

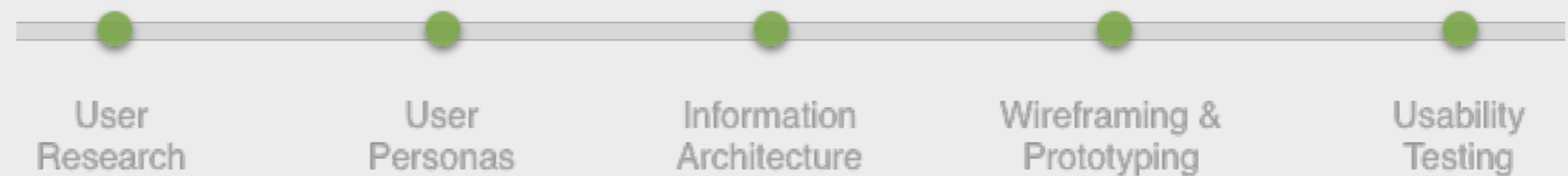
# App Overview

Vocabulary Application Project

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10/24/2018

Steps used in designing mobile study app tentatively called “Quick Study”



## User Research -Competitive Analysis

Quizlet



Cram.com



Magoosh  
Vocab Builder



App Store Rating

★★★★★ 219,244 👤

★★★★★ 18,275 👤

★★★★★ 72,763 👤

Gamification

Yes

Yes

Yes

Sharing

Yes

Yes

Yes

Text

Yes

Yes

Yes

Pronunciation

Yes

Yes

Yes

Images

Images

Images

Images

Import/Export

Yes/Export

No/No

Yes/Export

Advertising

Yes

No

No

Strong emphasis on language learning. Begins with choice of own cards, or select from sets.

3 modes (regular, memorize, and cram).

Open to different kinds of study topics.

Must create own cards, rather than get pre-made sets of cards

Developer uses same platform to release focused versions of the app, based on topic (SAT, GRE, Vocab, Math, etc).

Can choose from sets of pre-filled downloadable cards. Ability to copy/mod set.

# User Research Feedback

Participant 1: Sally A.

September 24, 2018

- Student, HS Sophomore, age 15
- Studies: Spanish, Honors English, AP World History

*“I find it annoying when the apps overdo the “encouragement, to keep you motivated to keep using the app”*

- Uses about 2-3 times weekly
- Pay prompts are annoying.
- Like to be told that I did a good job.
- Send url to teacher to show progress.

Participant 2: John P.

September 24, 2018

- Student, HS Sophomore, age 15
- Studies: French, Honors English, AP World History
- Taking test to be a fencing coach.

*“Duolingo is less (like) flashcards and more like just learning.”*

- Uses 5 -6 times/week, but then not at all. Again in 3 weeks. Uses before test/quiz.
- Likes tests & games. Use same sets of cards in diff ways.
- Likes progress indicators.

Participant 3: Linda B.

September 25, 2018

- HR Director at tech company, age: 40
- Has two kids
- Active in Toastmasters organization

*“We always say we need to... ‘Read it, Say it, Do it’.”*

- Prefers pre-made, shared, free content.
- Likes to hear pronunciation
- Wants ability to share with other Toastmasters groups.
- We learn it and then use it immediately in our speeches.

# Persona



Jessica

Meet Jessica. She is a student and studies different topics every day...

AGE 19

FULL-TIME  
STUDENT

ACTIVE ON  
SOCIAL  
MEDIA

PART-TIME  
INTERN

...She is very busy and likes to make the most of her day and squeezes study time in whenever she can.

# Problem Brief



Jessica

Jessica needs a way to learn word terms' definitions by seeing or hearing the definition of the word term, in order to learn the definition.

Or conversely, when seeing/hearing the definition, she will state the word term... because she is a busy student who regularly needs to learn sets of terms.

By creating a simple but powerful interface for vocabulary which provides audio pronunciation and vocabulary set sharing, we will produce a superior study tool for busy folks like Jessica.

# Challenges faced by Jessica



Jessica

*Need to be able to look at sets of words “forward, backward and sideways” to really learn and retain this information!”*

*“I wish it was faster to create my own flashcards.”*

- Needs a quick way to create new sets of cards
- Needs different ways of looking at a set of flashcards. Not just one static order.
- Time to start using the cards needs to be FAST!

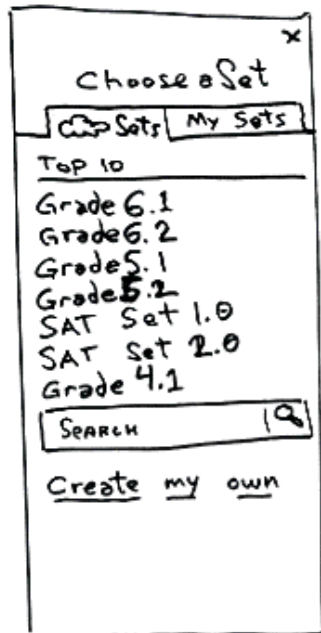
*“I can’t afford to spend a lot of time configuring the app just to study. It should just work.”*

# Sketches

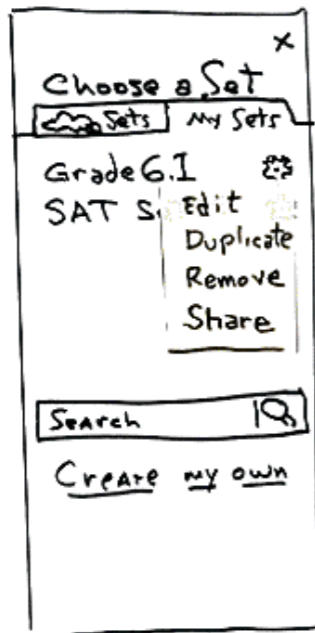
## Early Sketches



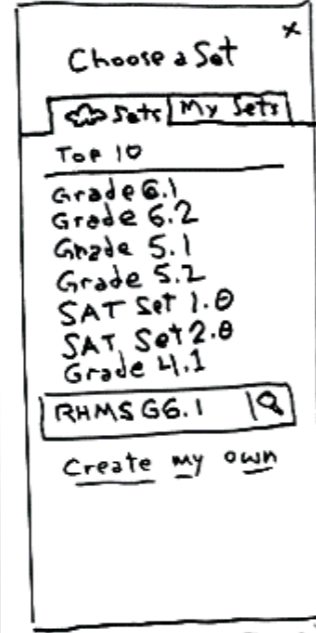
Jessica



cloud sets + my sets tabs



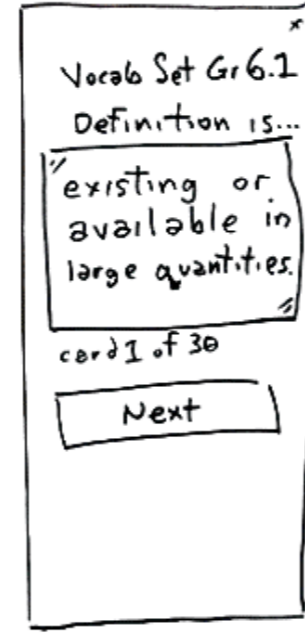
My Sets TAB ACTIVE



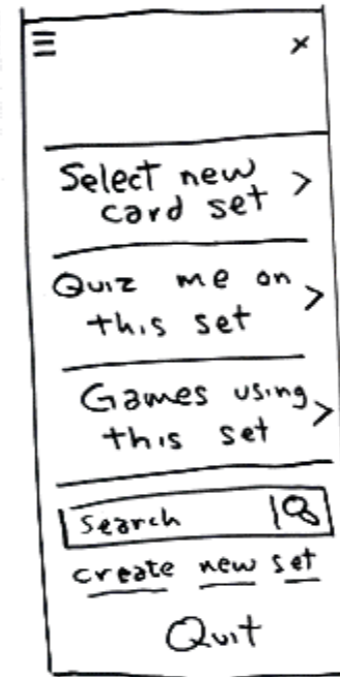
SEARCH for Teachers Specific Set



9.0



10.0



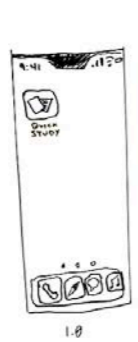
# Prototypes

Wireframes showing information architecture

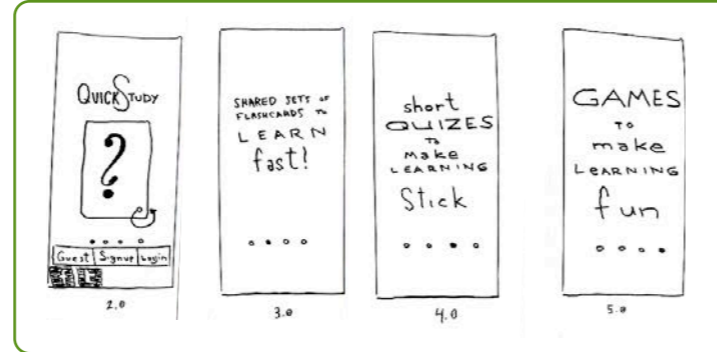


Jessica

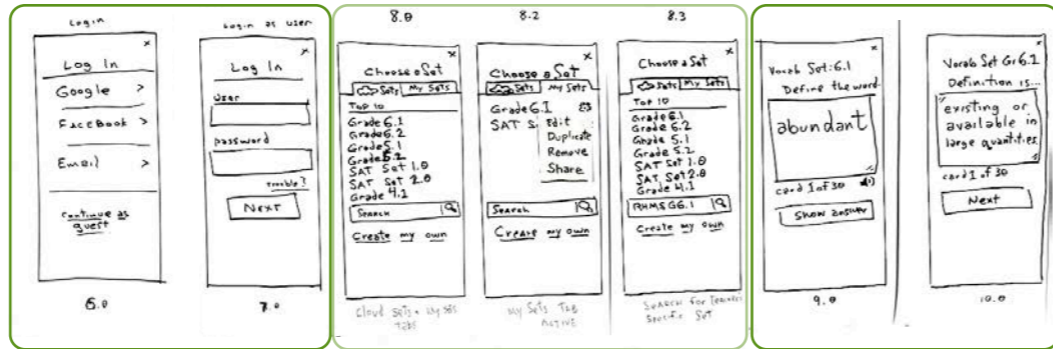
Desktop launcher



Splash screens



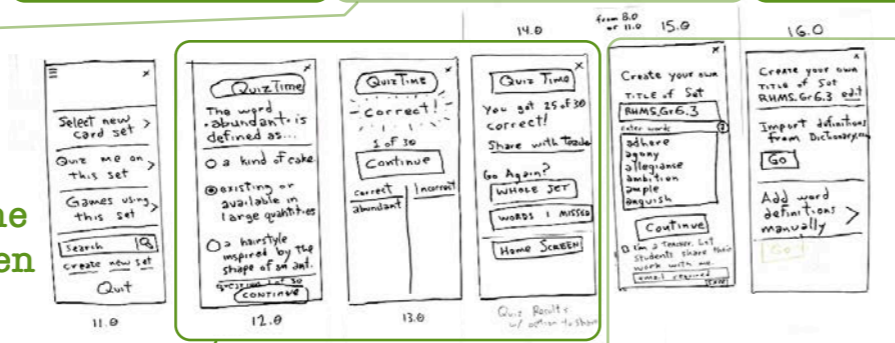
Login screens



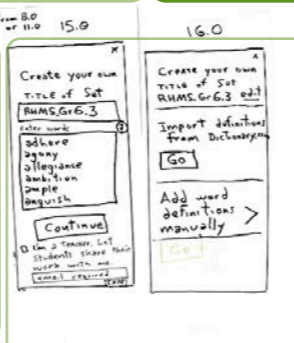
Flashcard screens



Choose/create set screens



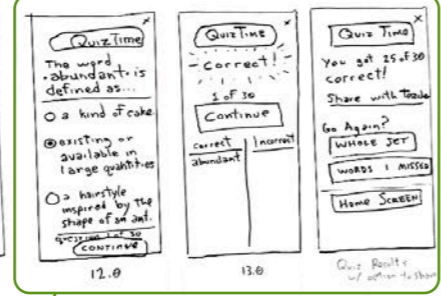
Create your own vocab set screens



Home screen



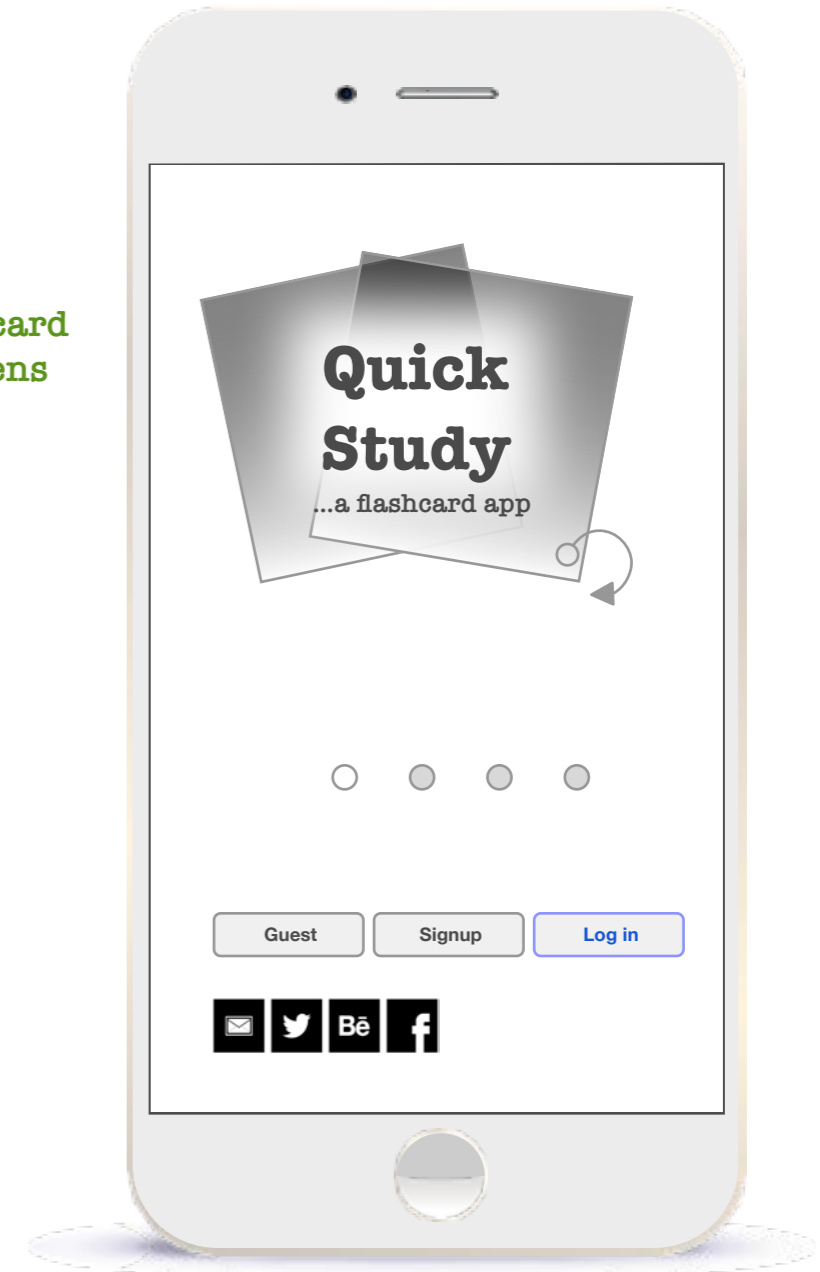
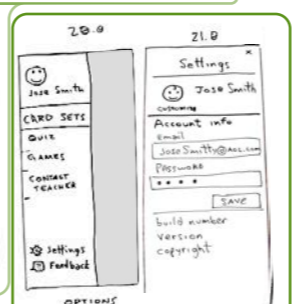
Quiz screens



Create your own vocab set screens



Options and settings screens





# Usability Test Plan

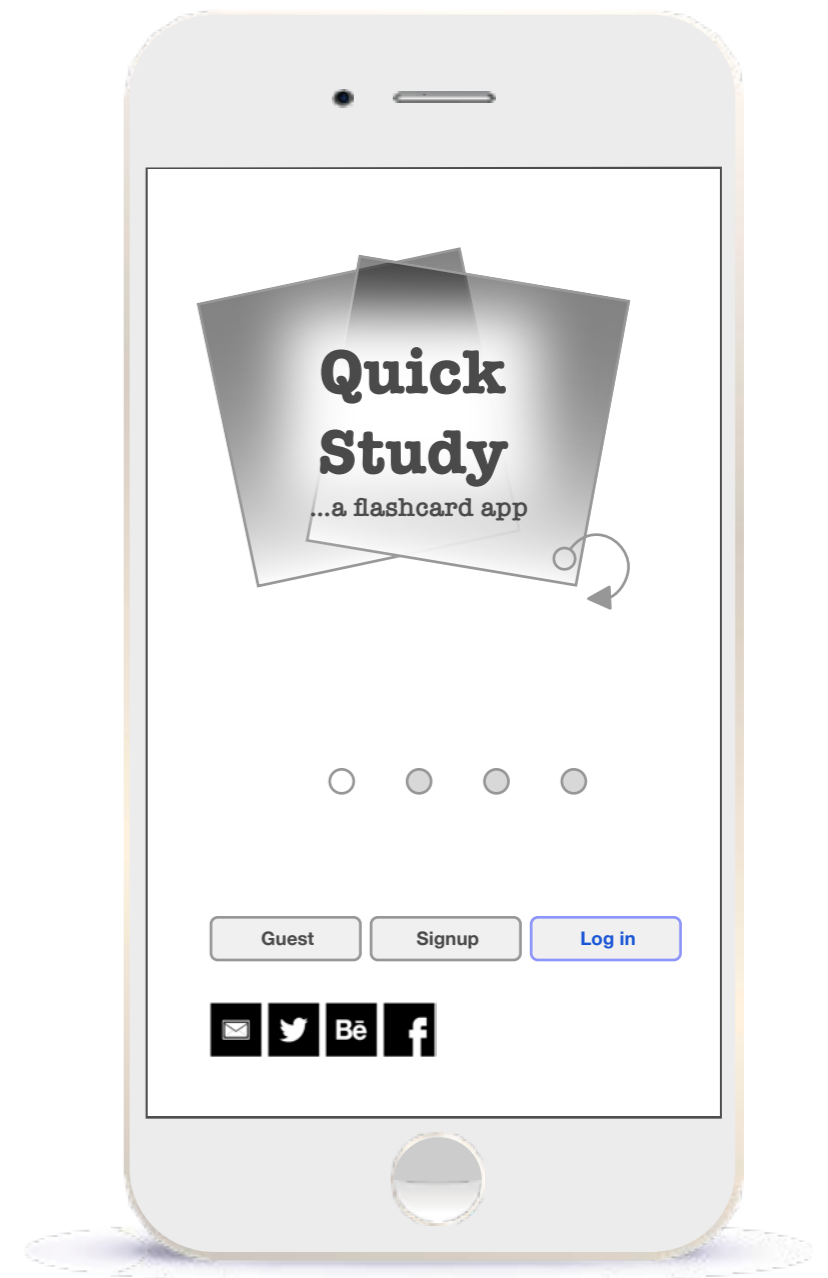
- Conduct tests to try common actions and validate concepts.
- Tests conducted in person and via Slack video call.

1. Test the user's ability to create a new set of cards.

2. Test user's ability to use a shared set of cards.

3. Test the user's ability to study with a quiz and share it with the teacher.

3. Test user's ability to change password.



# Usability Test Findings

Over the course of testing, a few serious issues were identified. Here are the top 2.

**#1. Users struggled with completing and sharing their *new card sets*.**

**#2. Users were *unable* and/or *unwilling* to agree *to share* their work with the teacher.**

A hand-drawn sketch of a form titled "Create your own" with a small 'x' in the top right corner. The form contains the following elements from top to bottom: a text input field labeled "Name the set"; a text input field labeled "Word #1"; a text input field labeled "Definition #1"; a section titled "Add Pronunciation" containing a speaker icon and a plus sign; a checkbox labeled "I'm a teacher. Let students email their test scores to me"; a text input field labeled "Email address"; and a "Save & continue" button.

# Improvements

#1. Add a button to complete the 'new card set' process.

#2. Move naming of new set, and sharing options to the end of the process.

#3. Regarding sharing with teacher, consider a simple URL copy, to share results, or eliminate the feature.

Mobile app screen titled "Create your own" with a close button (X) in the top right. It contains two input fields: "Word #1" and "Definition #1". Below the "Definition #1" field is a button labeled "Add word pronunciation" with a speaker icon and a plus sign. At the bottom is a grey button labeled "Save and continue".

Mobile app screen titled "Create your own" with a back arrow and close button (X) in the top left. It contains two input fields: "Word #2" and "Definition #2". Below the "Definition #2" field is a button labeled "Add word pronunciation" with a speaker icon and a plus sign. At the bottom are two buttons: a grey "Save and continue" button and a blue "Set is complete" link.

1 New "Set is complete" link provides a clear way to complete 'New Card Set' process.

2 Name of set, and sharing options now at end of DIY flow.

Mobile app screen titled "Finish your set" with a back arrow and close button (X) in the top left. It contains an input field for "Set name". Below it are "Sharing options" with three radio buttons: "Share with everyone. This is a public set." (selected), "Don't share. This set is only for me.", and "I'm a teacher. Allow students to share their results with me." (unchecked). Below the third option is a text box "Email address required." At the bottom are two buttons: a grey "Save and exit" button and a blue "Review set" link.

3 Moved Sharing option to end of flow. It may still be removed completely.

# Conclusions

## Pros

- Embrace outside resources like APIs. Used correctly, they can greatly improve functionality.
- Sketch prototypes help keep users from believing that designs are real “live” products.

I learned to go over the low-fidelity design over and over with a critical eye, to make improvements. But found that even with extreme diligence there is no substitute for user testing to realize those things that you maybe didn't catch or didn't consider.

## Cons

- Concepts like a carousel aren't easy to recognize when shown in low fidelity.
- Prototyping is a slow process but keeping it low fidelity can speed up the overall UX process.
- Technology like video capture devices are unpredictable, so having a backup or redundant recorder is important.



# Next Steps

...to improve the prototype



1. Incorporate an API integration with [dictionaryapi.com/](https://dictionaryapi.com/) :
  - A. to add a new auto-complete option. This feature (turned on by default) will ensure the quality of spelling of terms in sets that get shared and duplicated.
  - B. use the same API to provide “official” definitions of terms. This feature will reduce the instances of incorrect, and/or prank answers in card sets.
2. Add click or swipe functionality to card question, to toggle between the answer and the question.
3. Add ability to share a URL of Quiz results. This simplifies the process and removes some of the privacy/sharing risks and unnecessary complexity.



End

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