How might we design a mobile app that empowers people to learn new vocabulary?

Vocabulary App: Build-Your-Own Flash Cards

This is a course project of UX Design Introductory. The goal is to learn and practice the design thinking process, by researching and designing an app to learn new vocabulary.

Designed and created by Peishan Grace Li

THE PROCESS

Competitive Analysis

User Research

Persona & User Flow

Wireframe & Prototype

Usability Testing

	Feature Advantage	Feature Disadvantage
Drops	5-min timer conveys a sense of urgency, prompting me to finish all of the words in one sitting Learn to write the characters: strokes breakdown, practices, quiz & repeat Positive reinforcement and easy onboarding: quick tutorial	1st page could be overwhelming with too many tabs Distracting visual movement when tapping/swiping Confusing naming the on main navigation: Topics vs Collection
Quizlet	Provides QR code scan, quickly linking users to the exact content.	Generally not enough information during onboarding process Unintuitive main page structure the content. The in app purchase prompt it out too soon before a user can get their hands on in trying out the app.
Flash Cards	Straightforward to use with a focus single feature Intuitive onboarding process is intuitive	Pop-up ads are too frequent, interrupting user experience too frequently. The edit function of each flash card is not intuitive enough for users to figure out. The button of flipping between front and back is not obvious enough for users to click and find out.

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Five in-person interviews, moderated

Vivian S:

- *Doing*: use book/audio 1-2 times a week to learn new words and upkeep English level
- *Thinking*: book/audio helps me practice pronunciation
- *Feeling*: Most language apps are complicated with many ads. I could just type in Google instead of going to apps.

Roger T:

- *Doing*: downloaded chinese news app and Hold down texts to Google translate
- *Thinking*: this helps me learn the language through context. It improves my reading.
- *Feeling*: frustrated that when I could recognize the characters but not sure what they meant overall in the context.

Blair R.

- *Doing*: learn Spanish through immersing myself in the culture (traveling, talking to natives, taking in-person class)
- *Thinking*: learn best when it's connected to real world; seeing the words while hearing the words
- *Feeling*: there is a disconnect between oral and written form

Jennifer Y.

- *Doing*: in-person classes and Duolingual app for a short time
- *Thinking*: helpful that the app breaks down content into bits and pieces with real-world visual aid
- *Feeling*: Learn and communicate with my boyfriend who speaks Czech and if one day we go visit, it will be helpful. It was new and exciting at first. The need disappear so I stopped

Michael T.

- *Doing*: learn a language by reading and writing
- *Thinking*: learning a language takes a lot of time
- *Feeling*: I like online learning - it's easy to access

Full interview report here.

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PERSONA

May Lin
a full time mom of a 1-year-old
5+ years work experience in International Business Development

GOAL
“I want stay competitive so I could get back to work when the right time comes.”

Frustrations
“I struggle with staying connected with the world while being a full-time mom. I used to study and learn all the time, but my time is all fragmented now.”

NEED
To learn and practice English in bits and pieces of time

PROBLEM STATEMENT

May does not have a whole lot of time to sit down and learn vocabulary systematically, but she wants to keep on learning with her fragmented time.

To create a quick-to-start vocabulary app to reiterate language learning by providing real-world context.

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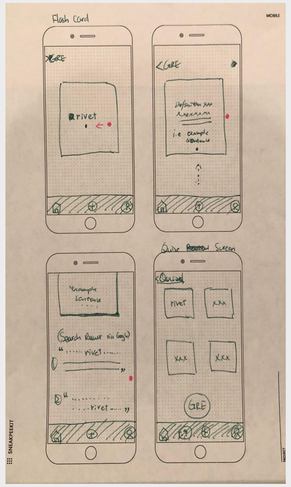
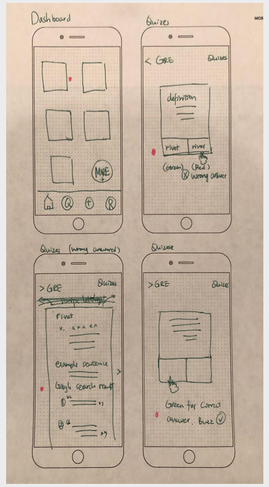
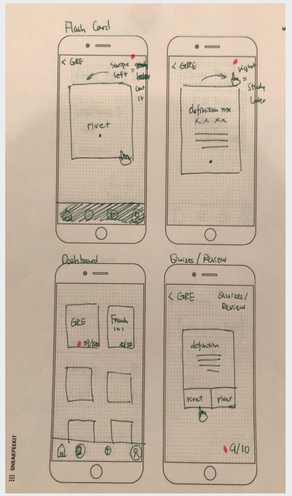
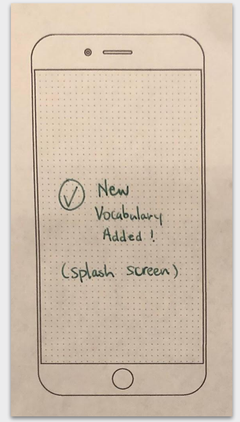
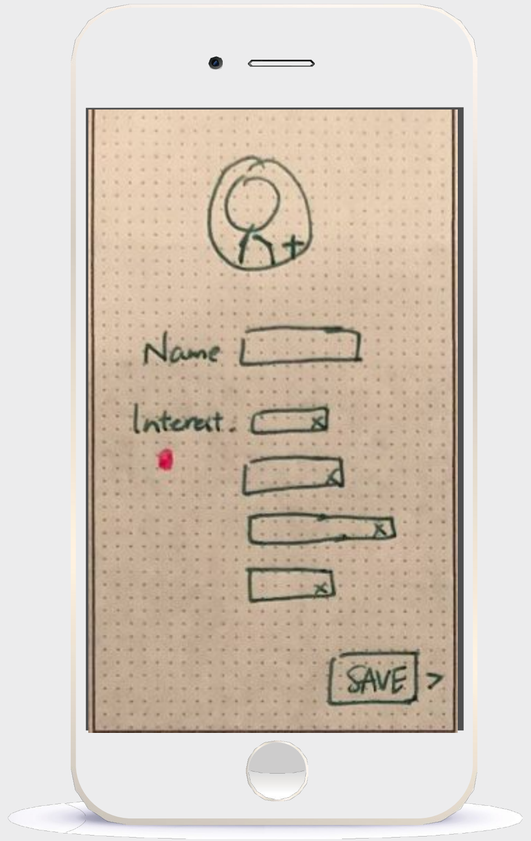
HAND SKETCH WIREFRAME

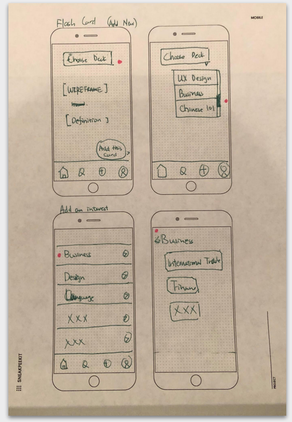


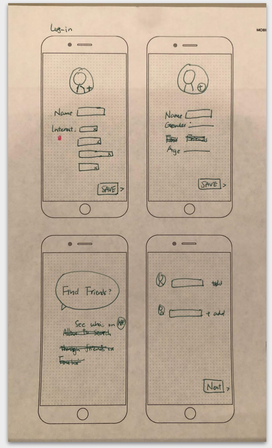


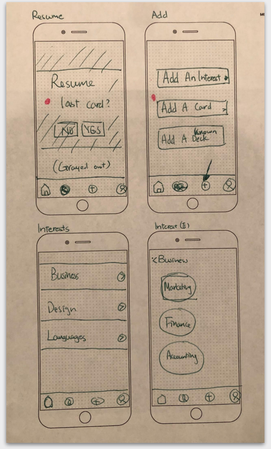












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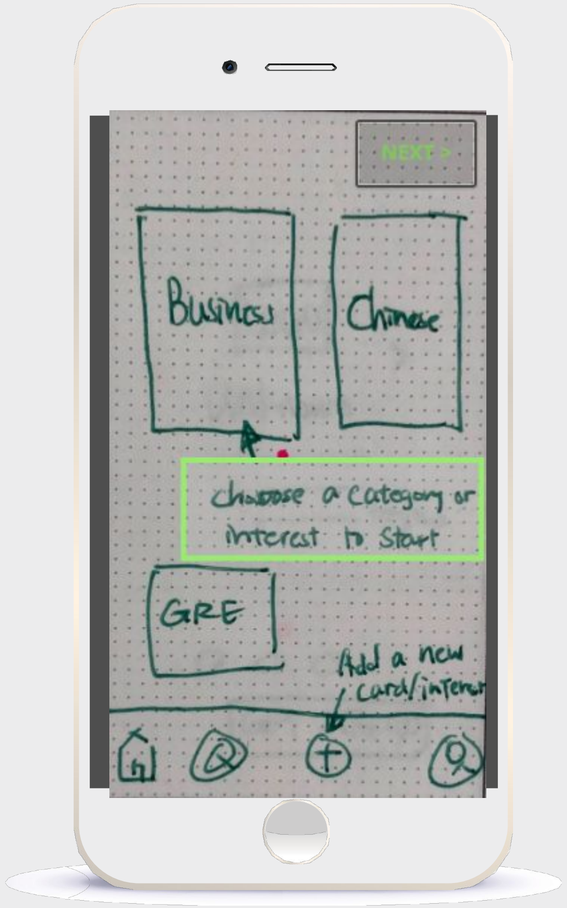
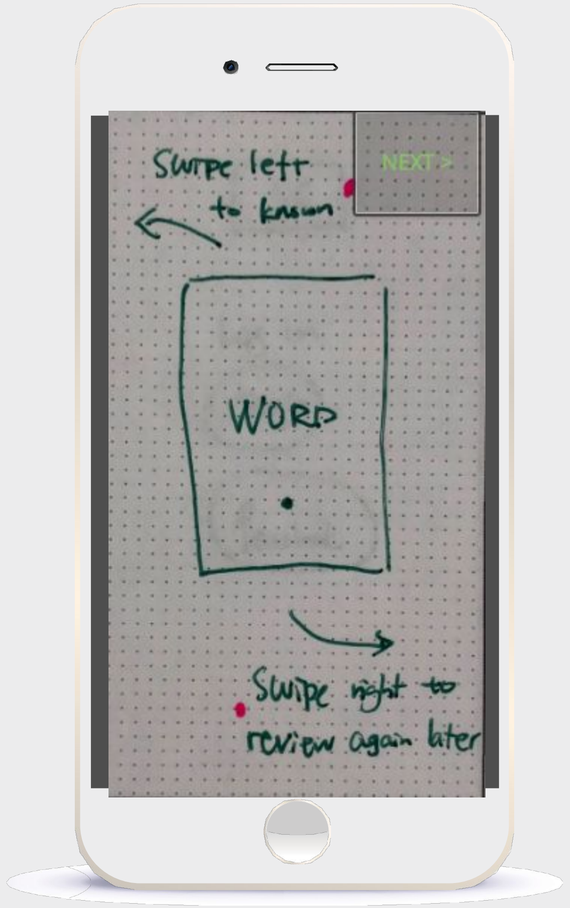
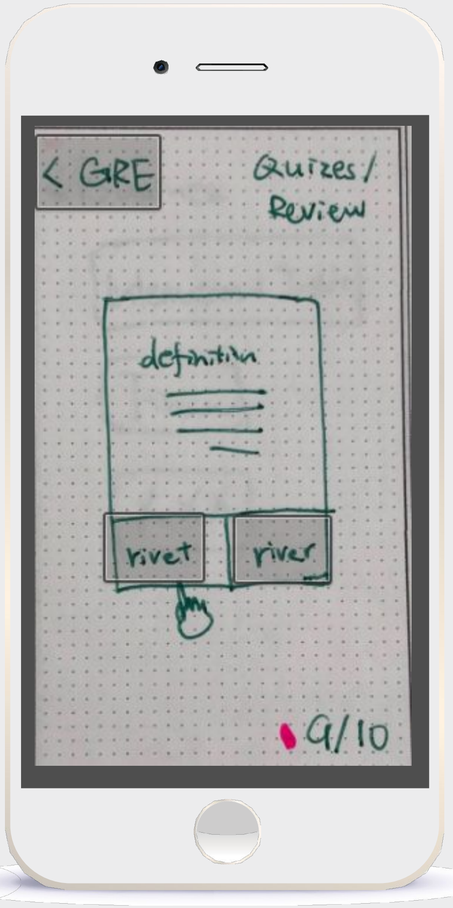
LOW FIDELITY PROTOTYPE







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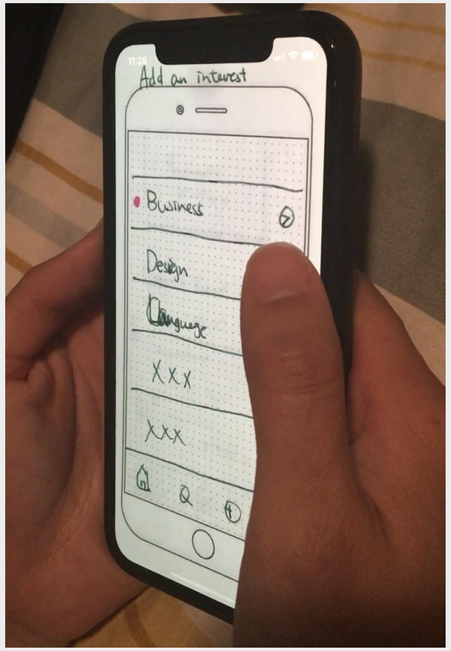
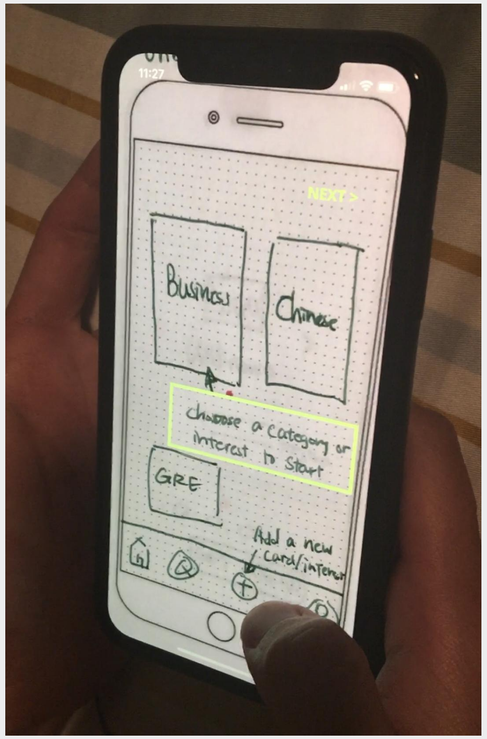
USABILITY TEST PLAN

To conduct in-person moderated usability testing, including below direct tasks:

- Learn new words using the app
- Add a new flash card
- Add a category of words to study
- Take a quiz





TEST RESULTS

"Onboarding is a bit confusing as I thought I was already in the app."

"I don't know how Quiz works."

Improve below experiences:

- Onboarding (to provide further context on how it works)
- Navigation & layout

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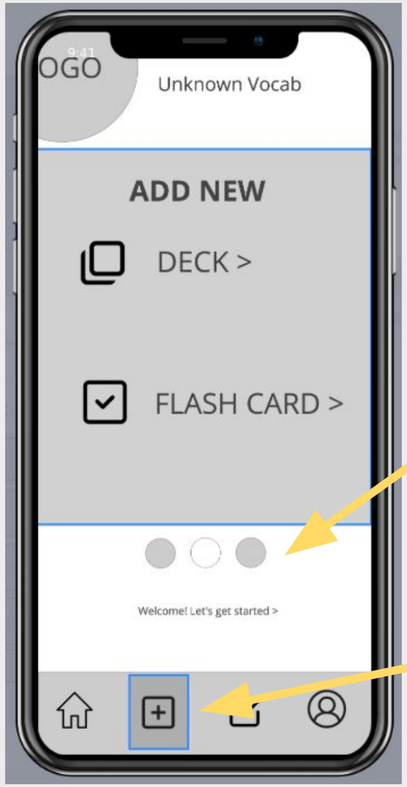
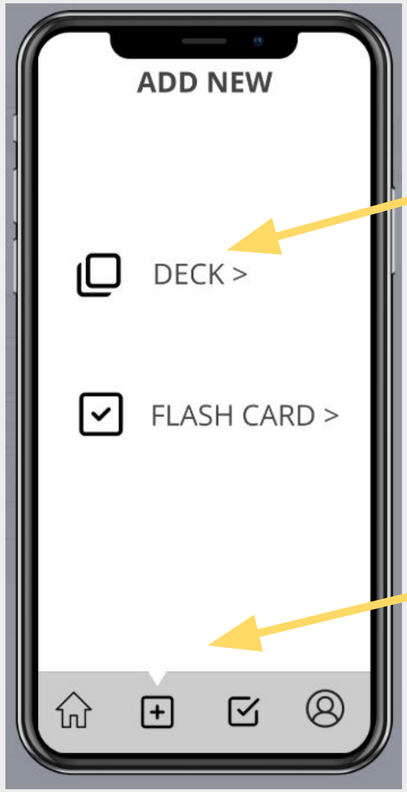
MID FIDELITY PROTOTYPE



indicate onboarding progress

connect button and its function



Consolidated for simplicity and easy understanding.

Connect function / button and screen

THE NEXT STEPS

More pressing:

- Improve the flashcard gesture to integrate a real-world use display (Google search).
- Add audio button to a flashcard

Nice to have:

- Refine and improve button UI with more visual clue of clickability
- QA content hierarchy to ensure consistency across the app

VIDEO PRESENTATION

https://youtu.be/AI1ykh2CqtQ

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