

# Immerse

Practice English through immersing yourself in  
your favorite TV shows

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# Overview

1. Problem and Solution Overview
2. Tasks
3. Major Design Changes
4. Medium-Fi Task Flows
5. Prototype Overview
6. Appendix

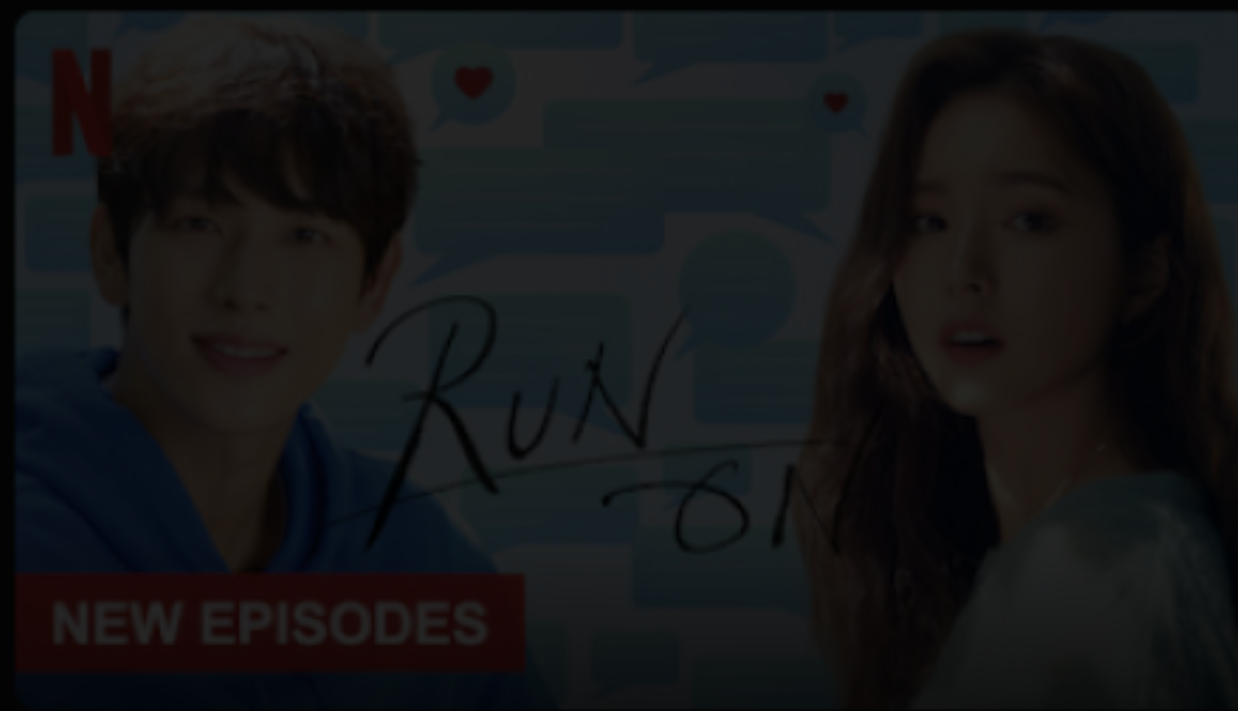


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# Problem and Solution Overview

Ashley's List



# Problem

Speakers of English as a second language struggle with context-specific vocabulary and conversations not typically taught in class

# Solution

Interactive mobile platform where users can practice and get AI-generated feedback on pronunciation, vocabulary, and comprehension while watching their favorite shows

Value Proposition: Practice English through immersing yourself in your favorite TV shows

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Ashley's List  
Tasks



# Original Tasks

Allow the user to develop fundamental comprehension and practice vocabulary

Simple

Allow the user to feel prepared for a real-world conversation and practice with templated conversations based on common conversation patterns

Medium

Allow the user to apply theory to action and engage in impromptu conversations

Complex

After receiving feedback about the room for novelty in our solution, we decided to revise our tasks for the medium-fi prototype.

# Revised Tasks

Allow the user to practice context-specific vocabulary

Simple

Allow the user to practice and receive feedback on pronunciation of context-specific phrases and sentences

Medium

Allow the user to assess their comprehension of contextual situations and interactions

Complex

We revised our simple and complex tasks to focus more on pronunciation in addition to learning, and pivoted on our complex task, emphasizing comprehension of situations rather than actual conversation.

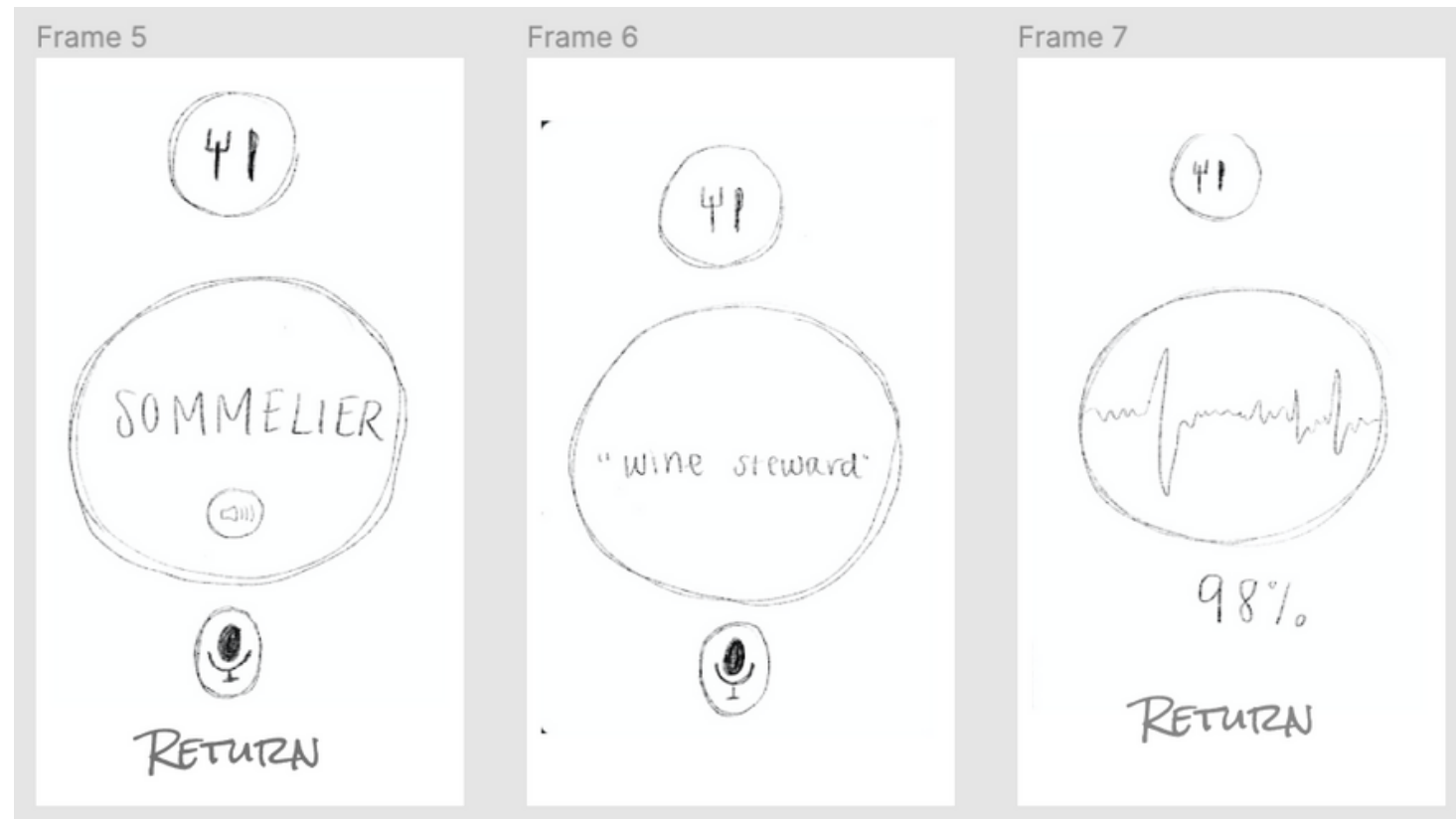
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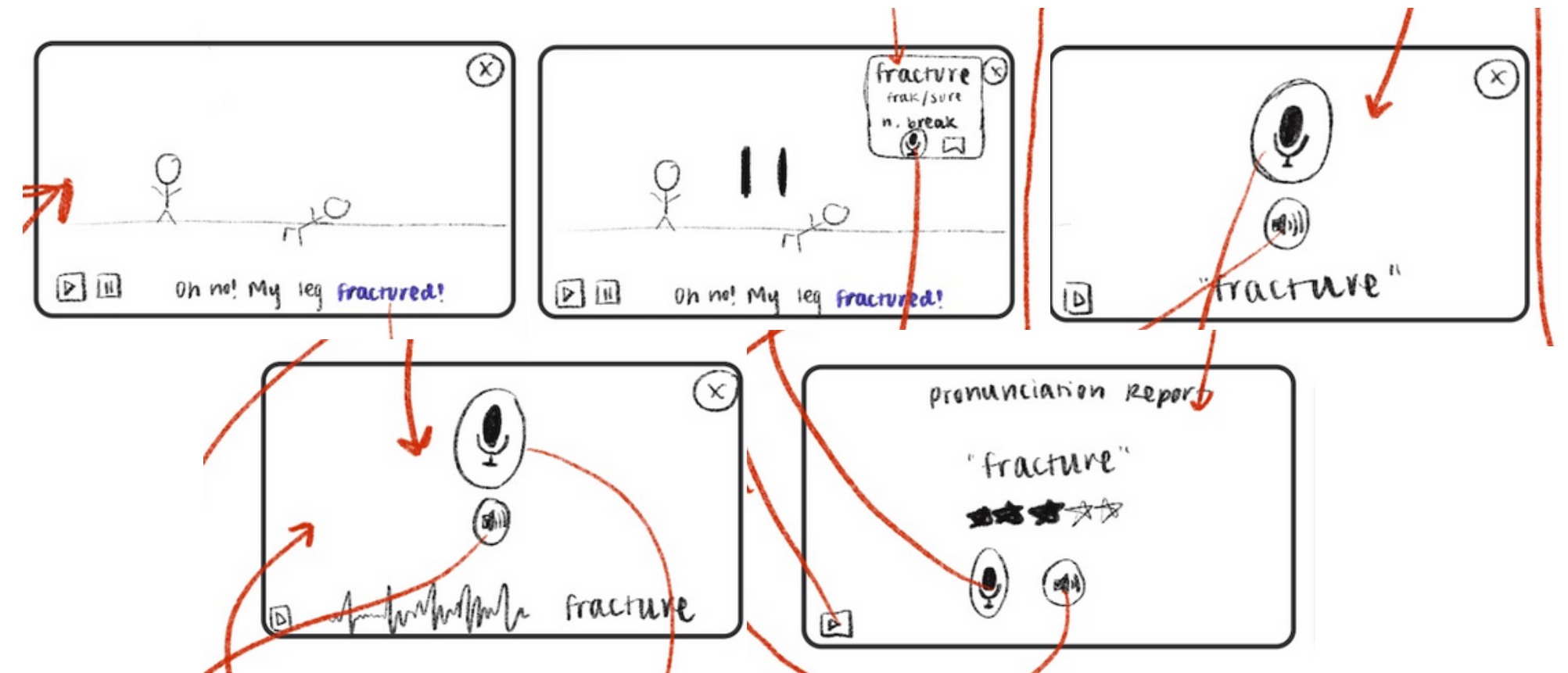
# Major Design Changes



# Before

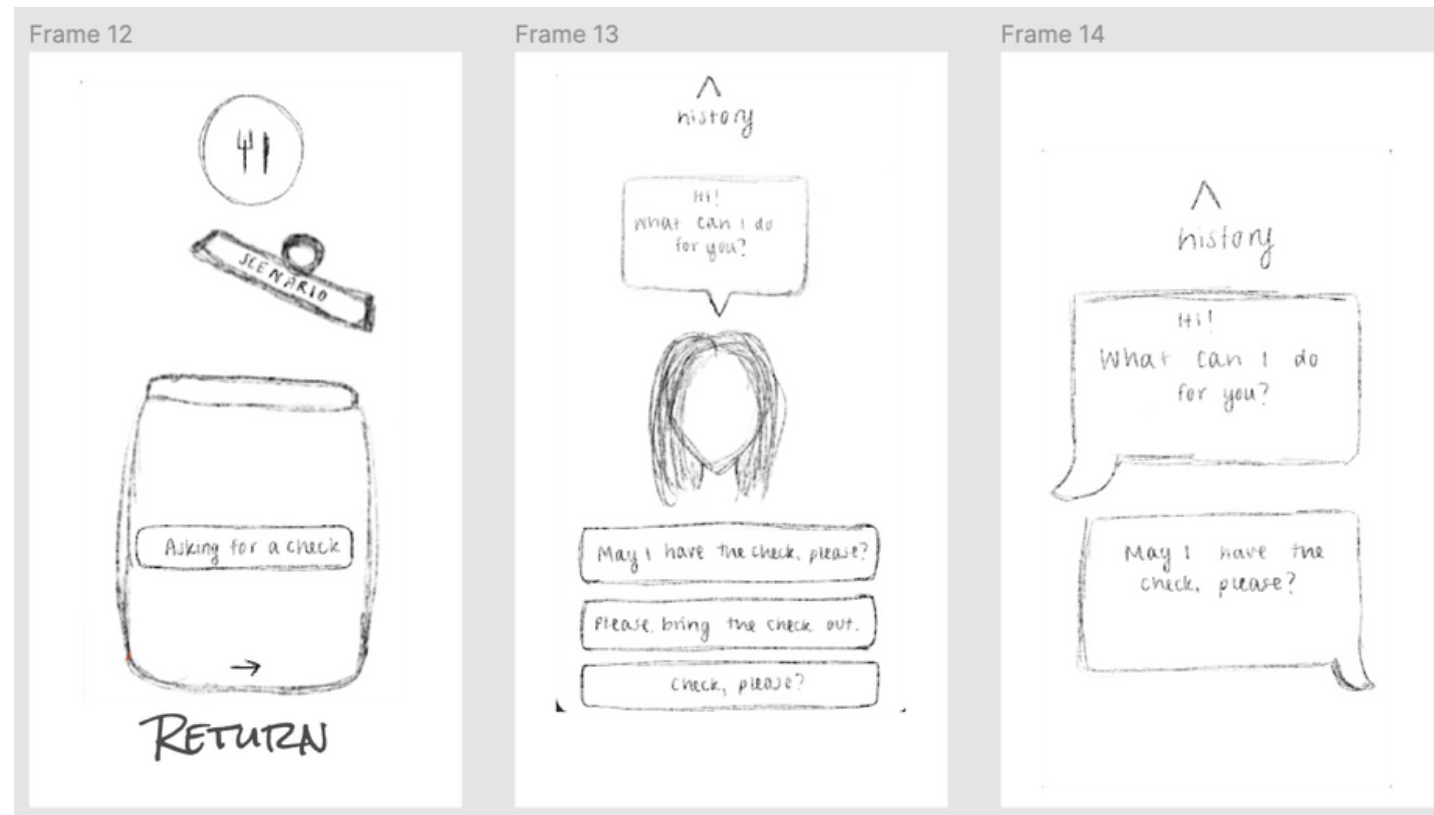


# Revised

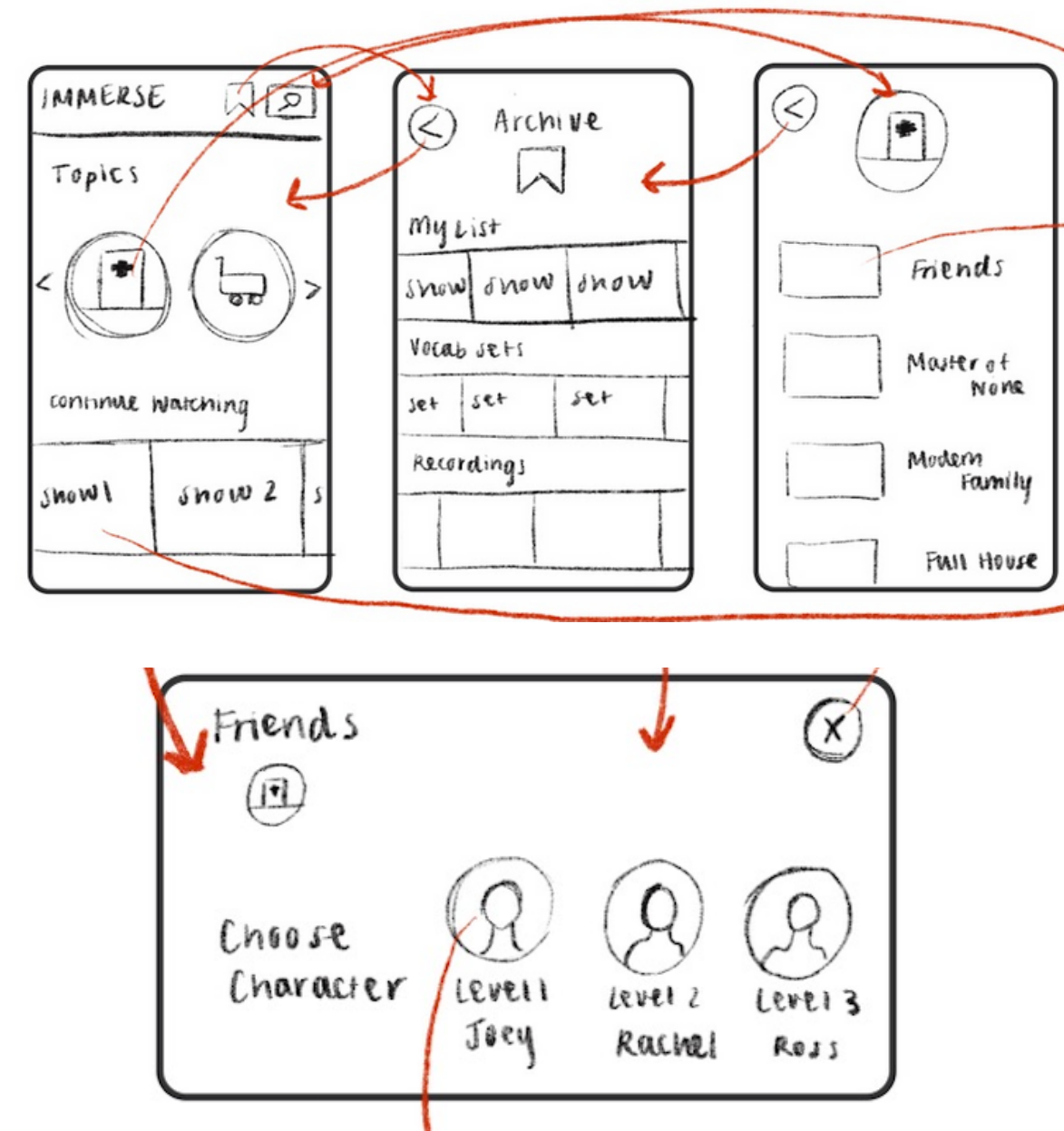


Previously our vocabulary consisted of text-based and pre-determined sets. We have transitioned to a model that allows users to add only the vocabulary they are not familiar with to their practice sets. We have also placed the emphasis on seeing vocabulary in the context of a sentence, as opposed to practicing vocabulary in isolation.

# Before

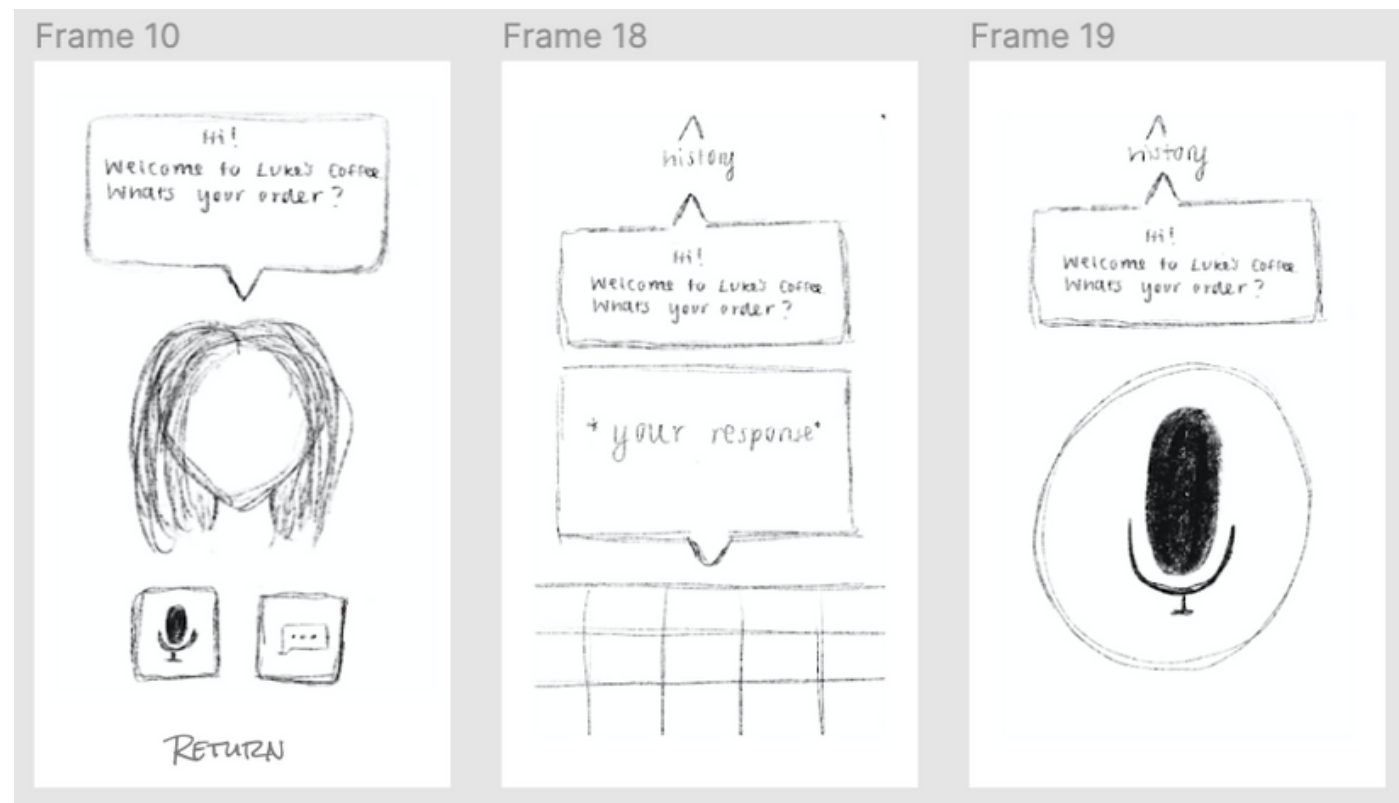


# Revised

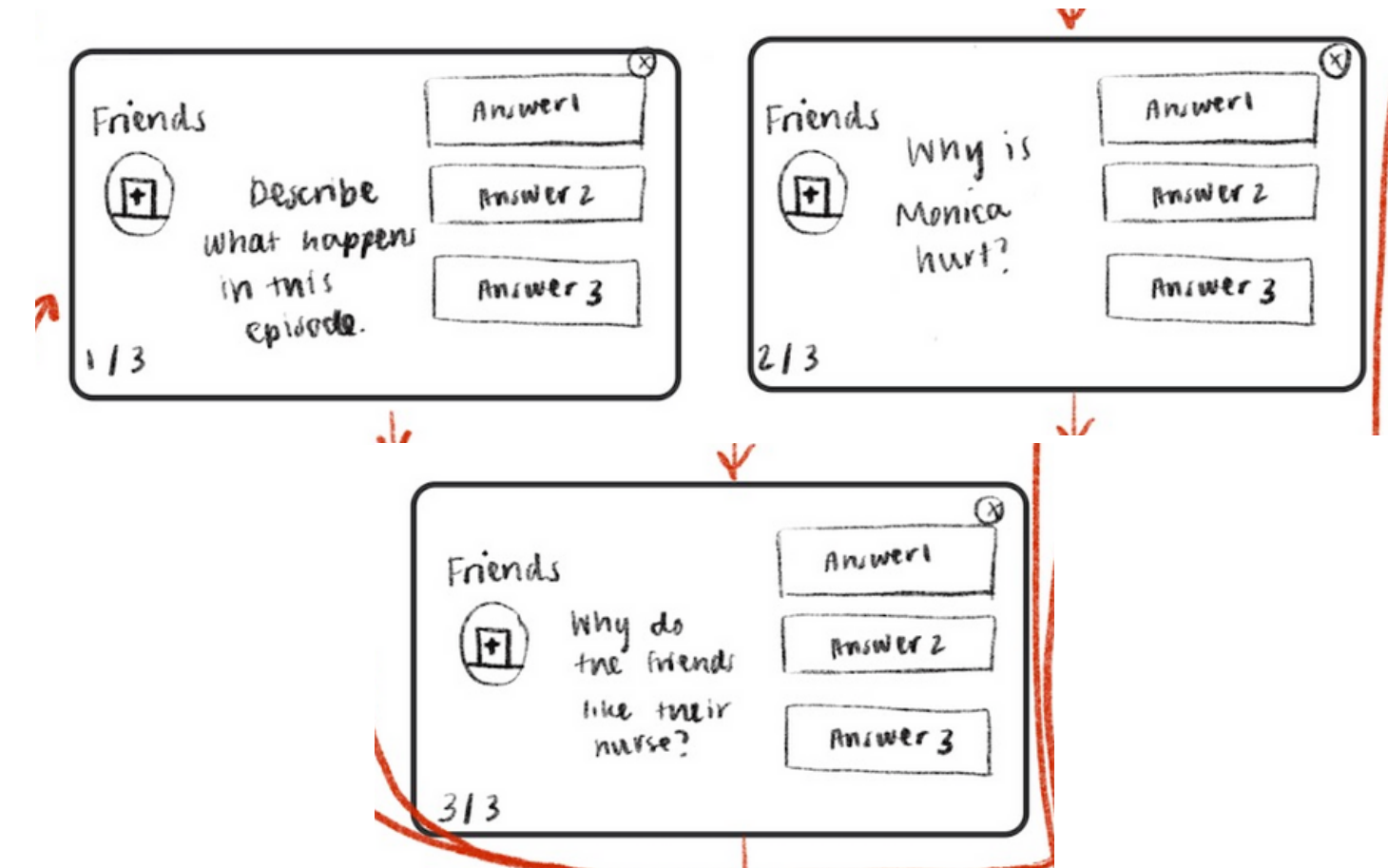


Previously users could select a topic (i.e. eating at a restaurant) to practice a conversation with a bot. Now, users instead select a topic to experience by watching a video. Rather than following a templated conversation with a bot, users play the role of a character throughout a video, recording their lines and receiving feedback on pronunciation.

# Before



# Revised

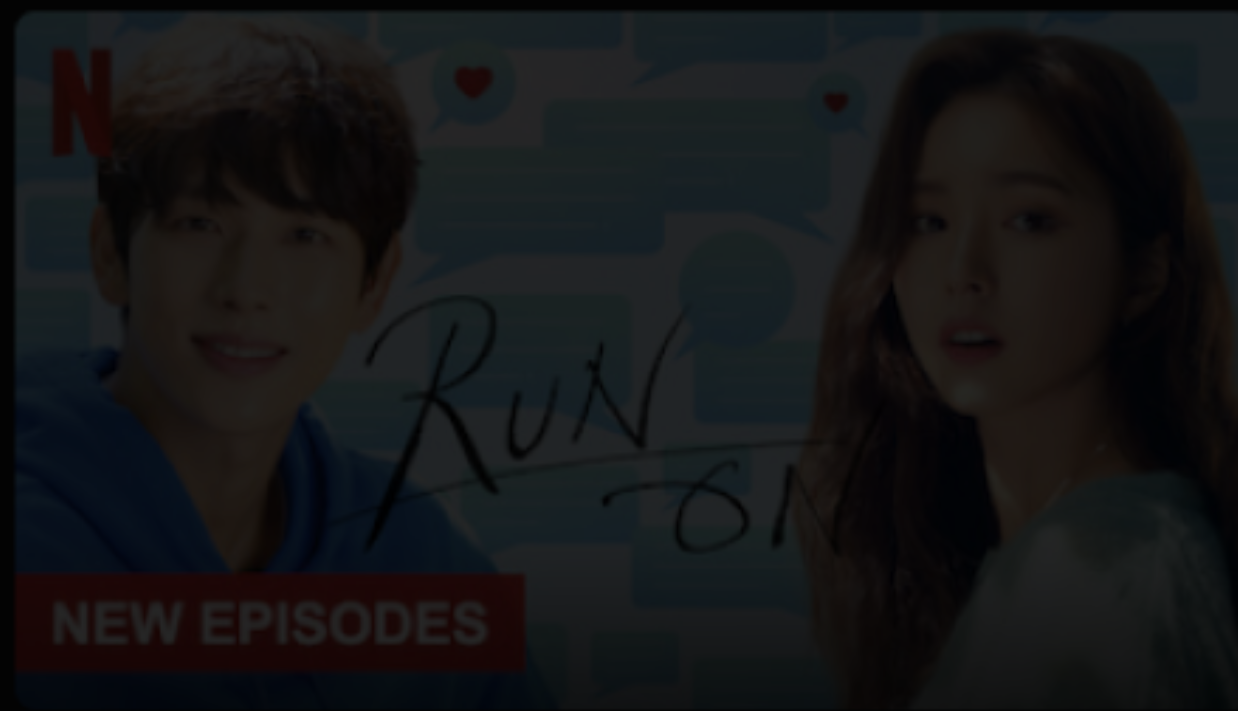


In our previous prototype, users were tested on their ability to follow a conversation by participating in a free-form conversation with a bot. Now, users are instead tested on their understanding of a video by answering questions about plot and vocabulary.

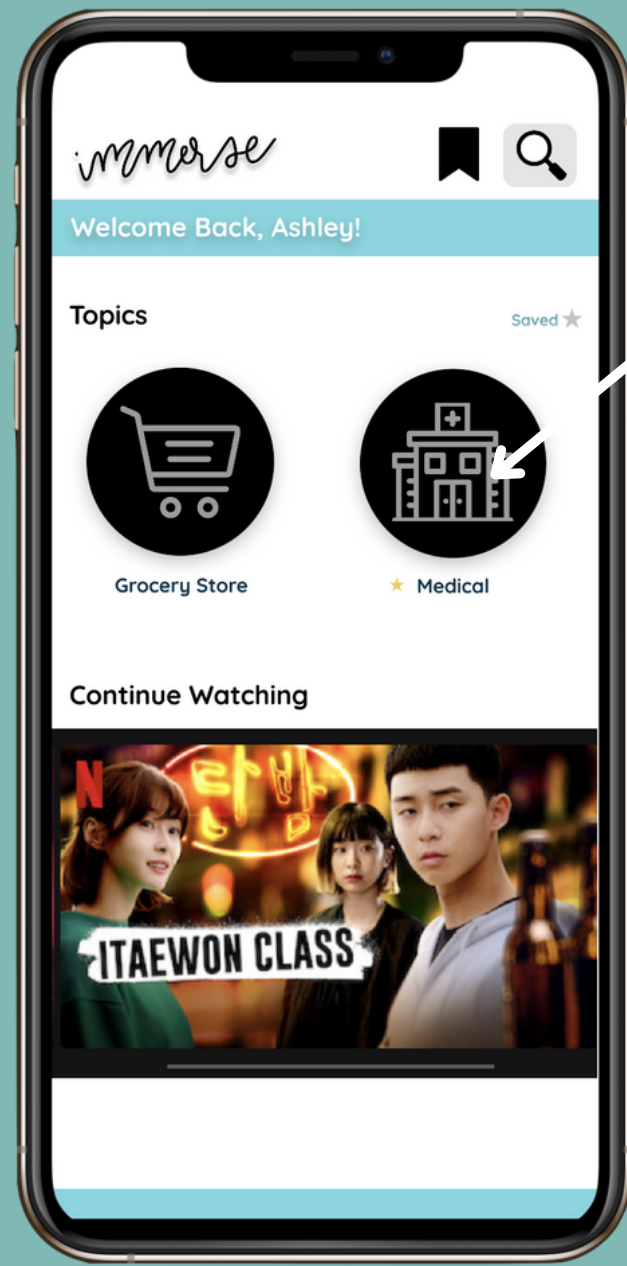
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# Ashley's List Medium-Fi Task Flows

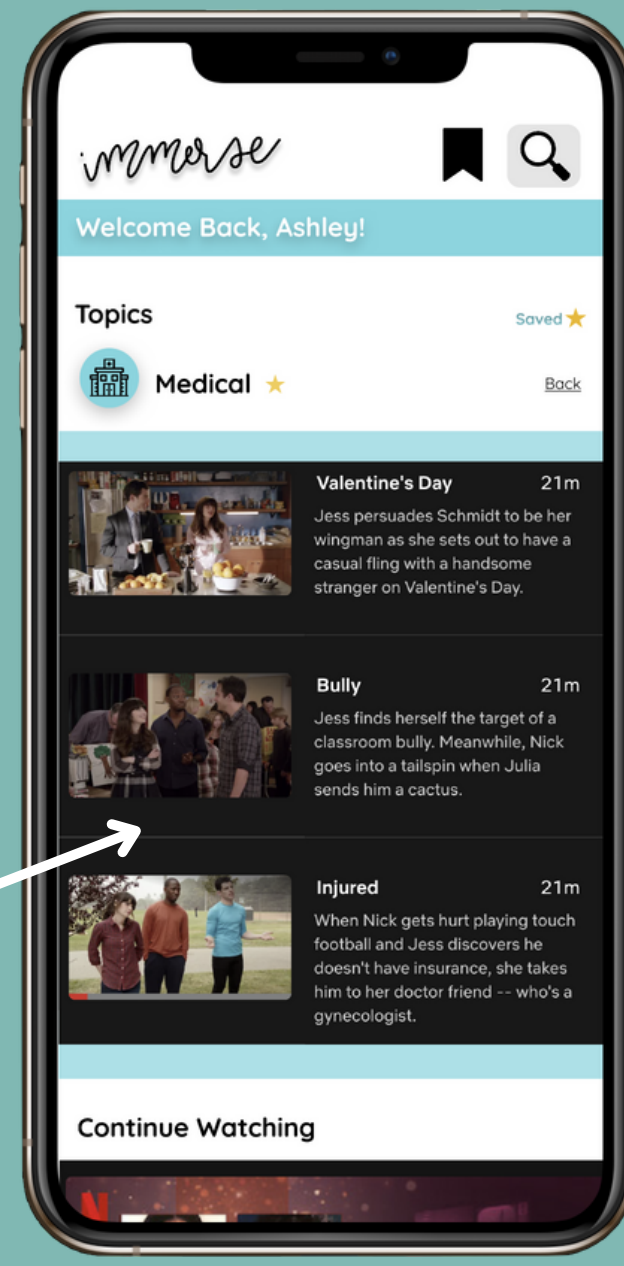


# Task One: Vocabulary



1  
Choose a  
Video Topic

2  
Select a  
video



3

Relevant vocabulary  
is highlighted in the  
video



4

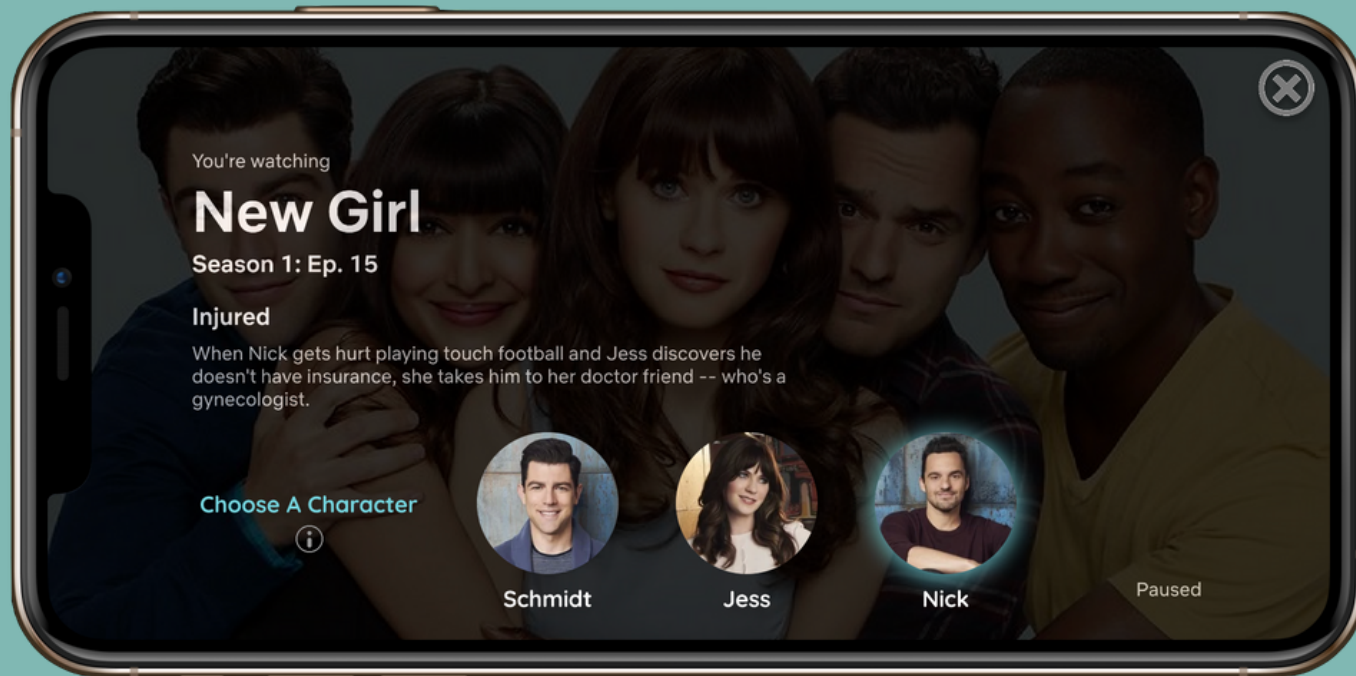
Definitions  
displayed

5

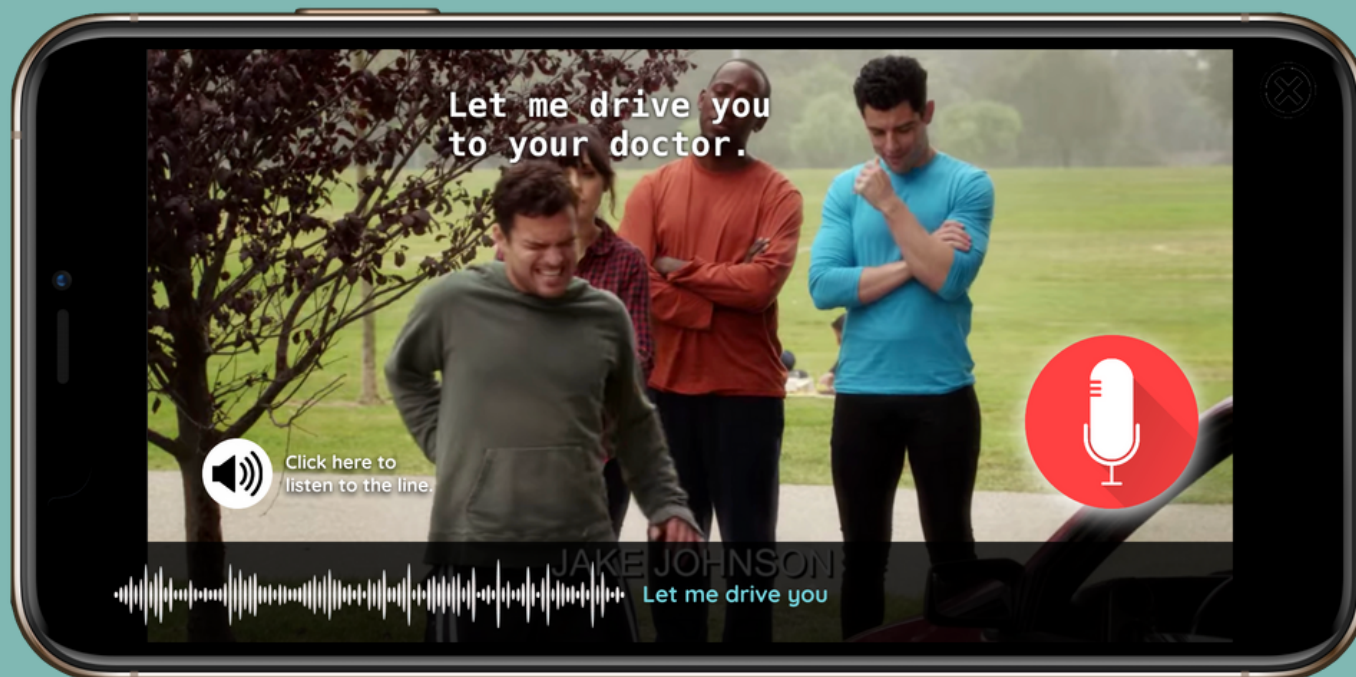
Save vocabulary to  
practice set

# Task Two: Pronunciation

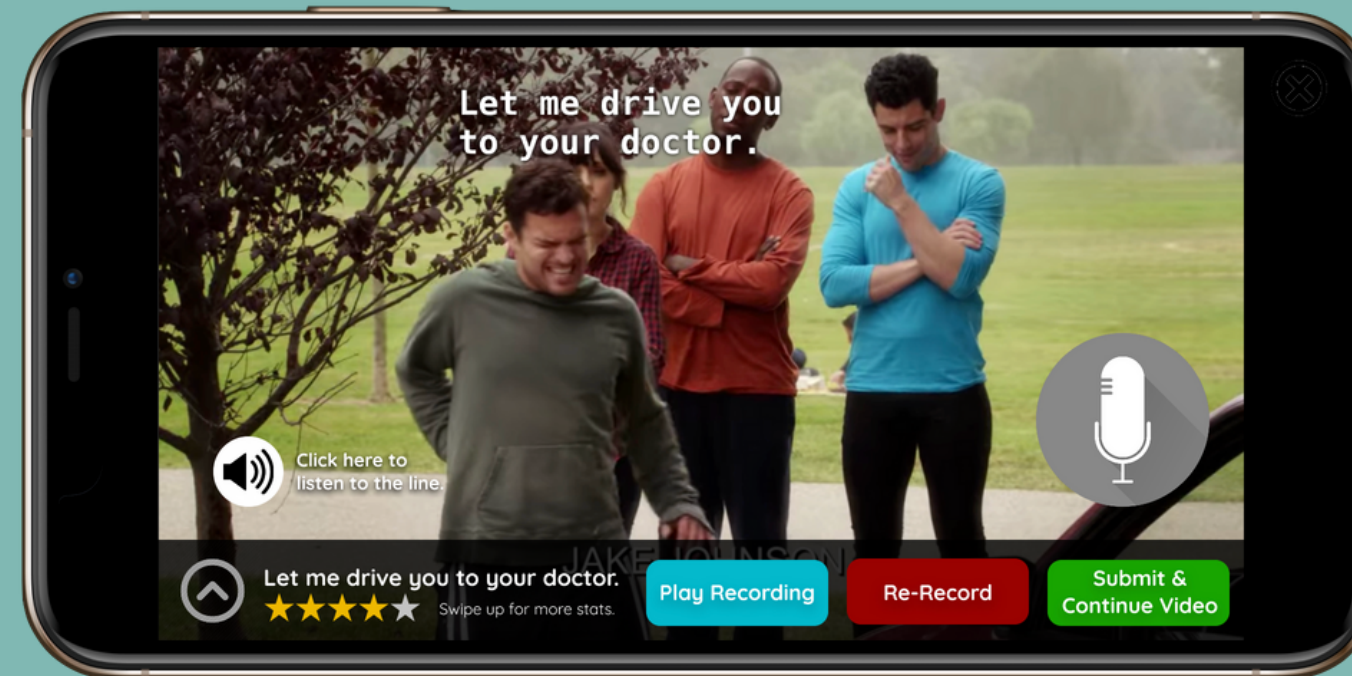
1  
Pick a  
character



2  
Record your  
character's  
lines while  
watching



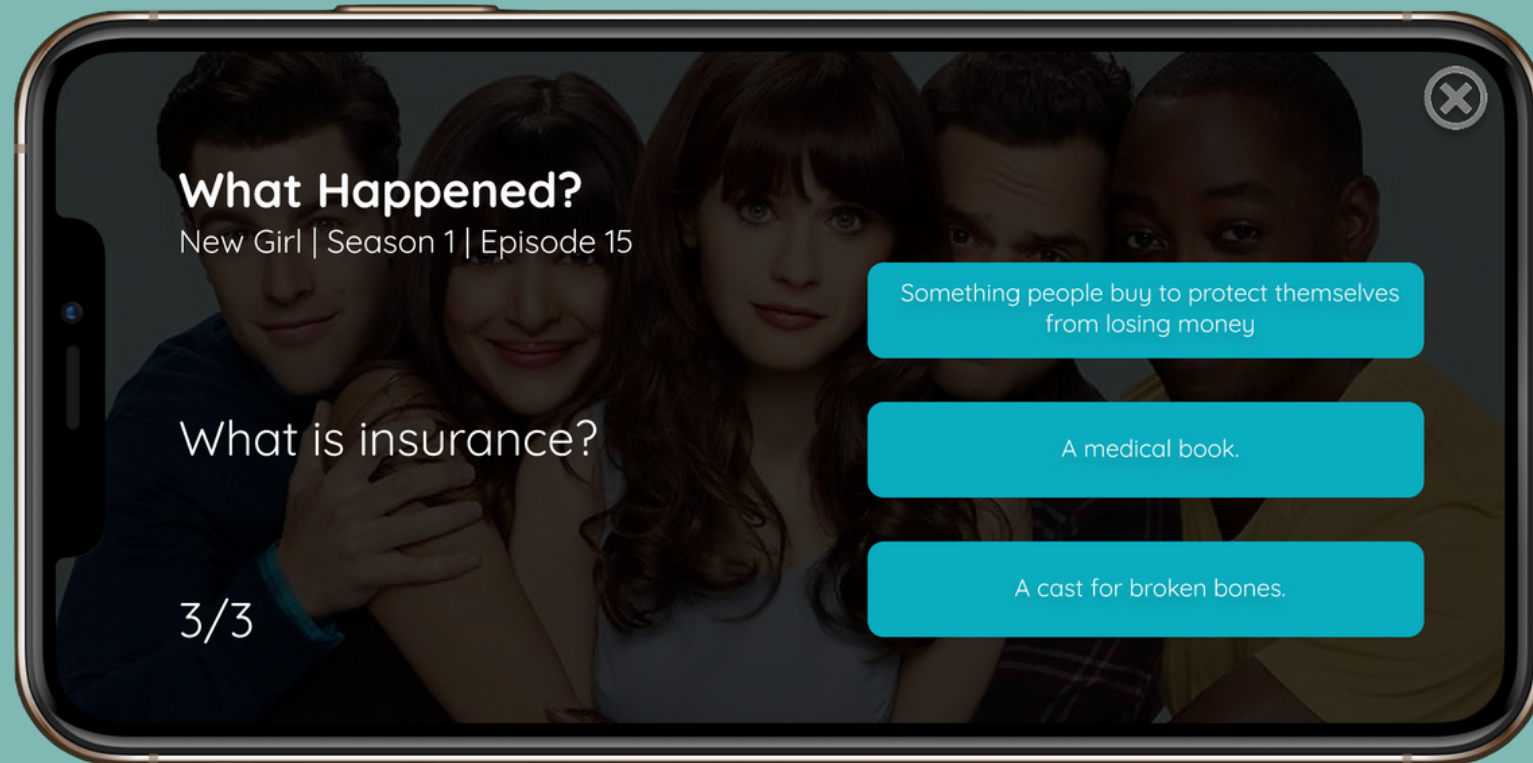
3  
Play, re-record,  
or continue  
watching



4  
See word-by-  
word, AI-  
generated  
feedback on  
pronunciation



# Task Three: Comprehension



1

Answer short questions after watching to test comprehension

2

Receive accuracy score on comprehension quiz



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# Prototype Overview

Ashley's List



New Girl



NEW EPISODES



BRIDGERTON

# Design/Prototyping Tools

## Design and Interaction: Figma

### Pros:

- Design: grids, reusable components, icons, layering, scrolling, carousel
- Prototyping: interactions between screens, testing
- Collaboration: single shared file, real-time

### Cons:

- Unable to embed video and layer elements without paid plugins
- No fluidity between vertical and horizontal device orientations for prototyping

# Limitations/Tradeoffs

- No access to native mobile features such as audio input and output, which are critical to the audio recording and pronunciation features
- Unable to store data in memory (i.e. for the Saved Videos, Saved Vocabulary, and Saved Recordings features)

# Limitations/Tradeoffs

- Unable to embed video directly in the prototype and layer UI elements, such as vocabulary pop-ups, on top of the video (we used video editing to mock the UI elements on top of the video)
- Unable to switch automatically between vertical and horizontal device orientations for prototyping (i.e. when the user chooses to play a video, the device should switch from vertical to horizontal)

# Wizard of Oz Techniques

- The user is supposed to hold the microphone button to record their response. Because of the audio input limitation, we use multiple screens to mock the app transcribing the user's recording.
- The user should receive AI-generated feedback on their pronunciation, which we are currently Wizard of Oz-ing.

# Wizard of Oz Techniques

- Because of the video embedding and layering limitation, the prototype uses an edited video to mock the feature, which we intend to be an interactive video. This also means that when the prototype tester is directed to the video playing on another link, we use a timer to move them to the next screen when they return to the prototype link.

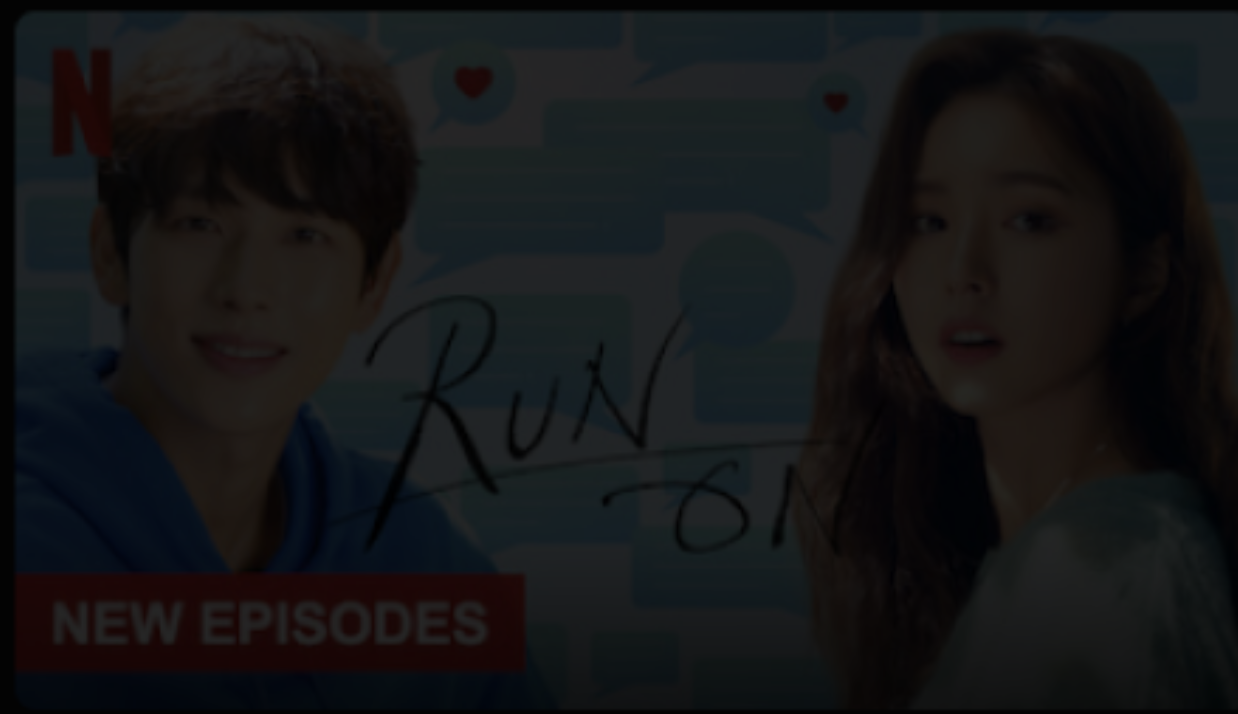
# Hard-Coded Features

- TV videos, characters, vocabulary sets, and comprehension questions available to watch and practice with
  - Developing the entire "database" of learning curriculum is beyond the scope of a medium-fi prototype
- "Saved" lists of videos, vocabulary sets, and recordings
  - These are user-dependent/user-generated

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Ashley's List  
Appendix



✓ Pronunciation Report ✕  
Are ★★★★★  
you ★★★★★  
okay, ★★★★★  
man? ★★★★★

✕  
Are you okay man?

Friends  
Describe what happens in this episode.  
1/3  
Answer 1  
Answer 2  
Answer 3

✕  
Are you okay man?

Friends  
Why is Monica hurt?  
2/3  
Answer 1  
Answer 2  
Answer 3

✕  
Are you...

Friends  
Why do the friends like their nurse?  
3/3  
Answer 1  
Answer 2  
Answer 3

✕  
Are you okay, man? ★★★★★

Friends  
Done!  
✕

✕  
Are you okay, man?

✓ Pronunciation Report ✕  
Are ★★★★★  
you ★★★★★  
okay, ★★★★★  
man? ★★★★★

✕  
Are you okay man?

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Answer 3

✕  
Are you...

Friends  
Why do the friends like their nurse?  
3/3  
Answer 1  
Answer 2  
Answer 3

✕  
Are you okay, man? ★★★★★

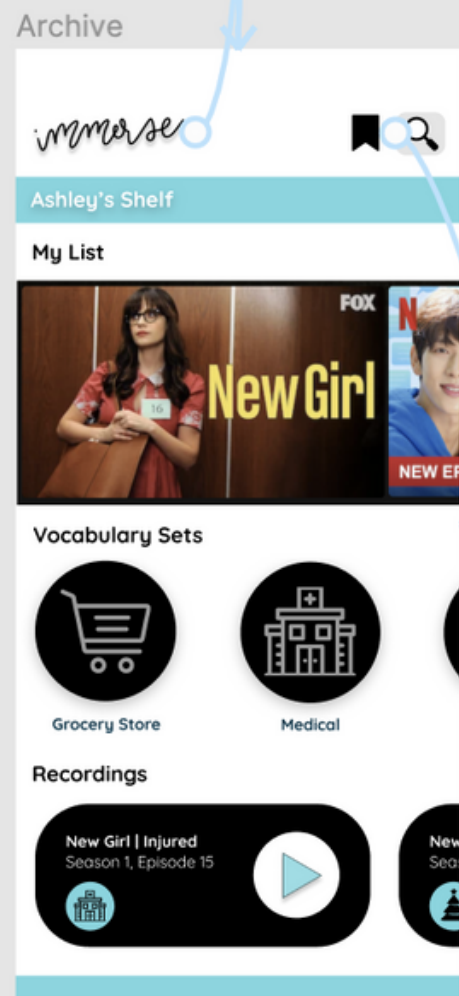
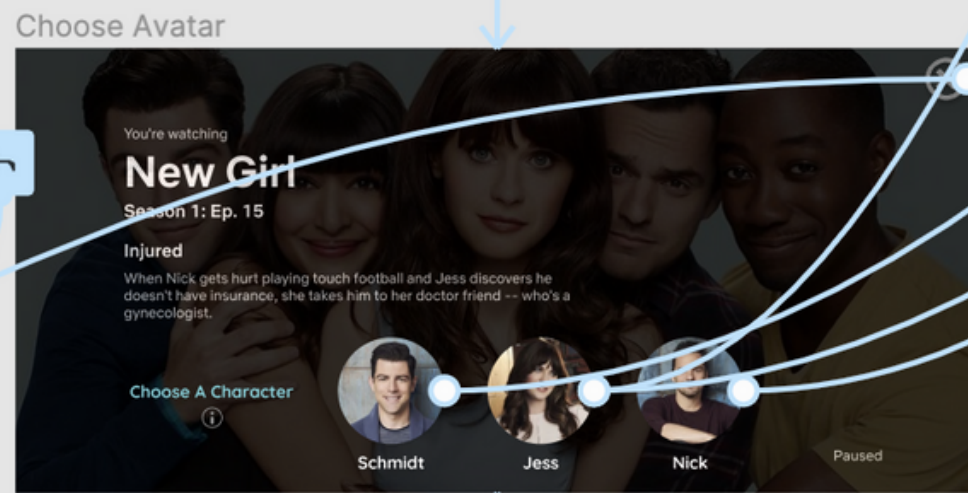
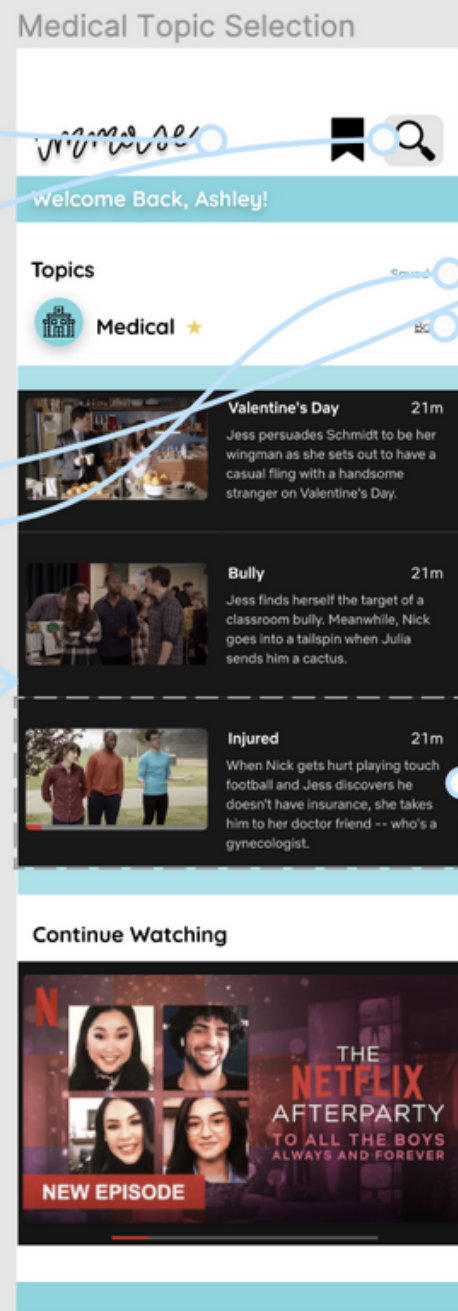
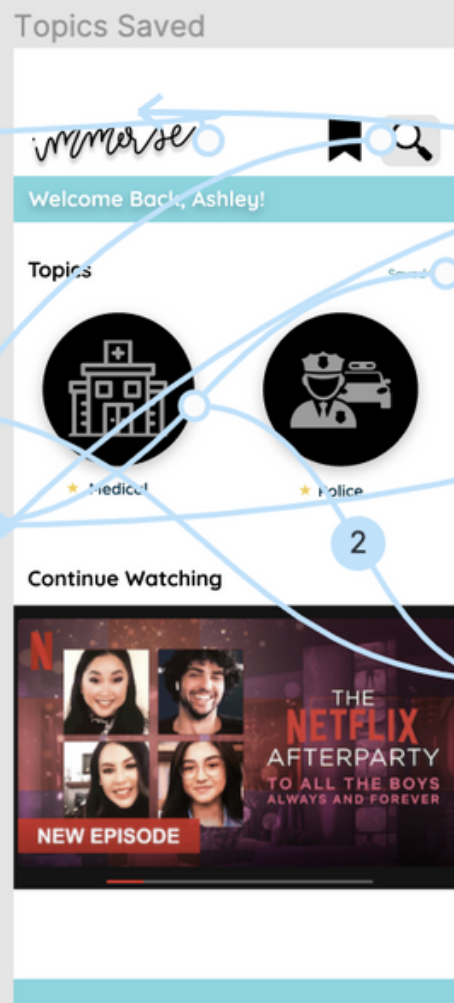
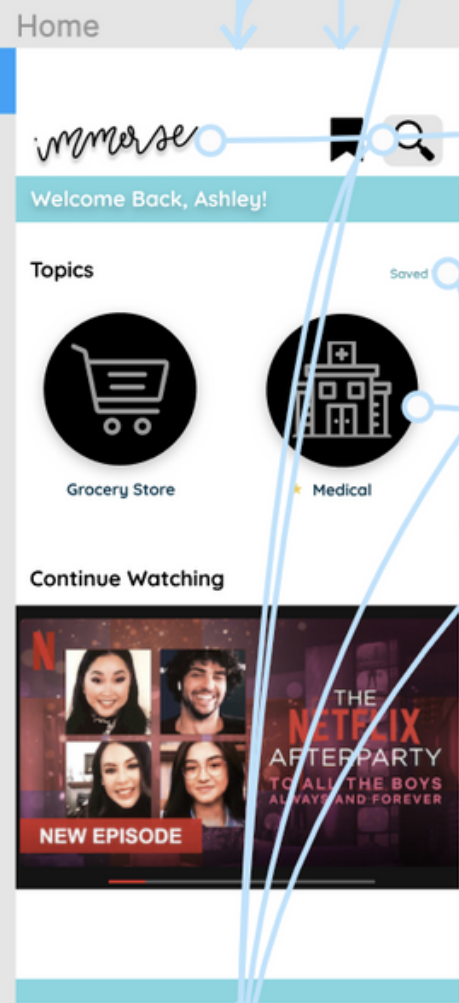
Friends  
Done!  
✕

✕  
Are you okay, man?

"Are you okay, man?" read aloud

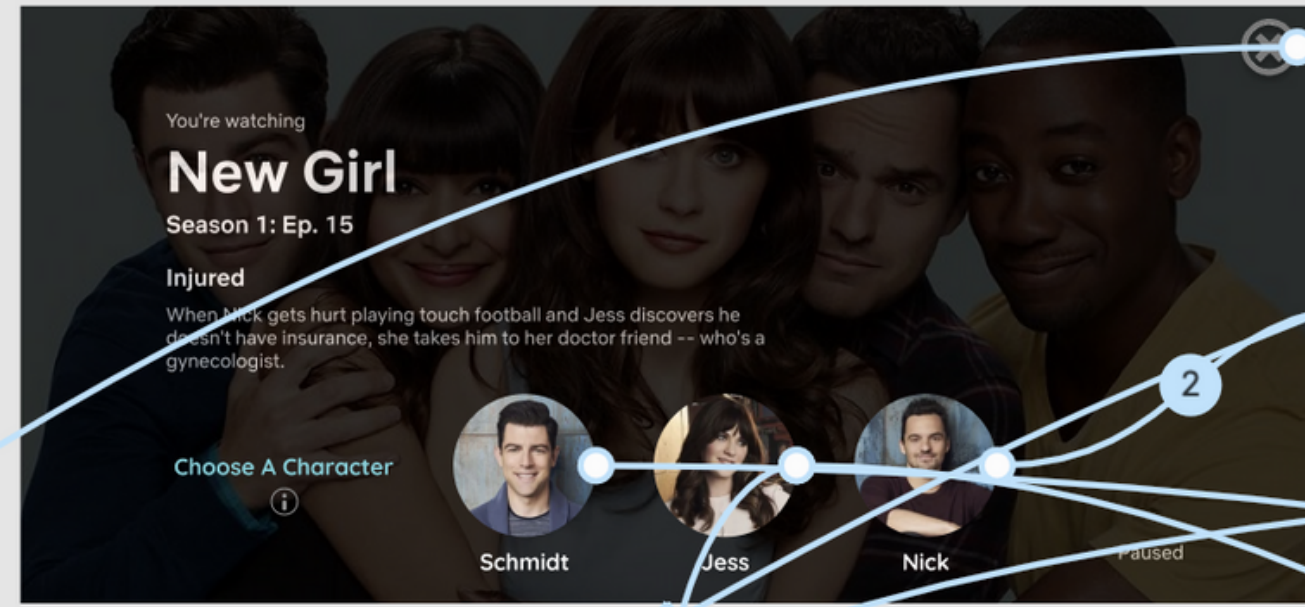
"Are you okay, man?" read aloud

# Revised Storyboards

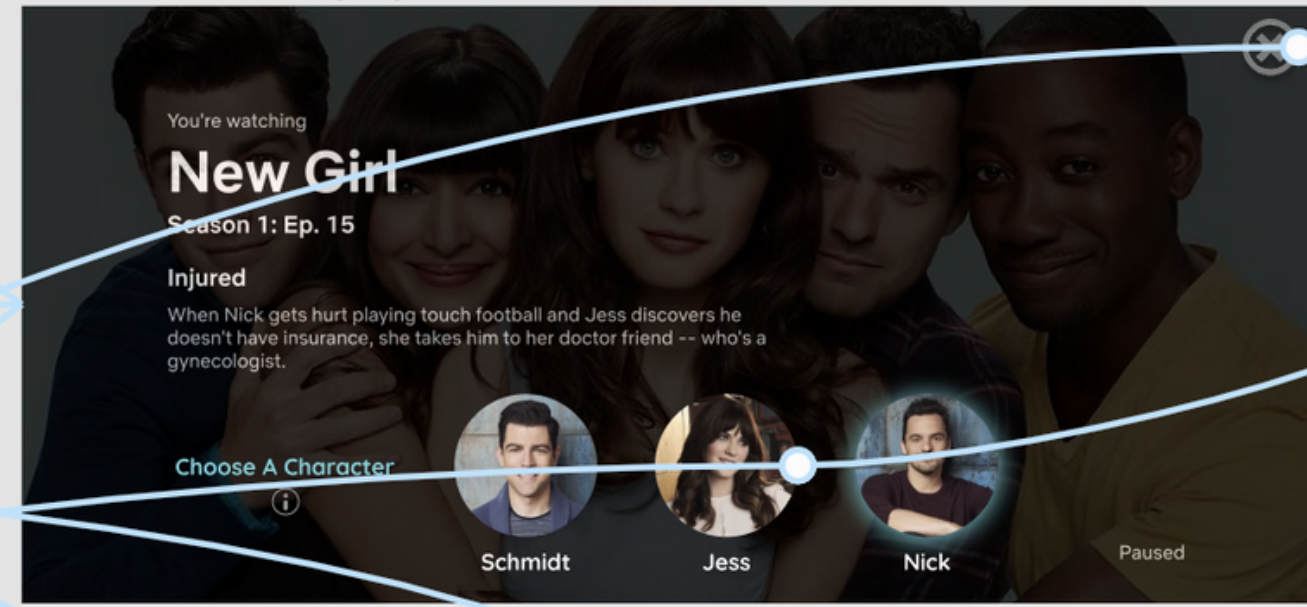


# Home Screen Navigation

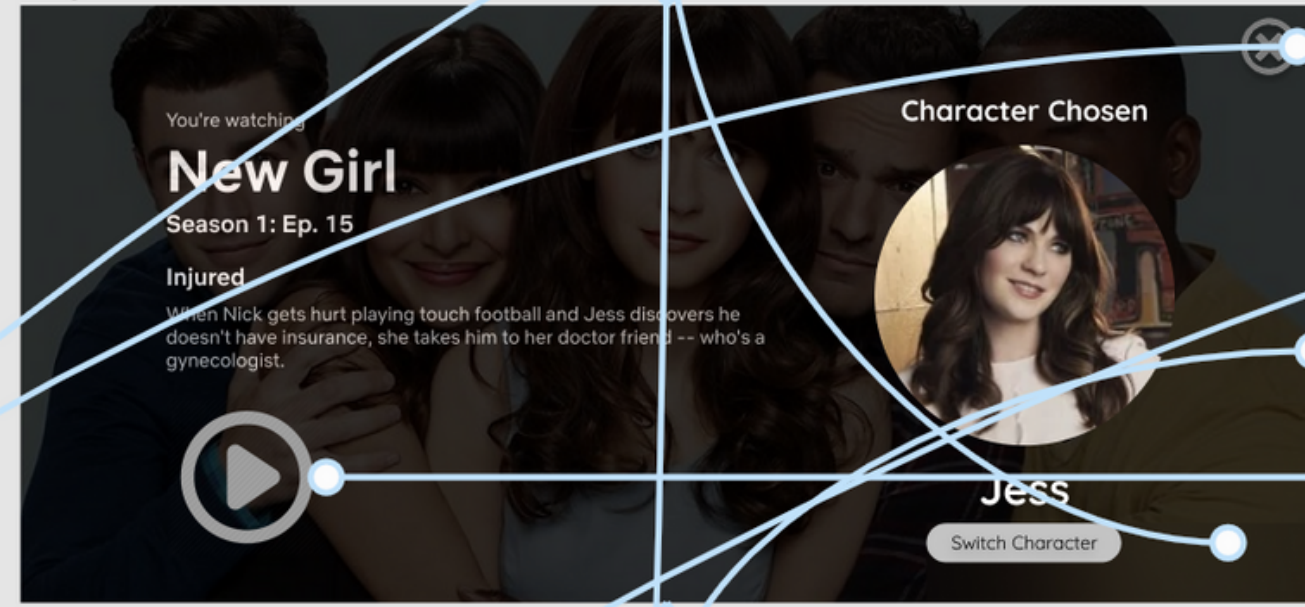
Choose Avatar



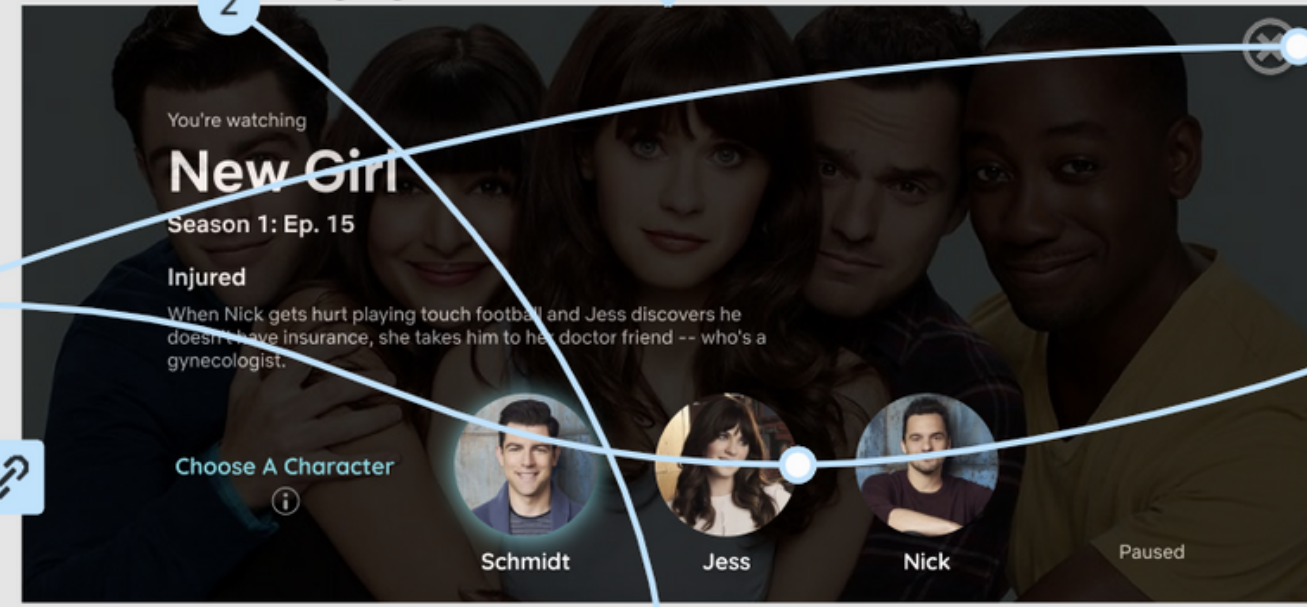
Choose Avatar - Highlighted



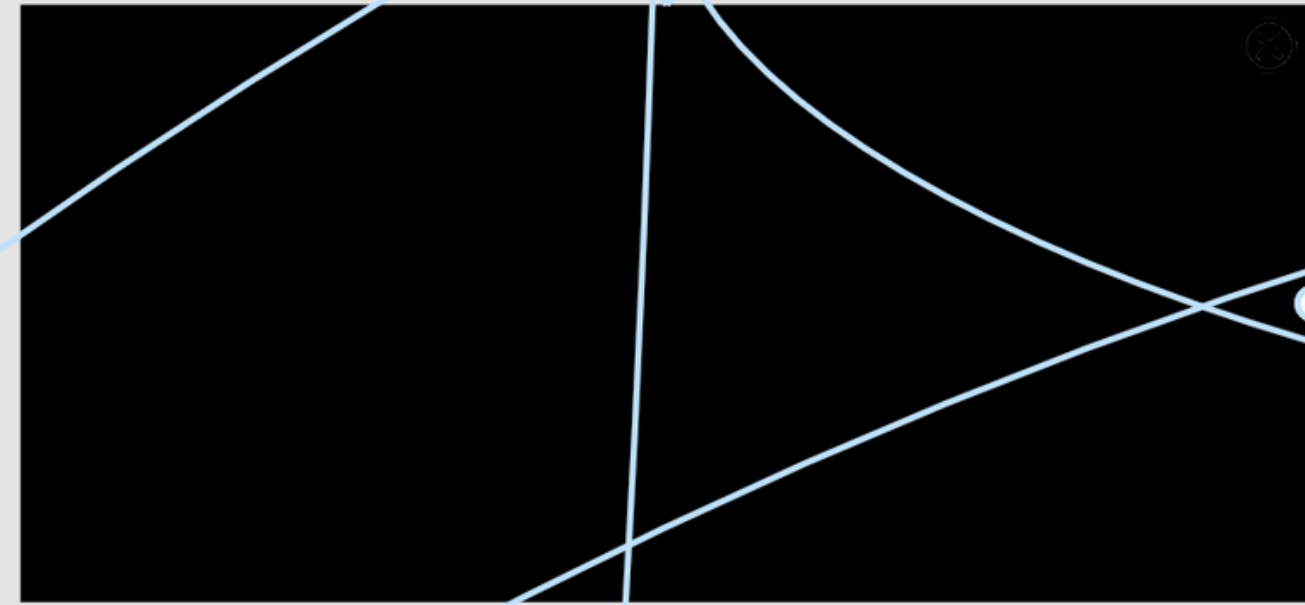
Play Screen - NG



Choose Avatar - Highlighted



Pronounce - Line A



Choose Avatar - Highlighted



# Choosing Avatar



# Finish Screen

You're watching  
**New Girl**  
Season 1: Ep. 15  
Injured  
When Nick gets hurt playing touch football and Jess discovers he doesn't have insurance, she takes him to her doctor friend -- who's a gynecologist.  
Overall Episode Performance  
★★★★☆  
Paused

**What Happened?**  
Click here to test your knowledge.

**Episode Report**  
Click here for your pronunciation report and vocabulary list.

# Test Screen - q1

**What Happened?**  
New Girl | Season 1 | Episode 15

Describe what happens in this episode.

1/3

- Jess takes her class on a field trip to the zoo.
- Nick gets injured playing football.
- Schmidt celebrates his anniversary with CeCe.

# Test Screen

**What Happened?**  
New Girl | Season 1 | Episode 15

Describe what happens in this episode.

1/3

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- Nick gets injured playing football.
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Describe what happens in this episode.

1/3

- Jess takes her class on a field trip to the zoo.
- Nick gets injured playing football.
- Schmidt celebrates his anniversary with CeCe.

# Test Screen - q2

**What Happened?**  
New Girl | Season 1 | Episode 15

Why doesn't Nick want to go to the doctor?

2/3

- He is scared of doctors.
- He has an important meeting.
- He doesn't have insurance.

# Test Screen - q2

**What Happened?**  
New Girl | Season 1 | Episode 15

Why doesn't Nick want to go to the doctor?

2/3

- He is scared of doctors.
- He has an important meeting.
- He doesn't have insurance.

# Test Screen - q2

**What Happened?**  
New Girl | Season 1 | Episode 15

Why doesn't Nick want to go to the doctor?

2/3

- He is scared of doctors.
- He has an important meeting.
- He doesn't have insurance.

# Test Screen - q2

**What Happened?**  
New Girl | Season 1 | Episode 15

Why doesn't Nick want to go to the doctor?

2/3

- He is scared of doctors.
- He has an important meeting.
- He doesn't have insurance.

# Test Screen - q3

**What Happened?**  
New Girl | Season 1 | Episode 15

What is insurance?

3/3

- Something people buy to protect themselves from losing money.
- A medical book.
- A cast for broken bones.

# Test Screen - q3

**What Happened?**  
New Girl | Season 1 | Episode 15

What is insurance?

3/3

- Something people buy to protect themselves from losing money.
- A medical book.
- A cast for broken bones.

# Test Screen - q3

**What Happened?**  
New Girl | Season 1 | Episode 15

What is insurance?

3/3

- Something people buy to protect themselves from losing money.
- A medical book.
- A cast for broken bones.

# Test Screen - q3

**What Happened?**  
New Girl | Season 1 | Episode 15

What is insurance?

3/3

- Something people buy to protect themselves from losing money.
- A medical book.
- A cast for broken bones.

# Summary - Quiz

**What Happened?**  
New Girl | Season 1 | Episode 15

2/3

67%

# Video Comprehension Test