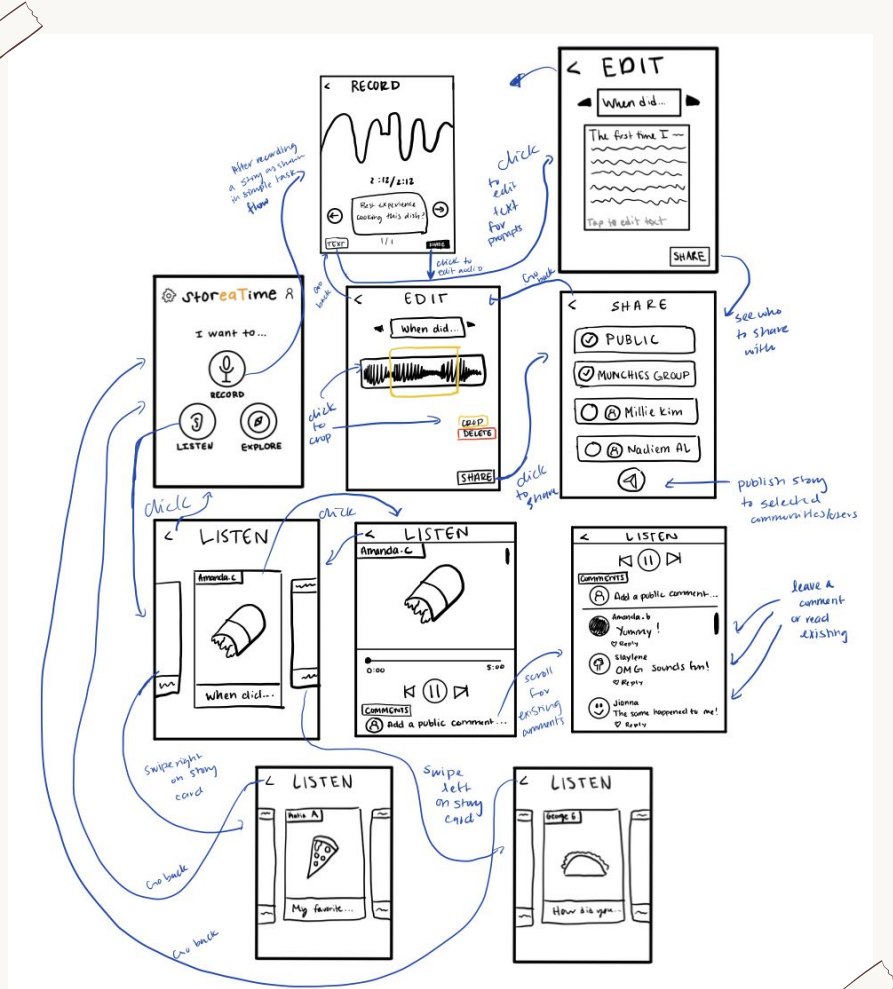
“Swiping”
mechanism to see
different story
options to listen to.



Task Flows

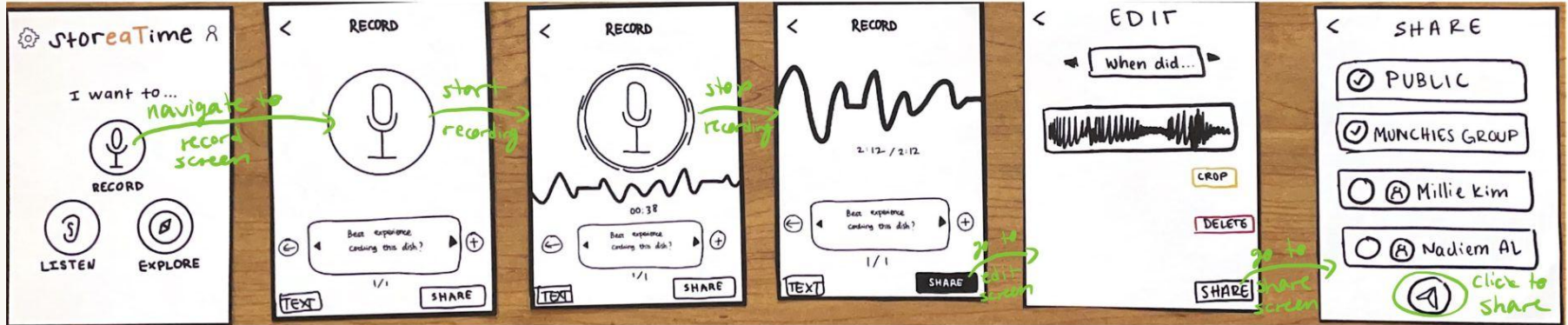
Simple Task: Reminisce & record a story.





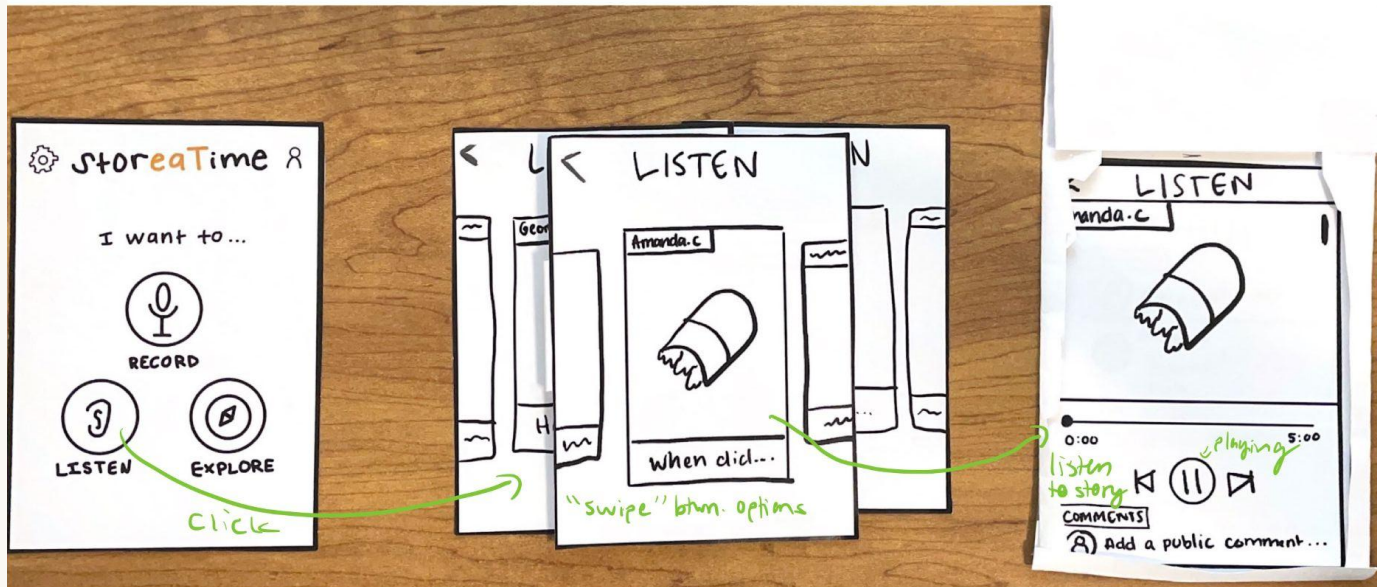
Moderate
Task: Share
your story and
listen to
others'.

*Actual moderate task during testing



Reminisce, record, and share your story.

*Actual simple task during testing



Listen to others' stories.



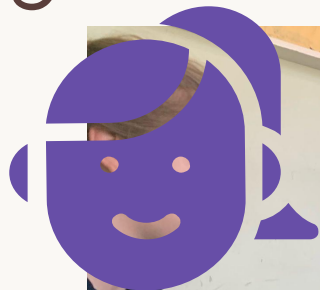
A hand-drawn title card with a dark brown border. The text "Usability Testing" is written in a dark brown, cursive script in the center. There are two pieces of white tape with jagged edges: one in the top-left corner and one in the bottom-right corner. A dashed line runs vertically on the right side and horizontally along the bottom edge of the card.

Usability Testing

Recruitment

- 1) Amateur/professional chefs who enjoy sharing their stories
- 2) People who love to consume content

Jillian



Age: 24

Job: Lab Manager

Relevant experience

- Avid social media poster and consumer
- Cooks simple dishes at home

Yuchen



Age: 22

Job: Student

Relevant experience

- Avid social media lurker
- Does not post often
- Loves to browse content

Tom



Age: 51

Job: Tech Product Manager

Relevant experience

- Father who cooks for his children
- Shares overnight oats recipes with people online

Nick



Age: 54

Job: Executive Chef on the
Row at Stanford

Relevant experience

- Has worked at restaurants since 16
- 30+ years of cooking experience
- Food is his passion

Roles



Daryl Budiman

Greeter/Observer



Angel Rivera

Facilitator



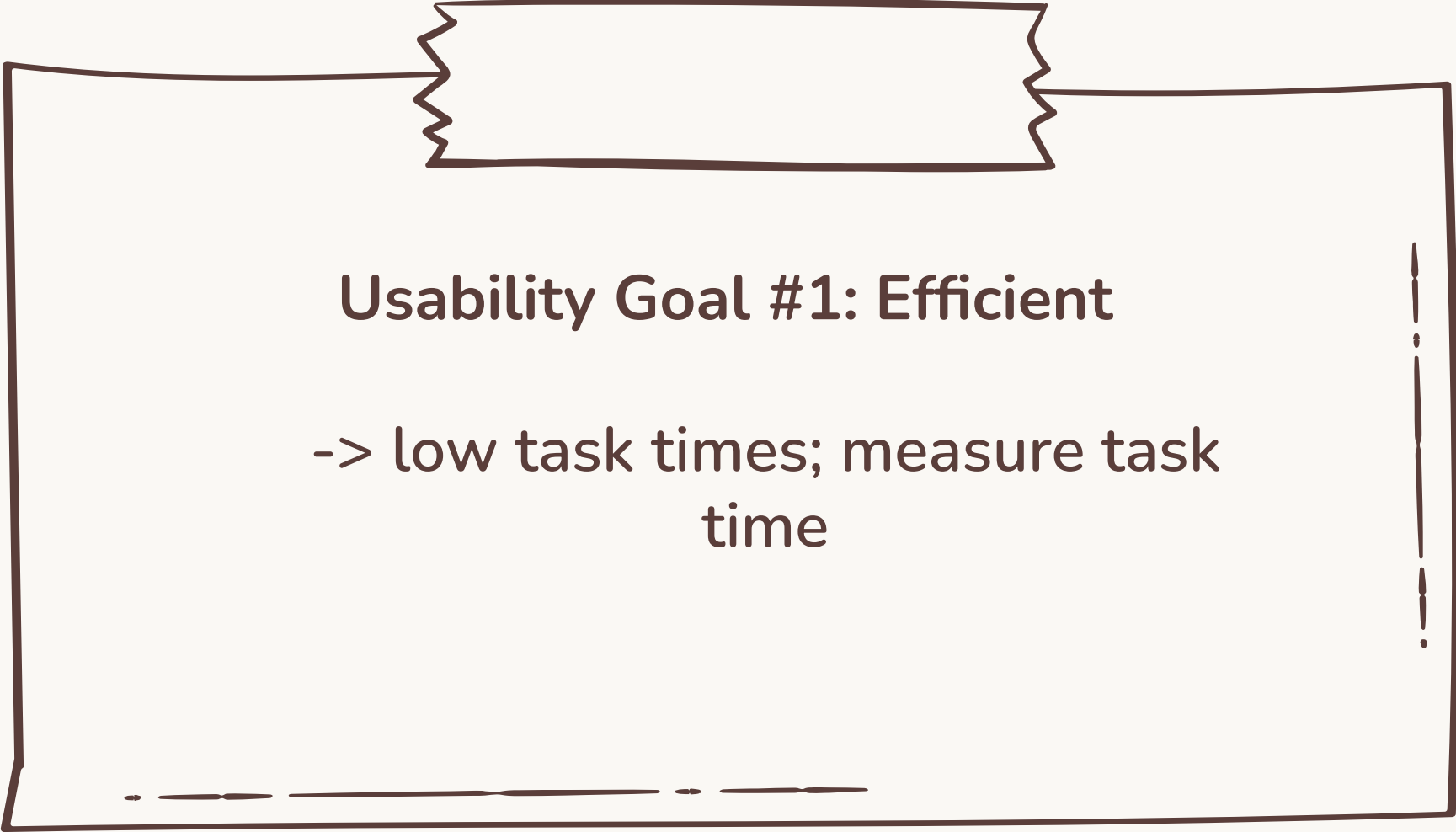
Lisette Malacon

Computer



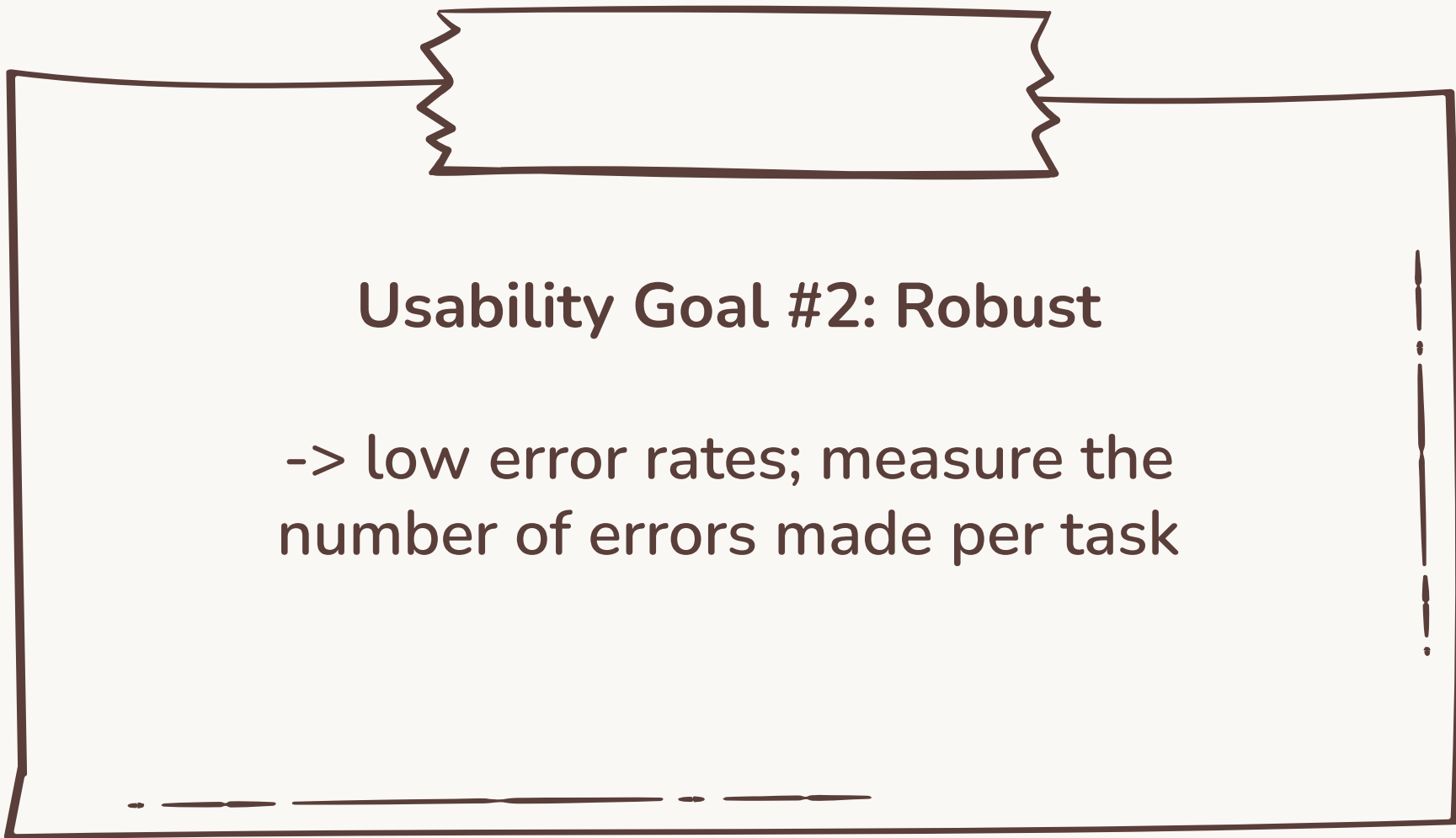
Jaylene Martinez

Observer



Usability Goal #1: Efficient

-> low task times; measure task
time



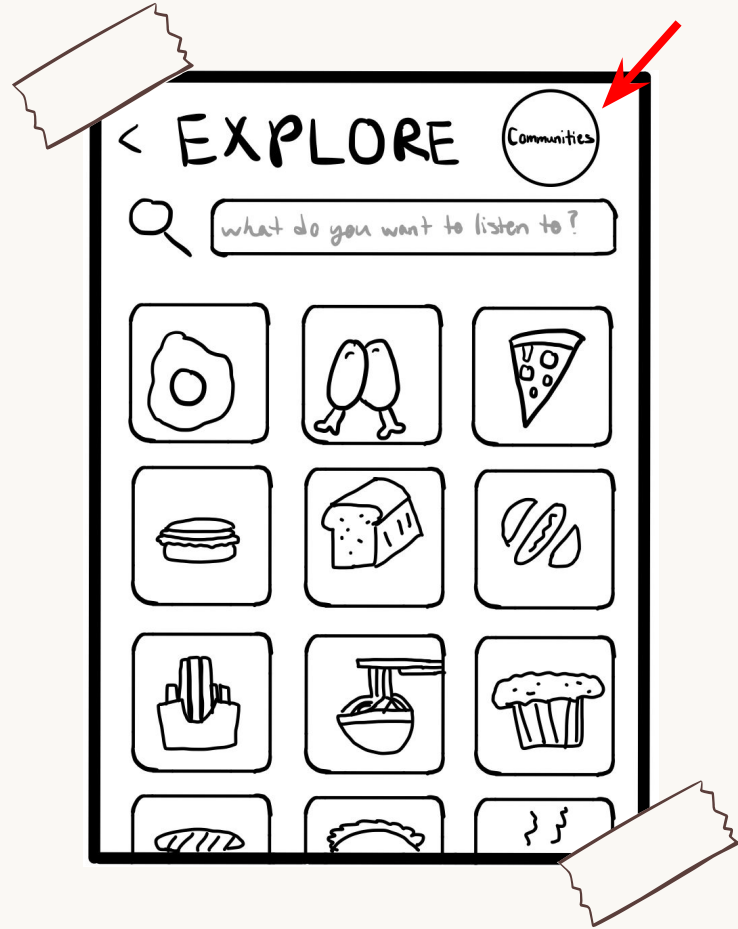
Usability Goal #2: Robust

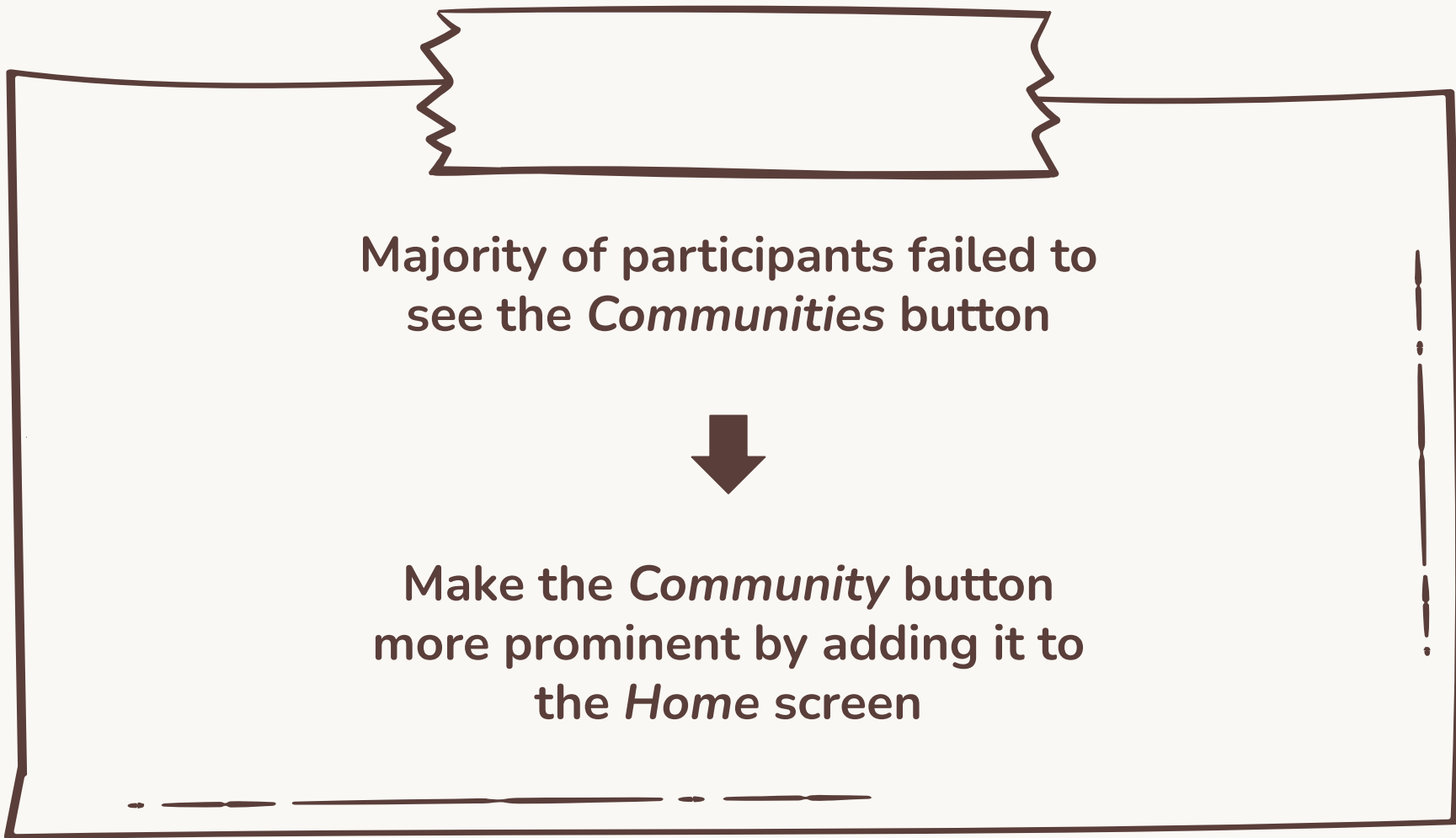
-> low error rates; measure the number of errors made per task



Results,
Discussion,
Implications

Excitement to
explore the icons,
failure to see the
Communities button

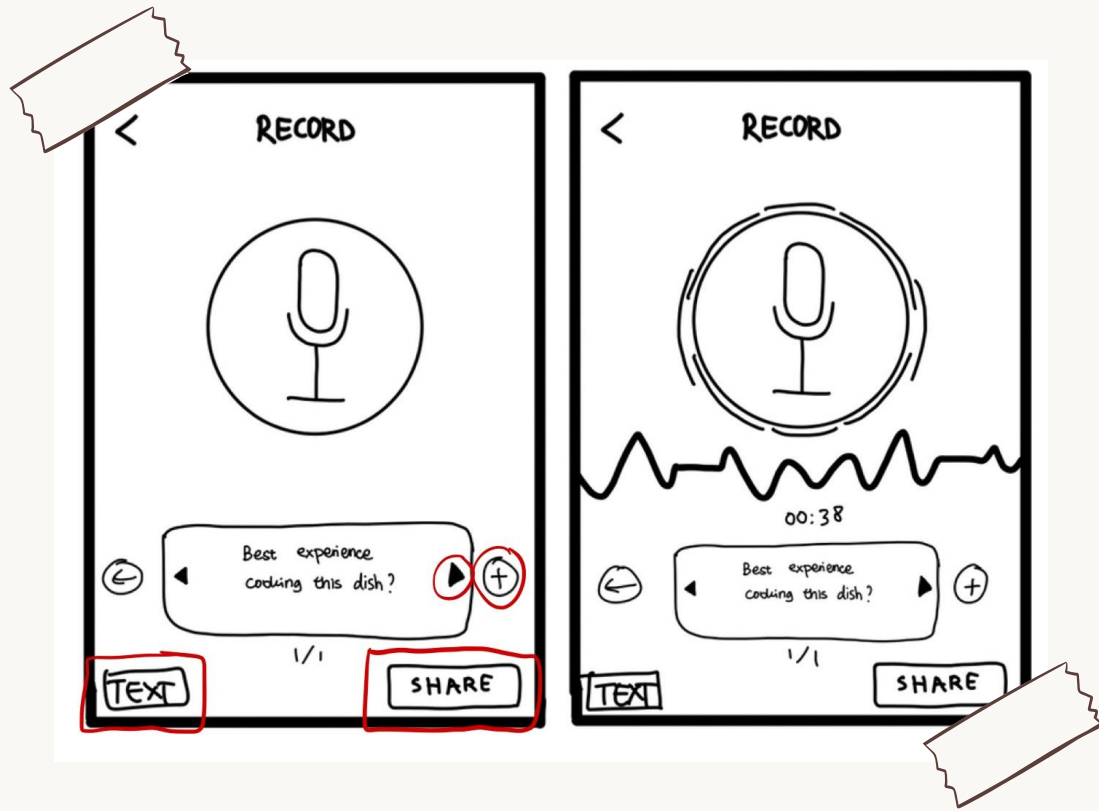




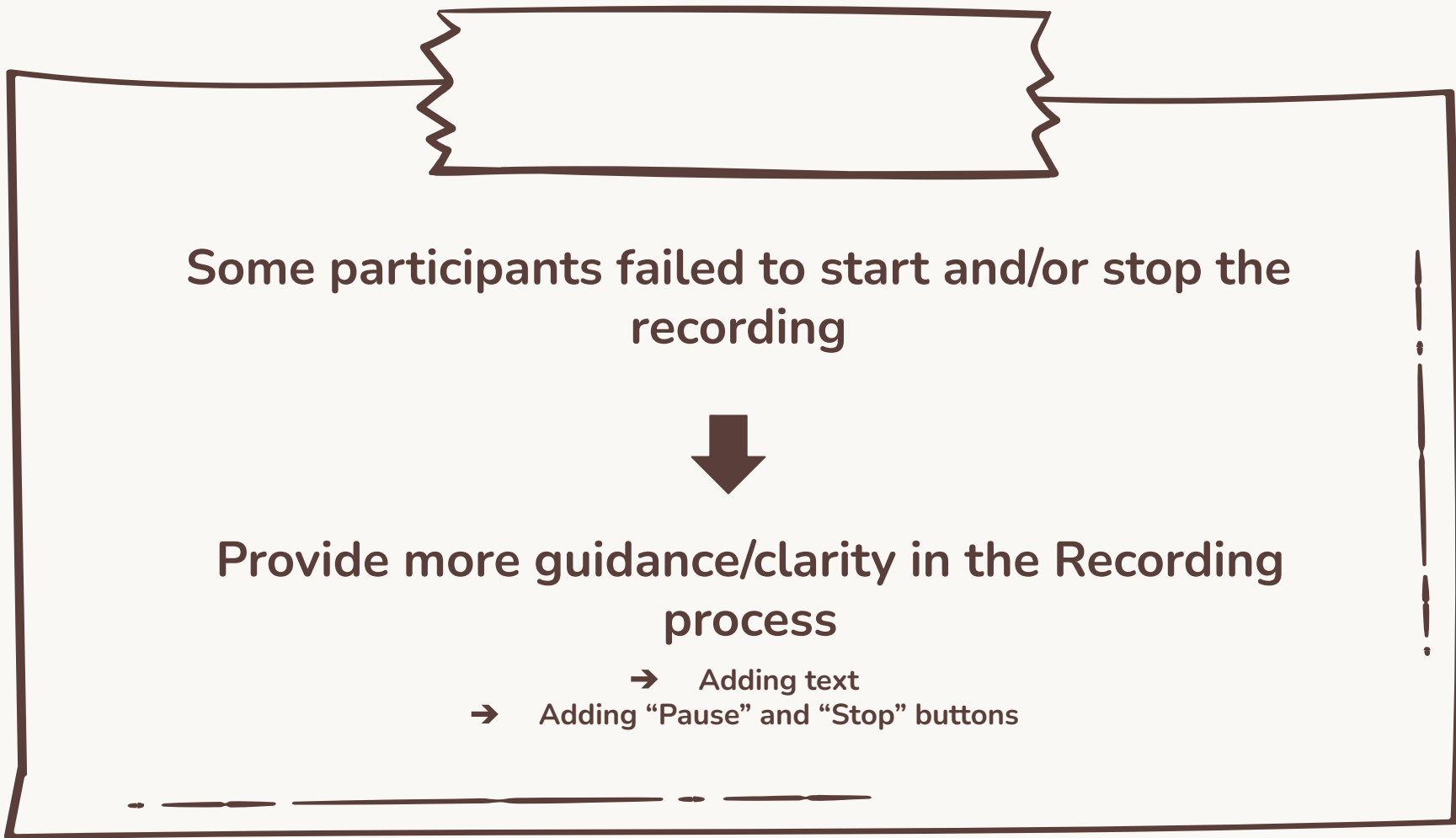
Majority of participants failed to
see the *Communities* button



Make the *Community* button
more prominent by adding it to
the *Home* screen



Confusion about certain buttons, failure to stop recording.

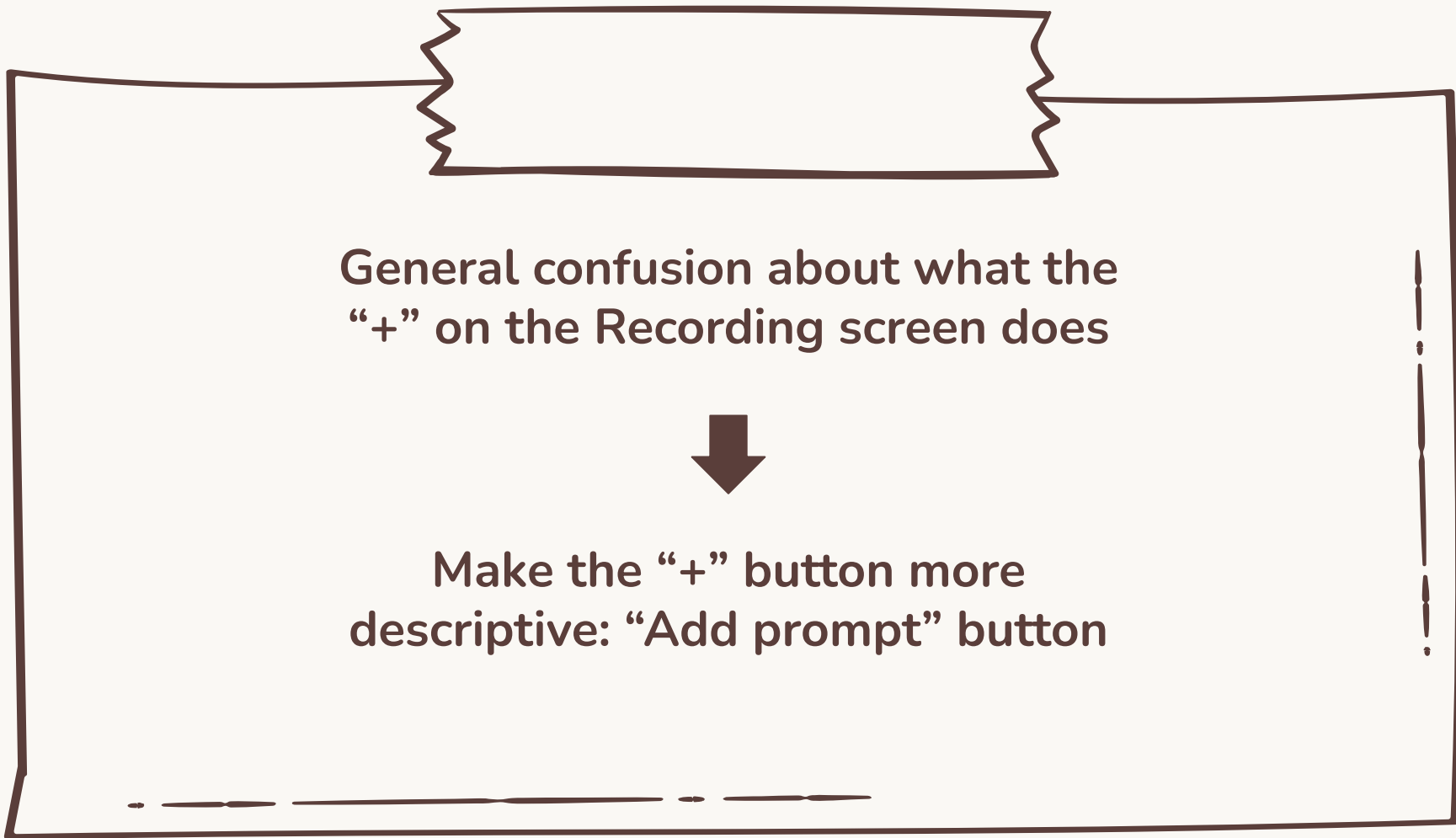


Some participants failed to start and/or stop the recording



Provide more guidance/clarity in the Recording process

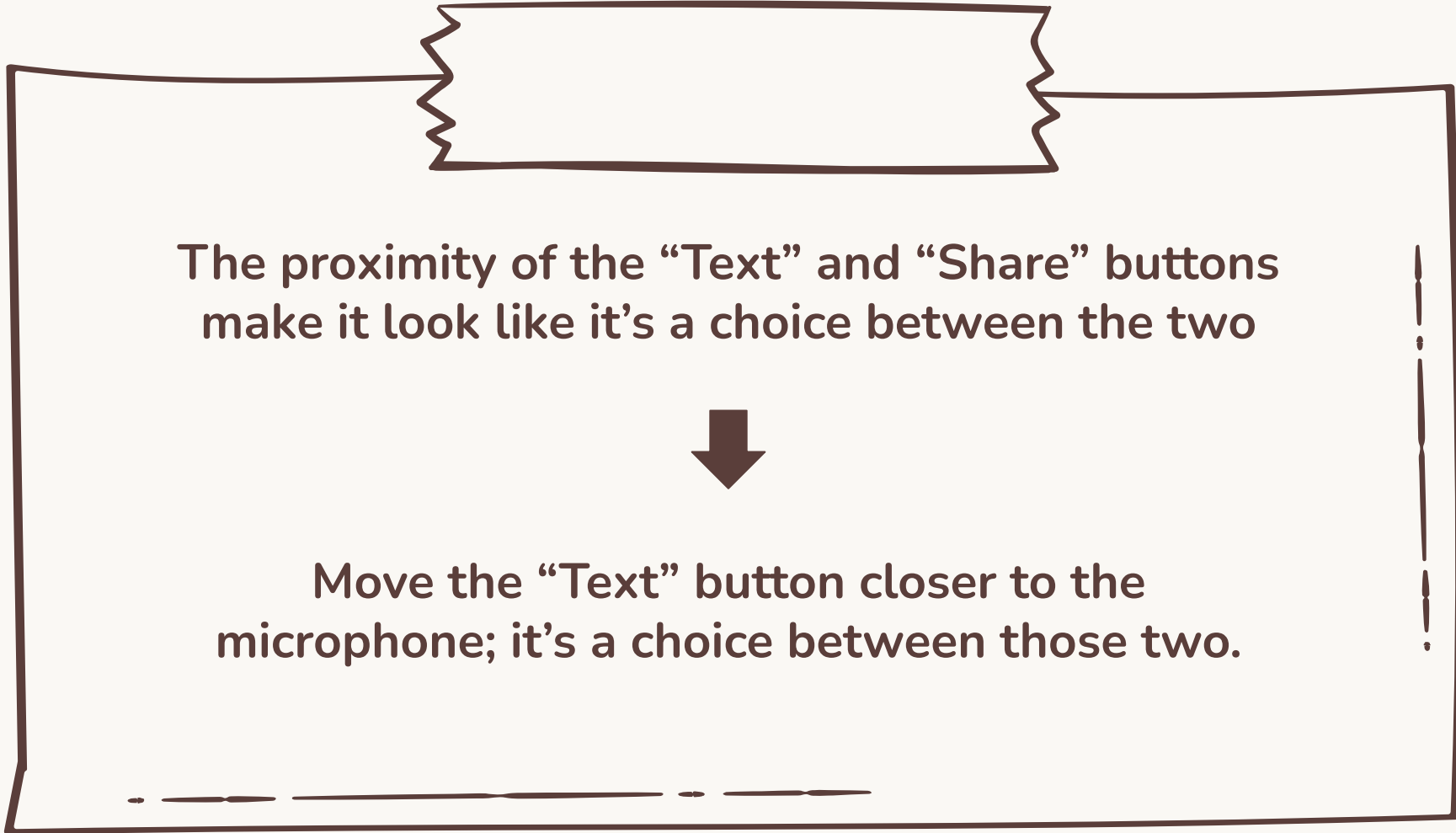
- Adding text
- Adding “Pause” and “Stop” buttons



General confusion about what the
“+” on the Recording screen does



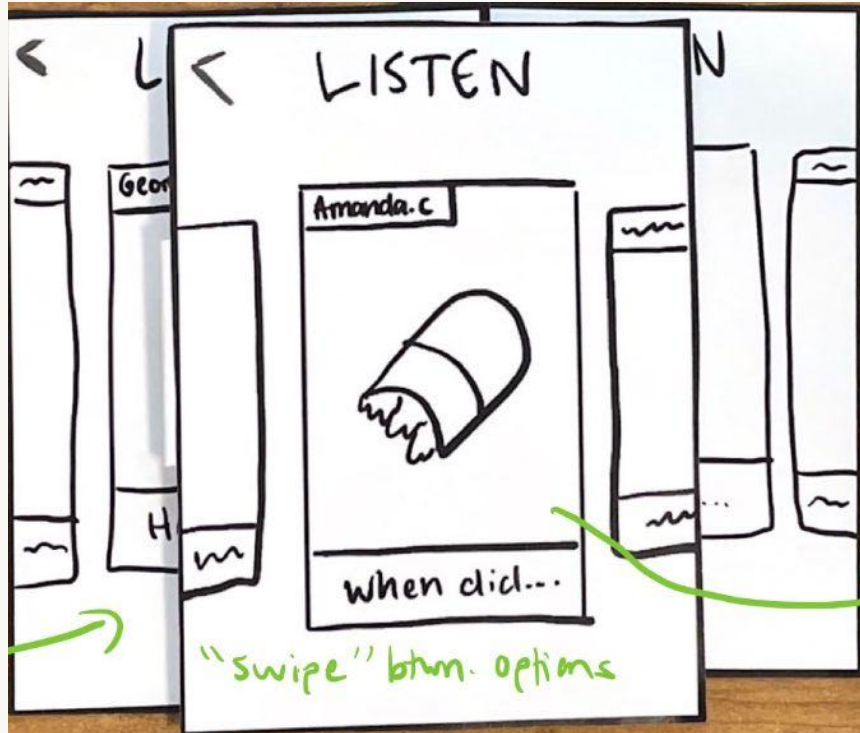
Make the “+” button more
descriptive: “Add prompt” button



The proximity of the “Text” and “Share” buttons
make it look like it’s a choice between the two

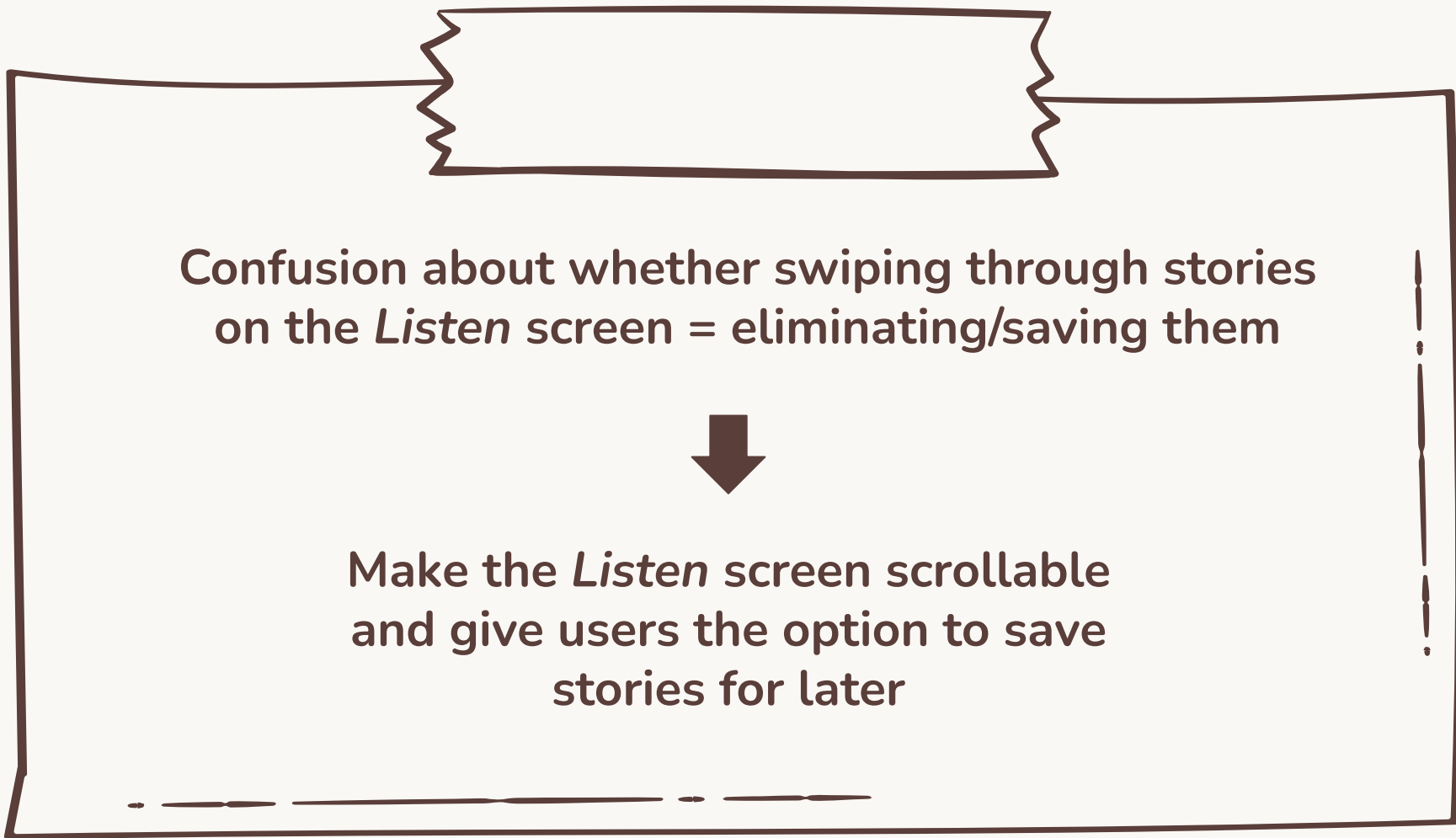


Move the “Text” button closer to the
microphone; it’s a choice between those two.



Swiping = elimination?

Interest in saving stories
to listen to for later



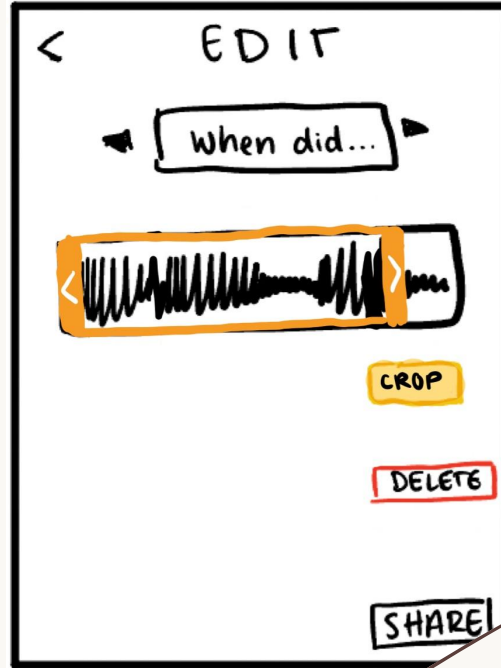
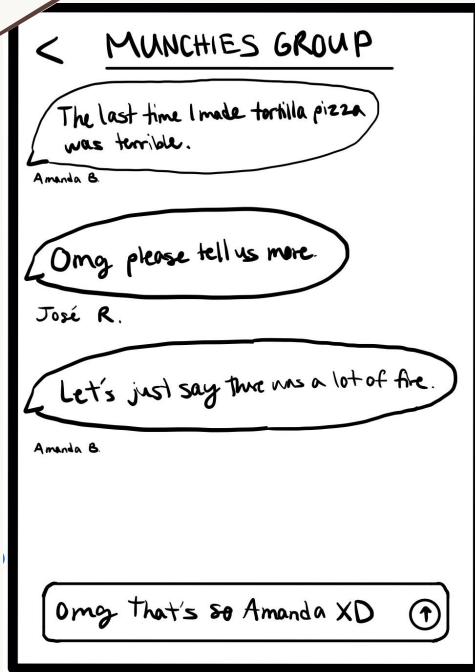
Confusion about whether swiping through stories
on the *Listen* screen = eliminating/saving them



Make the *Listen* screen scrollable
and give users the option to save
stories for later

Content lurker
wants option to like
stories without
having to comment





Familiar interfaces from other apps are very intuitive

People like having
finite or suggested
options to choose
from

A hand-drawn sketch of a mobile app form titled "NEW COMMUNITY". The form is enclosed in a thick black border with two torn paper corners. It contains the following sections:

- NAME**: A text input field with the placeholder "Enter group name".
- MEMBERS**: A rounded rectangular field with the question "Q Who are the members?".
- PRIVACY**: A section highlighted with a red border, containing two buttons: "PRIVATE" with a lock icon and "PUBLIC" with a person icon.
- TAGS**: A rounded rectangular field with the question "Q What is this group about?".
- CREATE COMMUNITY**: A button at the bottom of the form.

Usability Goal #1: Efficient



Simple

57 seconds



Moderate

3:03 minutes



Complex

3:15 minutes

Usability Goal #2: Robust



Simple

0 errors



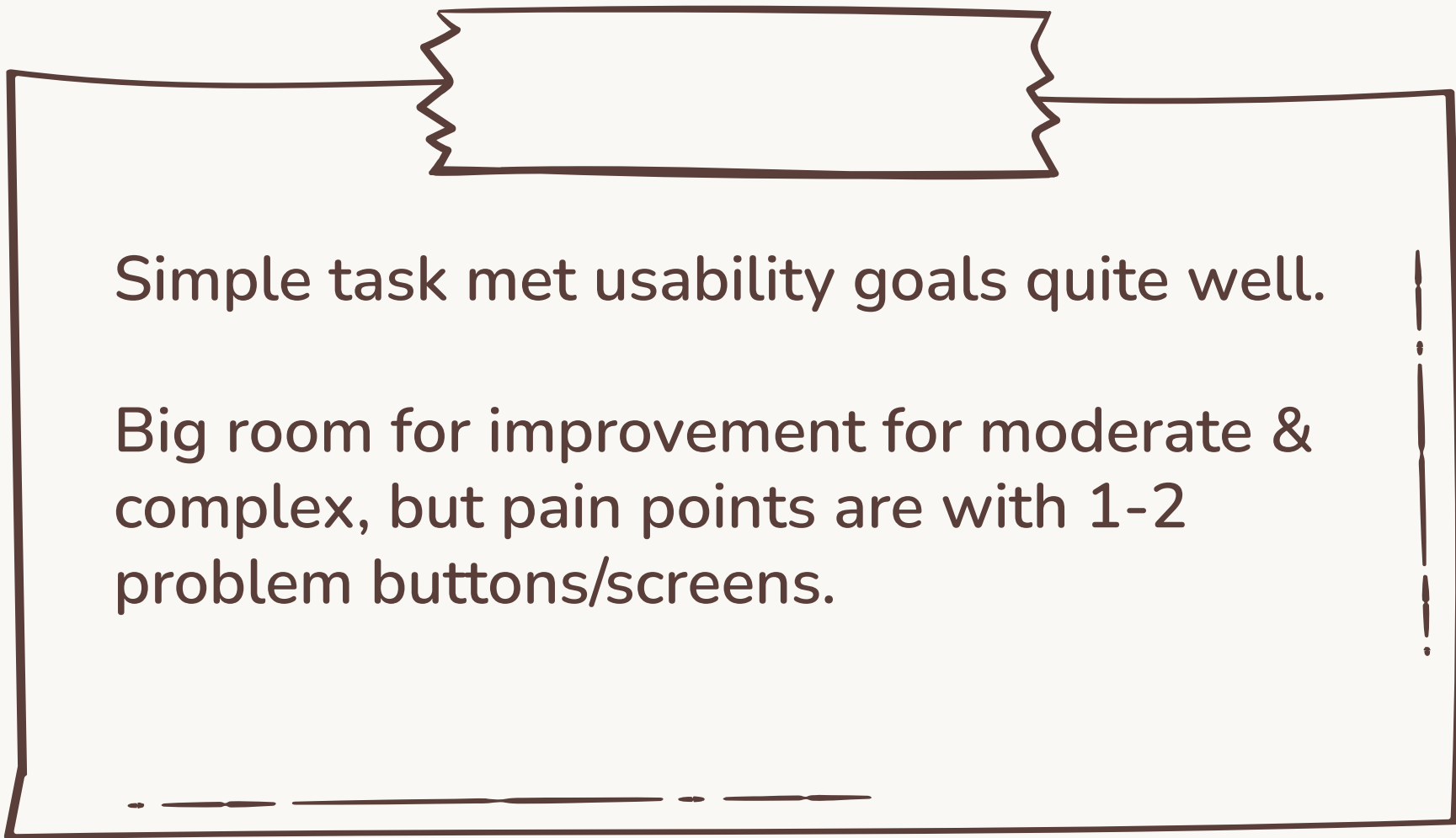
Moderate

1.75 errors



Complex

2.75 errors



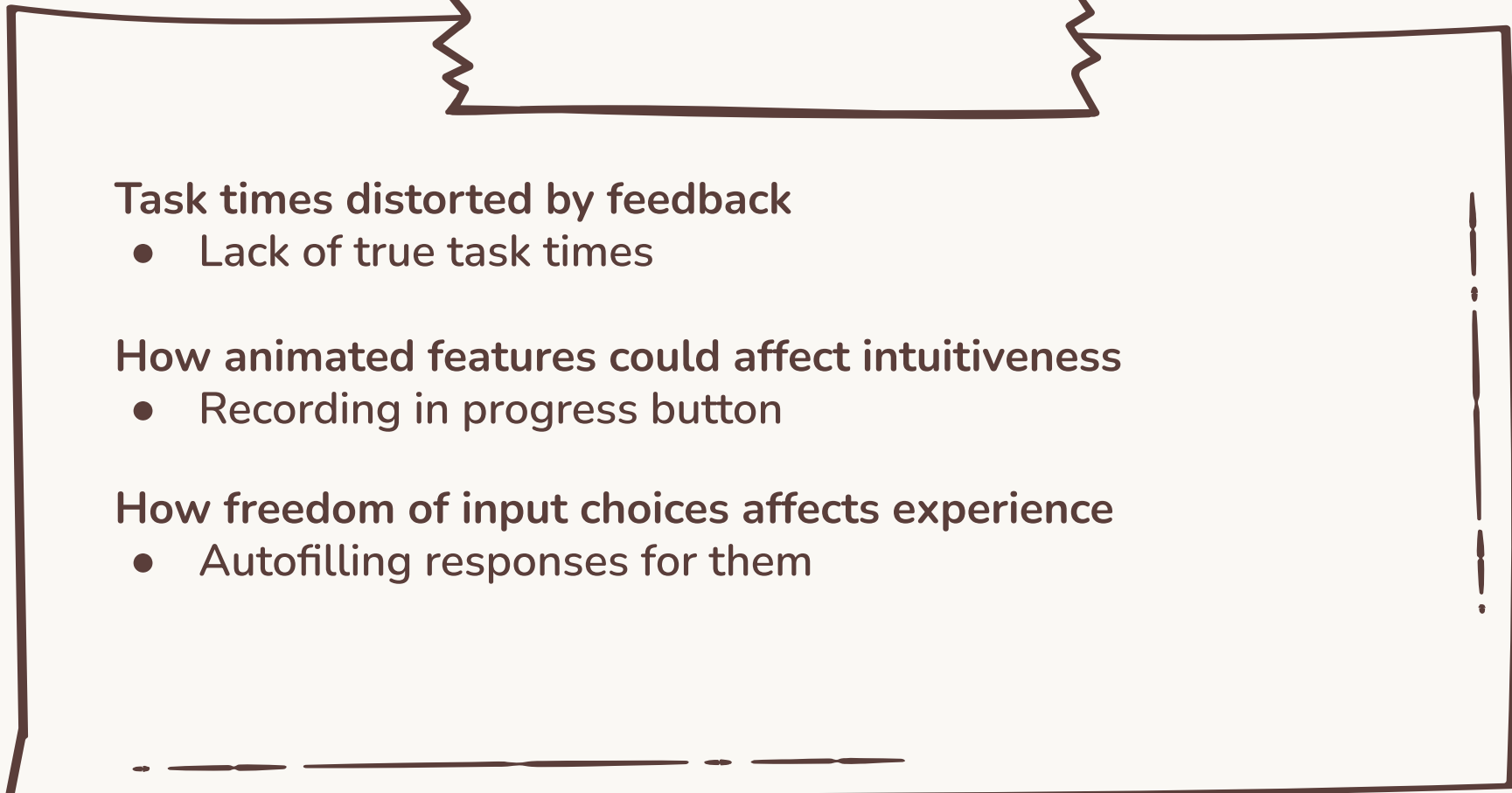
Simple task met usability goals quite well.

Big room for improvement for moderate & complex, but pain points are with 1-2 problem buttons/screens.



A hand-drawn notepad with a dark brown border. The word "Shortcomings" is written in the center in a dark brown, cursive script. The notepad is decorated with two pieces of white tape with jagged edges: one is on the top-left corner and the other is on the bottom-right corner. There are also some faint, dashed lines on the right and bottom edges of the notepad.

Shortcomings



Task times distorted by feedback

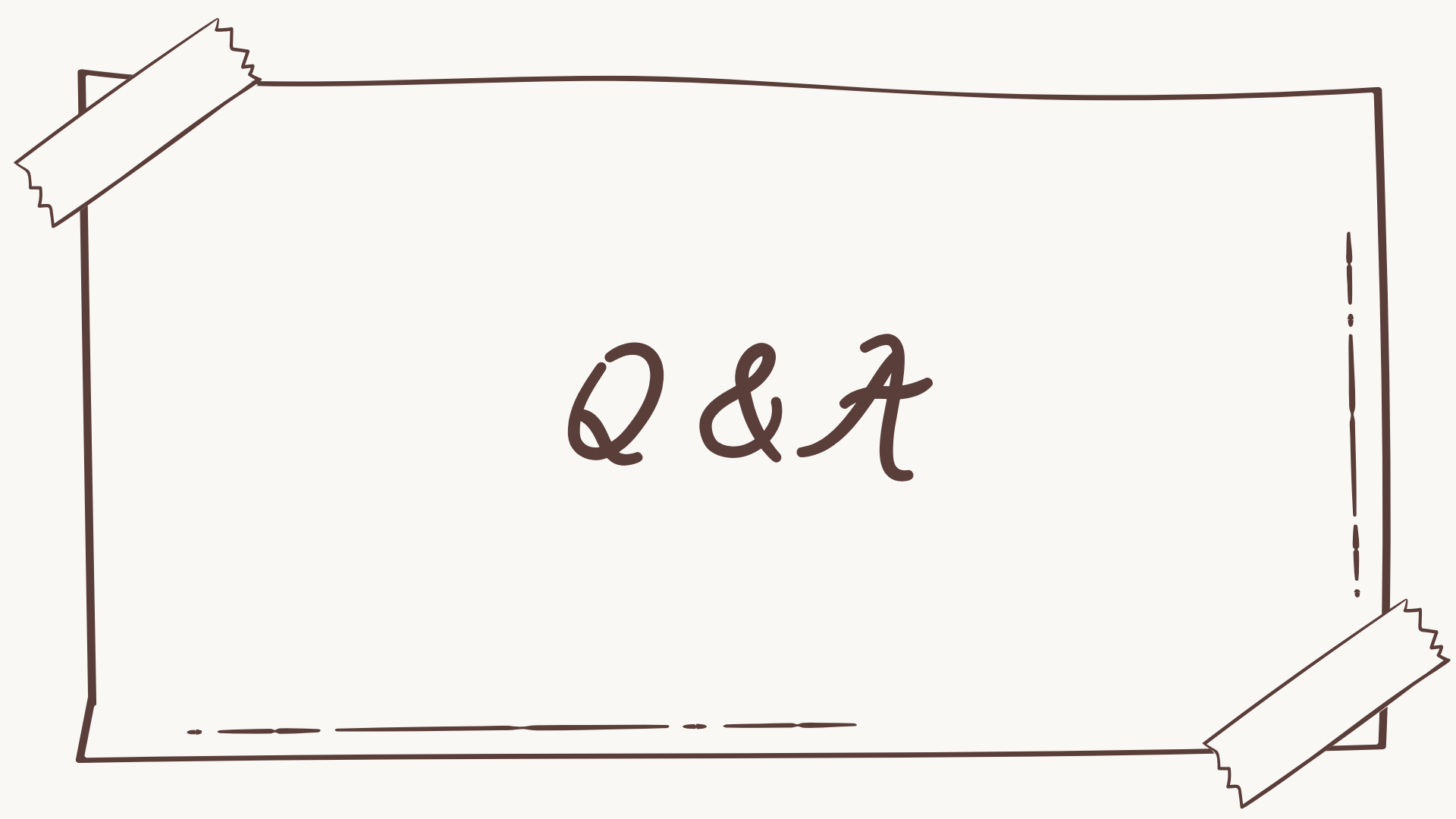
- Lack of true task times

How animated features could affect intuitiveness

- Recording in progress button

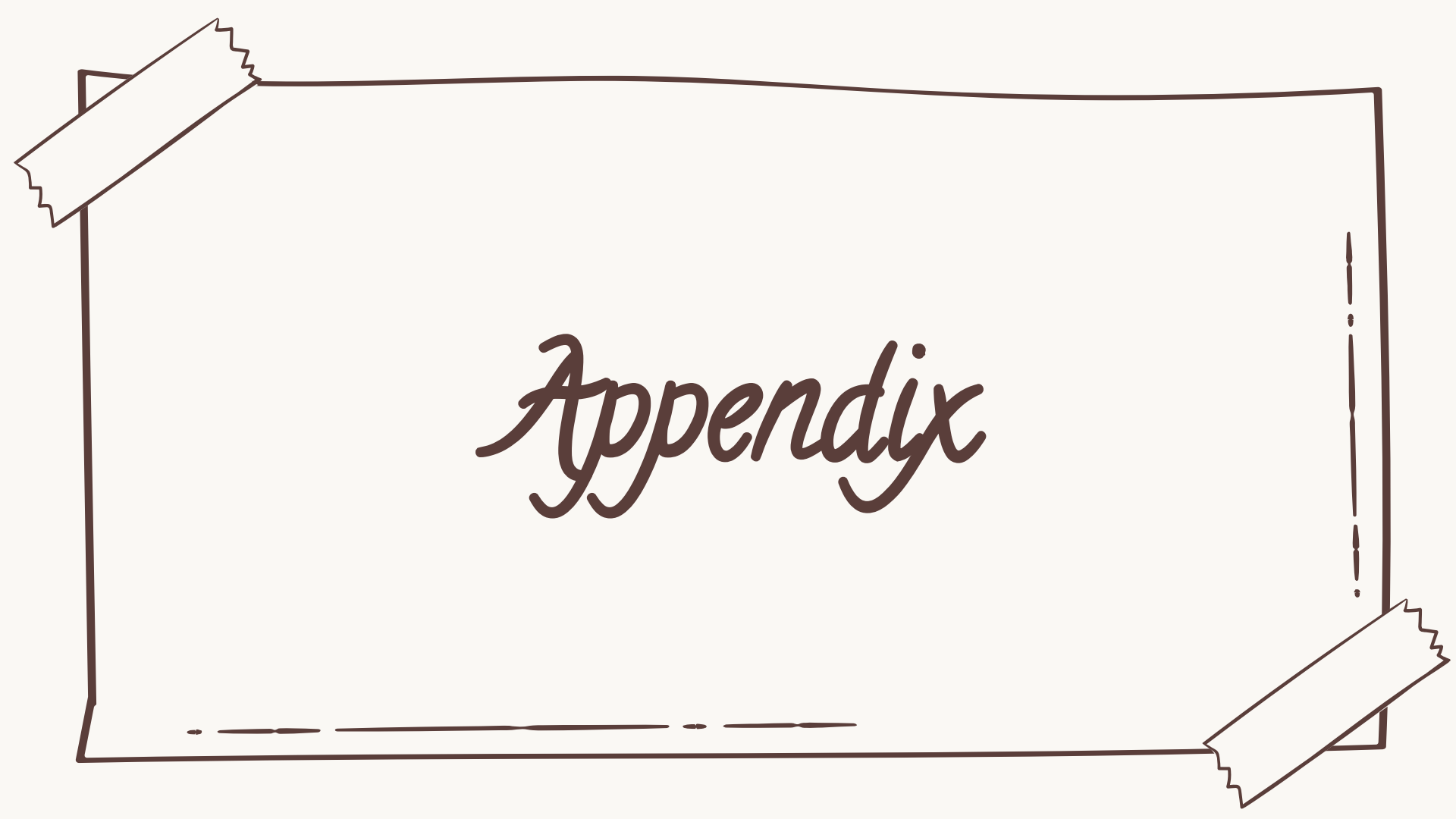
How freedom of input choices affects experience

- Autofilling responses for them



A hand-drawn template for a Q&A session. It features a rectangular frame with a dark brown outline. The top-left corner is secured with a piece of white tape with a jagged, torn edge. The bottom-right corner is also secured with a similar piece of white tape. In the center of the frame, the text "Q & A" is written in a dark brown, cursive, handwritten style. On the right side of the frame, there is a vertical dashed line. At the bottom of the frame, there is a horizontal dashed line.

Q & A



Appendix

See speaker notes on this slide
for the full list of pros and cons.

See speaker notes on this slide
for the testing script.

Participant #1: Jillian

Incident	Severity Rating
Confused about how to stop or pause the recording before sharing, and doesn't stop the recording before sharing	4
In the <i>Edit</i> screen, successfully crops recording and shares – “The crop feature looks like Voice Memos on the iPhone”	0
Wants closed captioning and language accessibility features in the <i>Listen</i> screen	3
Successfully shares recording	0
Listening to another's story was “very straightforward” to complete	0
Successfully listens to another's story	0
Didn't know how to complete Task 3 after navigating to the wrong screens from the <i>Explore</i> screen and needed guidance – “The <i>Communities</i> button looks like part of the header; I didn't know it was clickable”	4
Wants <i>Communities</i> features to look more like Instagram's messaging feature	1
Messaging flow was intuitive and similar to other apps	0
Successfully sends a message in the <i>Munchies Group</i> chat	0

Participant #2: Yuchen

Incident	Severity Rating
In the <i>Record</i> screen, confused about what the “+” button and the “->” button do	3
Confused about what the “Text” button does in the <i>Record</i> screen	3
After explaining that the “Text” button allows the user to type their story instead of speaking it, they knew immediately to click “Audio” to go back to the recording option	0
Only person that stopped the recording before sharing it	0
Successfully shares recording	0
Successfully listen to another’s story	0

Participant #2: Yuchen (continued)

Browsed listening options and chose the one she liked based on the food image	0
Scrolled to see comments in the <i>Listen</i> page because they help her know whether the story is something she'd want to listen to or not	0
Likes being able to like comments, but also wants to be able to like stories	1
Only person who clicked on the <i>Explore</i> page search bar because wanted to look for something in particular (didn't have a screen for this path, should be better once implemented)	2
Distracted by the food icons in the <i>Explore</i> page – failed to see the <i>Communities</i> button	4
Doesn't create a new community because "it looks like a lot of work"	2
Confused about whether the text from Amanda in the <i>Munchies Group</i> screen was a DM or from a group chat	2
Successfully sends a message in the <i>Munchies Group</i> chat	0

Participant #3: Tom

Incident	Severity Rating
Confused by the <i>Text</i> button the <i>Record</i> screen: “When I see the <i>Text</i> and <i>Share</i> button side by side, it seems like a choice between the two”	4
Doesn’t stop the recording before sharing	4
Wants to be able to sync share options with phone contacts	1
Successfully shares recording.	0
Successfully listens to another’s story.	0
In the <i>Listen</i> swiping screen, thought that swiping left and right would eliminate options	3
In the <i>Listen</i> swiping screen, wants to be able to put stories of interest in a queue to listen to later so that they are not lost after choosing one	1
Immediately confused by the <i>Explore</i> screen – “are these icons ones that I’ve selected, or are they based on my activity?”	3
Successfully created a community and thought it was straightforward	0
Referring to the <i>Create Community</i> screen: “The name and tag features are intuitive and easy to understand”	0

Participant #4: Nick

Incident	Severity Rating
Didn't click on the microphone icon to actually start recording after navigating to the <i>Record</i> screen from the home page.	4
Successfully shared story	0
Actually told a story after reading the prompt: "The first dish I did as a child was ginger fish pan fried asian style, my mother was an asian style specialist"	0
Successfully listened to someone else's story, but didn't use the scrolling mechanism to see comments	2
"I didn't even see it" – referring to the <i>Communities</i> button on the explore page. Instead, clicked on the food icons in the <i>Explore</i> page twice	4
Successfully listened to a story from someone in their community	0

Participant #4: Nick (continued)

Straightforward to interact with communities <i>after</i> finding communities button – “It seems kind of self-explanatory”	0
“I would have it ask what dish do you want to talk about and the user’s name” – referring to information retrieved by the app before the user starts recording.	1
Interacting with the scrollable <i>Listen</i> screen: “It would make more sense to start the first line of the comments with an ellipses, so I know to scroll”	2

Usability Goal Stats & Other Info

Participant #1 (Jillian):

- Time for simple task: 1:00
- Time for moderate task: 1:27
- Time for complex: 3:09
- Number of errors:
 - Task 1: 0
 - Task 2: 2
 - Task 3: 3
 - Total: 5
- Most Difficult Task: Task #3 (Communities)
- Easiest Task: Task #2 (Record and Share)

Participant #2 (Yuchen):

- Time for simple task: 1:02
- Time for moderate task: 4:47
- Time for complex: 4:20
- Number of errors:
 - Task 1: 0
 - Task 2: 1
 - Task 3: 3
 - Total: 4
- Most Difficult Task: Task #3 (Communities)
- Easiest Task: Task #1 (Listen)

Usability Goal Stats & Other Info

Participant #3 (Tom):

- Time for simple task: 1:06
- Time for moderate task: 3:15
- Time for complex: 3:20
- Number of errors:
 - Task 1: 0
 - Task 2: 3
 - Task 3: 2
 - Total: 5
- Most Difficult Task: Reading/entering text
 - Confusion surrounded the prompt in the *Record* screen
- Easiest Task: Task #3 (Communities)

Participant #4 (Nick):

- Time for simple task: 0:40
- Time for moderate task: 1:33
- Time for complex: 2:10
- Number of errors:
 - Task 1: 0
 - Task 2: 1
 - Task 3: 3
 - Total: 4
- Most Difficult Task: Task #3 (Communities)
- Easiest Task: Task #1 (Listen) and Task #2 (Record and Share)





