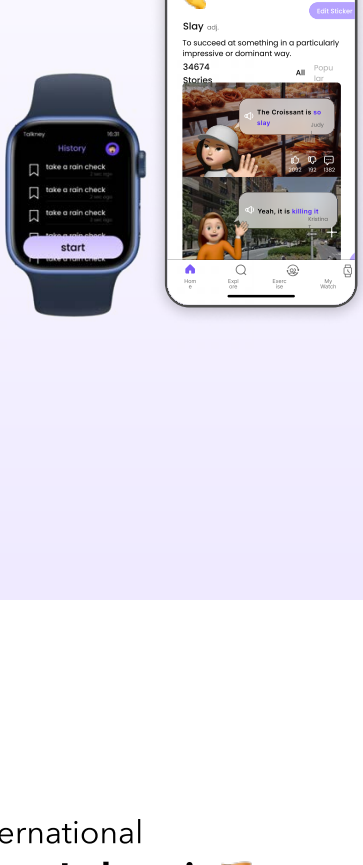


Talkney

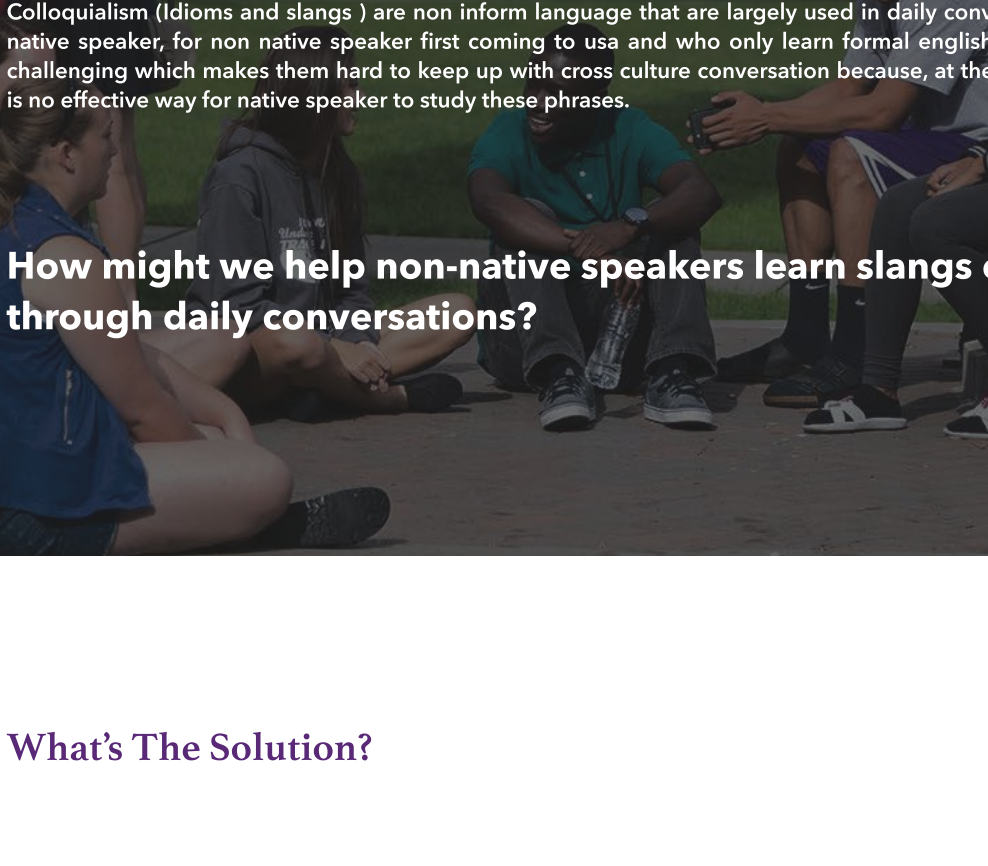
A set of transformative communication tools that help non-native speakers in facilitating cross cultural communication



TIMELINE	MY ROLES	TEAMMATE
Jan 2022 - Present	Design Iteration UX Research UX Design	Vaidhi Mahida, Anqi Wang Lingyan Chen Hehui Zhao



Who Is User?



Namesake is an international graduate student from Indonesia, this is my first time going to USA.

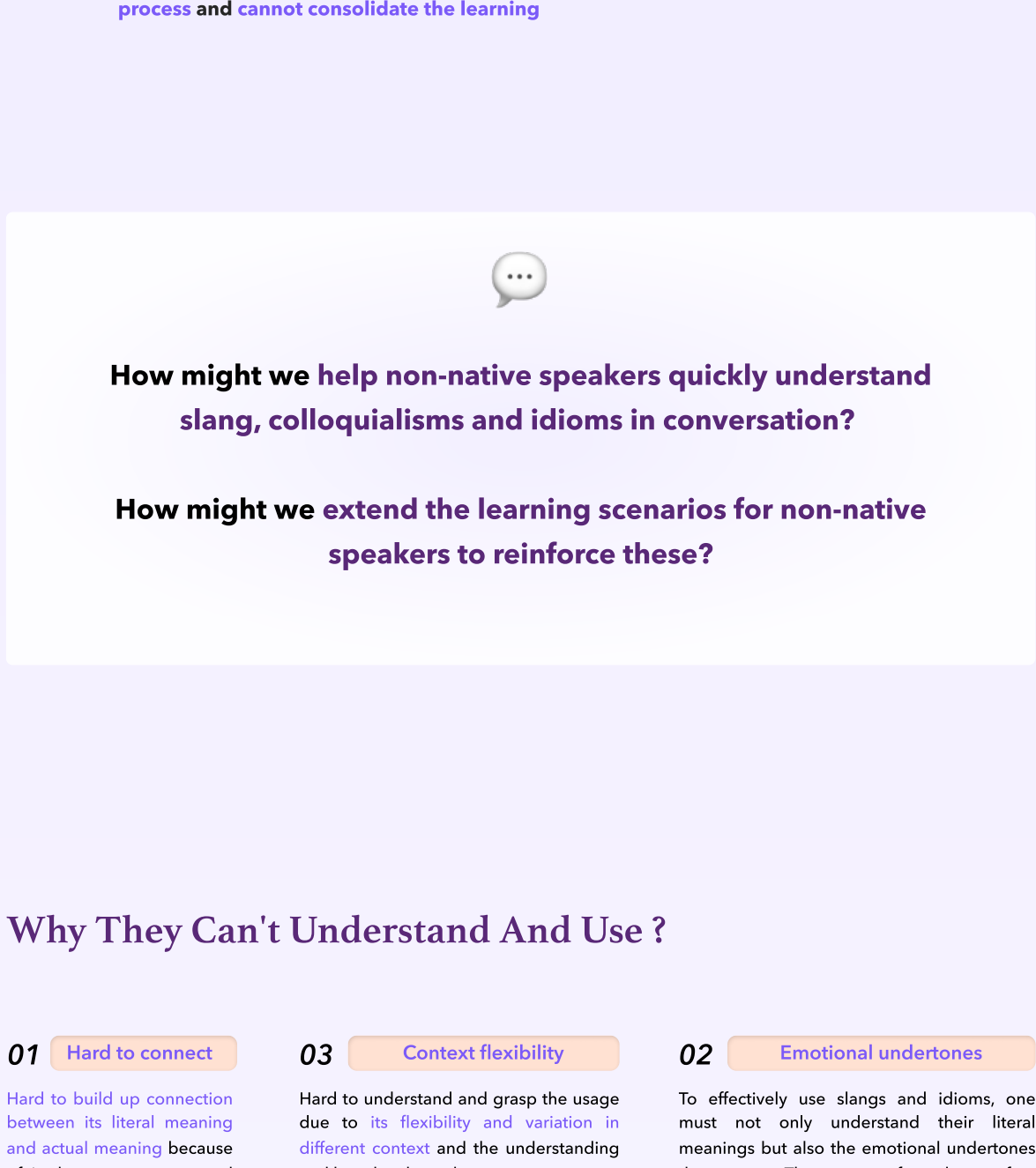
She is a non native speaker and only learn formal english in text book.

What's The Problem?

Colloquialism (Idioms and slangs) are non inform language that are largely used in daily conversation between a native speaker, for non native speaker first coming to usa and who only learn formal english in textbook, it is challenging which makes them hard to keep up with cross culture conversation because, at the same time, there is no effective way for native speaker to study these phrases.

How might we help non-native speakers learn slangs effectively through daily conversations?

What's The Solution?



Design Process

What Are Non-Native Speaker Suffering From ?

Stage	Doing	Thinking	Felling
Conversation process	Focused listening and understanding	• "I didn't understand. Would it be embarrassing if I asked again?" • "I asked several times, but I couldn't understand what the other party meant."	• "I want to be part of the conversation but it is so hard to..." • "I want to know what my native speaker friends are laughing at and make sound humorous and by using." • "It takes a lot of energy to listen attentively."
After the conversation	Think about how to respond	• "I can't remember or ask." • "I'm not sure if I remember correctly." • "I searched and learned from various channels, and some of them were not found."	• "I don't know what they mean and I feel in confusion using them." • "I didn't even get a chance to express it."
	Recall what slangs was used in the conversation just now		• "This makes me feel frustrated." • "It's hard to fit into the local culture."

Painpoint:

- Even if she can spell, read, and identify them easily, it is challenging for her to quickly understand slang during a conversation, and not use it confidently or accurately.
- After the conversation is over, it is easy for her to forget the slang words generated in the process and cannot consolidate the learning

How might we help non-native speakers quickly understand slang, colloquialisms and idioms in conversation?

How might we extend the learning scenarios for non-native speakers to reinforce these?

Why They Can't Understand And Use ?



How Do Non-Native Speakers Learn Slang Now ?

Current methods non-native speakers use to study slang and idioms but most of them are not very effective.

	APP	Online Dictionary	Real conversation	TV show, social media
Pros	• User generated content • Users can vote for meanings	• Video • Pictures • Multiple Reference Reliability	• Engaging • Learn and apply immediately	• Attractive • Close to life • Vivid Contexts and Scenes
Cons	• Limited example sentences • Scenario is missing • Limited amount hard to build up	• Limited example sentences • Text are hard to read • Lack of pronunciation • Limited amount hard to build up	• Inability to grasp meaning quickly • Inability to repeatedly question the interlocutor • Time limit, not always available	• Third-person perspective. Not in conversational manner • Be attracted by the plot rather than focus on learning • No repetition and limited exposure
Measurement	Efficiency: 4 stars Memorable: 4 stars Understanding: 4 stars Engagement: 4 stars	Efficiency: 4 stars Memorable: 4 stars Understanding: 4 stars Engagement: 4 stars	Efficiency: 4 stars Memorable: 4 stars Understanding: 4 stars Engagement: 4 stars	Efficiency: 4 stars Memorable: 4 stars Understanding: 4 stars Engagement: 4 stars

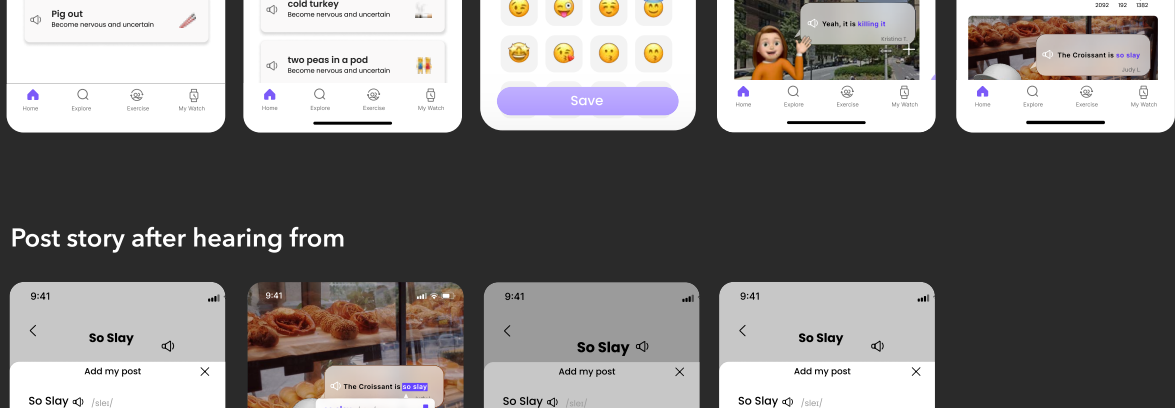
Challenge

- Conform to the timeliness of slang:** The dictionary needs to be updated in time to ensure that the slang used is in line with the current cultural environment.
- Understanding and translation of slang:** In the process of cultural collision, it is difficult to perfectly translate it into an appropriate meaning in another language.
- Conversations flow quickly and Fast-talking:** Users need to quickly understand the meaning of slang and respond quickly. However, most products on the market cannot achieve this function.

Opportunity

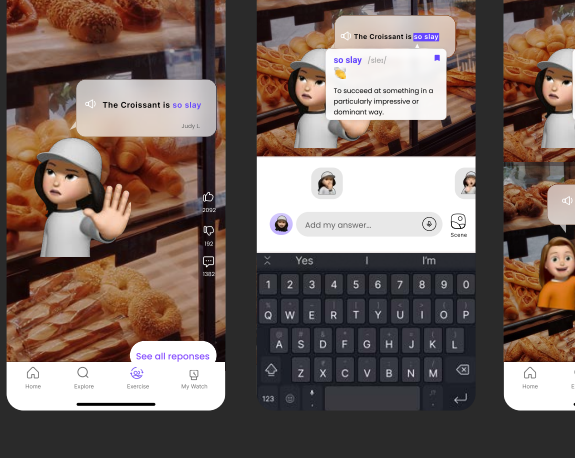
- Users can act as database builders and providers
- Turn the conversation process into a key scene for users to learn slang, which is more memorable.

Brainstorming & Ideation



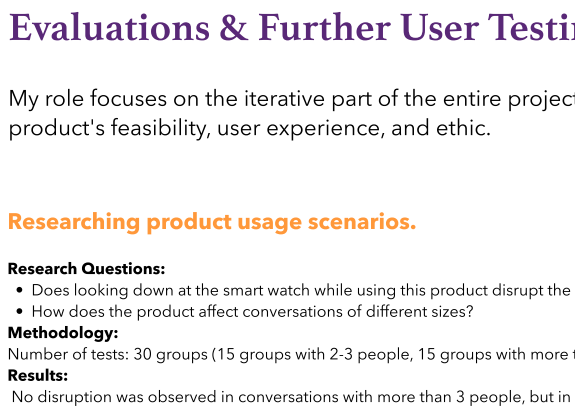
Prototype Sprint I: Paper prototype

We found 29 users for initial testing to determine the best touchpoints.



Insights from sprint 1:

- Uncomfortable using the phone all the time
- A quick glance at the watch.
- No time to go through a lot of information
- No need to display info like pictures and emoji in the watch because you already have the context
- It is not engaging to practice with a robot
- The habit of recognition.



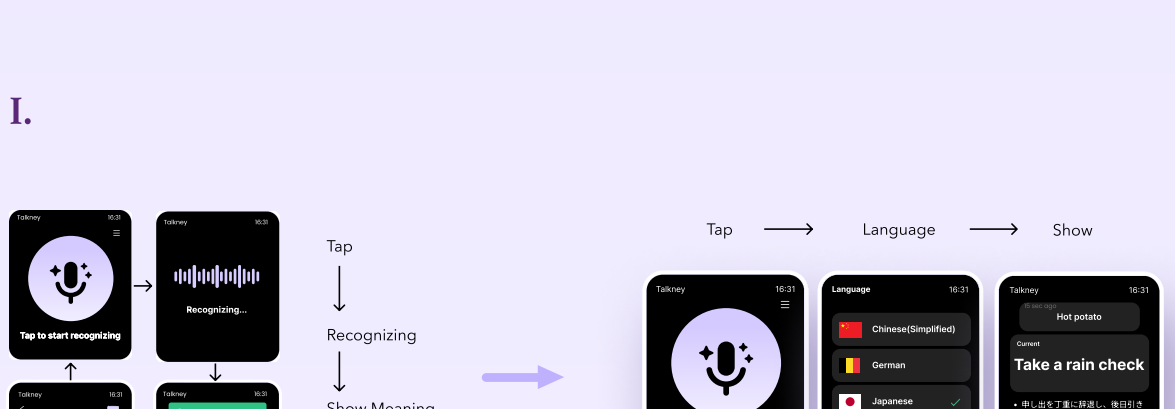
According to survey

89% It is socially acceptable to look at your watch especially if it is in an cross culture environment

"I won't even notice if you have a look at your watch"

"We have decided to explore using the Smart Watch as a key touchpoint to display translation content. This is a more socially acceptable way compared to other smart devices such as phones and earphones."

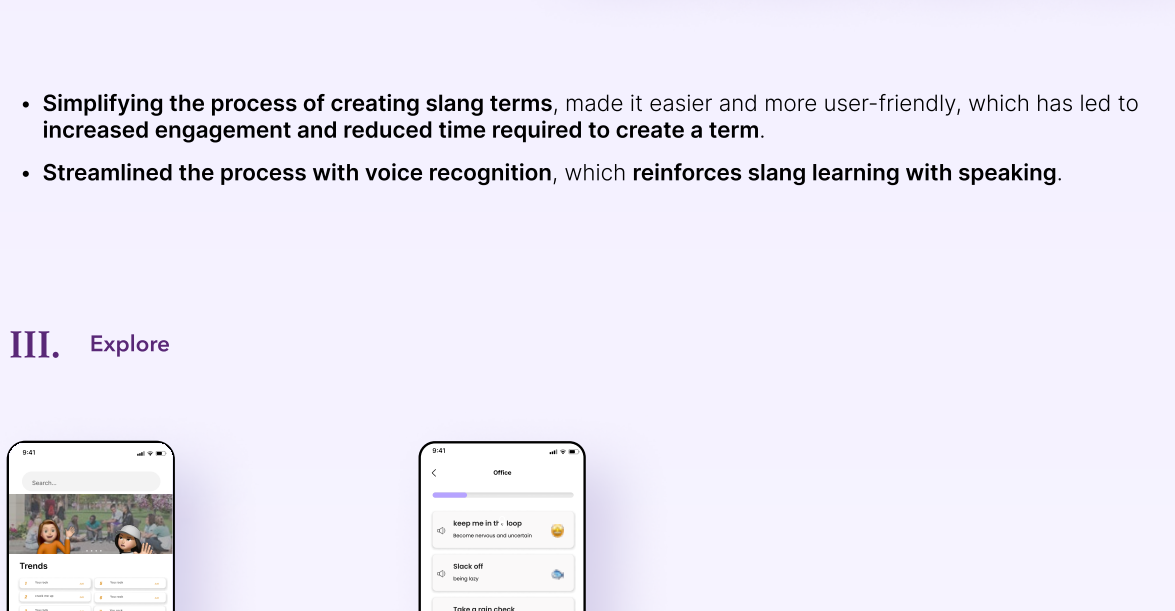
Framework flow



Outcome# Touchpoint 1

We designed two brand new design system and layout for mobile and watch, when users using the app on apple watch, they could record the conversation and will recognize the phrases to help them understand the context.

Watch: learn phrases from real life conversation and retain and review from home

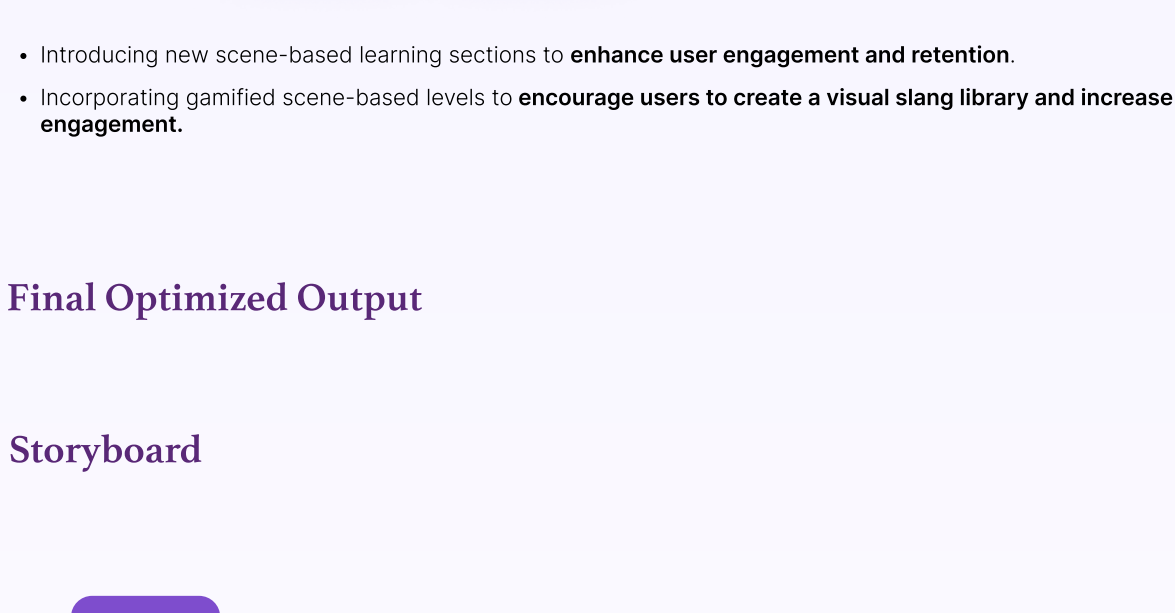


Outcome# Touchpoint 2

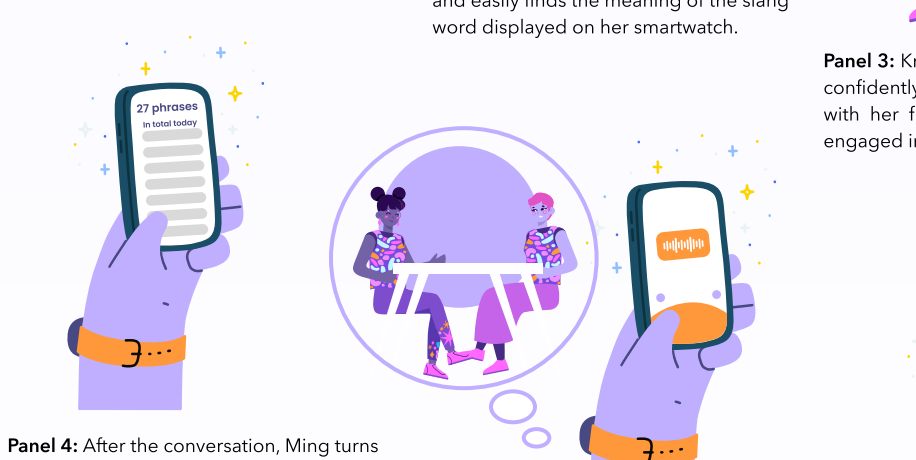
App: Customized Sticker helping better recall

- You can use the most intuitive
- Active thinking
- This can help better recall

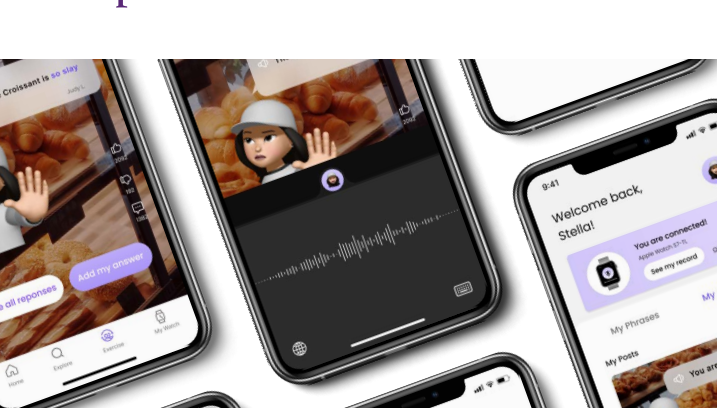
App: Scenario based and interactive immersive learning



Post story after hearing from



Exercise by answering other



Evaluations & Further User Testing

My role focuses on the iterative part of the entire project. At this stage, we conduct an in-depth analysis of the product's feasibility, user experience, and ethic.

Researching product usage scenarios.

- Research Questions:** Does looking down at the smart watch while using this product disrupt the conversation flow? How does the product affect conversations of different users?
- Methodology:** Encourage users to create visual phrase stories, visualize the progress of user story creation, and ensure ease of operation. After the user completes the progress, remind them to start a new scene for learning.
- Results:** Based on the frequency of phrases appearing in users' conversations, we will use a larger font size for currently appearing phrases and a smaller font size for historical phrases, and scroll up and down in real-time according to the captured content to make it easier to identify currently appearing words.
- Conclusion:** There is a 17% probability of conversation disruption when using the product in conversations with 2-3 people, but it does not affect conversations with more than 3 people.

Researching the effectiveness of functional logic and UI design.

- Problem 1:** The process of learning and uploading user-generated content is too complex.
- Goal:** Make it more convenient for users to add new phrases.
- Solution:** Simplify the operation process, allow users to see the steps clearly, and be aware of their progress.
- Problem 2:** The publishing process is mainly focused on typing, which is not conducive to oral practice.
- Goal:** Help users establish a learning habit that focuses on listening and speaking.
- Solution:** Change the process of publishing stories and responding to dialogue exercises to voice input, while automatically converting it to text for easy reading.
- Problem 3:** Users cannot quickly add their newly learned phrases to the app if they didn't recognize them from the smartwatch.
- Goal:** Make it more convenient for users to add new phrases.
- Solution:** Add a function on the homepage for users to add new phrases.
- Problem 4:** Users have difficulty in clearly identifying phrases displayed on the smartwatch within a short period of time.
- Goal:** Optimize the interface and create the most suitable display format for users' understanding.
- Solution:** Based on the frequency of phrases appearing in users' conversations, we will use a larger font size for currently appearing phrases and a smaller font size for historical phrases, and scroll up and down in real-time according to the captured content to make it easier to identify currently appearing words.
- Problem 5:** Takes users too long to understand the meaning of real-time displayed phrases during conversations, which affects the continuity of the dialogue.
- Goal:** Shorten the time users spend understanding the meaning of phrases during conversations.
- Solution:** Add a function for users to use the language of the explanation, so that they can quickly understand the meaning through their mother tongue.

Researching the product system

New Design Point 1: How to promote interaction between users? Using scenarios as the learning topic, focus on learning through two entry points: random conversation exercises and exploring scenarios.

New Design Point 2: How to motivate users to actively create scene stories? 1. Encourage users to create visual phrase stories, visualize the progress of user story creation, and ensure ease of operation. 2. After the user completes the progress, remind them to start a new scene for learning.

New Design Point 3: How to increase the database of conversation exercises? Utilize AI technology to generate conversations for users to practice in the community around the phrases collected, not relying on user-provided context. AI can also derive context to ensure the quantity of the database.

Iteration

I.

II.

III. Explore

Final Optimized Output

Storyboard

Touchpoint 1: Mobile Phone

Touchpoint 2: Smart Watch

We finally received 50+ feedback. We not only got valuable feedback on the design solution but also learned about some constraints and future directions for advancement.

"Really great motivation for designing this app. I can see a lot of people, both native and non-native speakers! I could see generational groups using this as well to understand new slang."

"This will help immigrant better fit in the society"