

## Project Overview

### The Challenge

To create a mobile application that provides students a way to learn a high volume of vocabulary for multiple courses without getting overwhelmed.

### The Process

Buzzwords was a project I built as part of my UX Design Foundations course at CareerFoundry. I demonstrated how to approach real world problems from a design perspective. My initial step was conducting research on competitors and users to get a better understanding of the problem. Next, I entered the design phase to create the app. Followed by evaluation in order to test the app, and revise as needed.

### The Objective

Empower people to learn new vocabulary.

### The UX Project Plan

| Phase 1: Research    | Phase 2: Design          | Phase 3: Evaluation |
|----------------------|--------------------------|---------------------|
| Competitive Analysis | Information Architecture | Usability Testing   |
| User Research        | Wireframes               | Prototype Revisions |
| User Personas        | Prototypes               |                     |

## Research

### Competitive Analysis

An informal competitive analysis was conducted to assessment of the strengths and weaknesses of my competitors. I looked at elements such as:

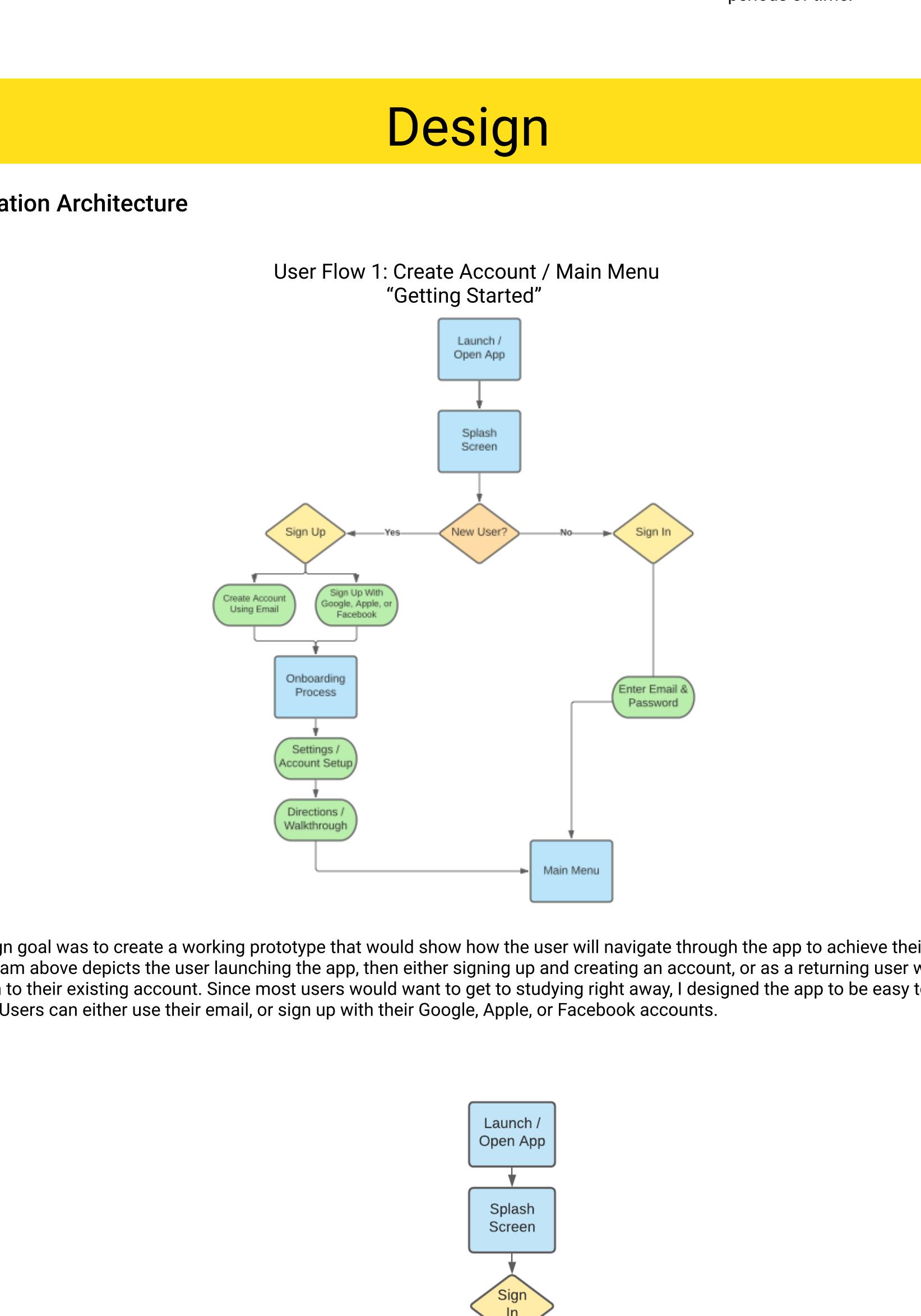
- Launch experience (splash, onboarding, sign up/log in)
- Navigation
- Buttons
- Options/Settings
- Difficulty/ease of task completion

I chose 3 very successful direct competitors to analyze. The companies I chose were:

- Quizlet
- AnkiApp
- Chegg Prep

### Company & Product Findings

The three applications feature very similar business models, features, and lesson structures. From a UX standpoint, the apps are very simple, easy to use, and focus on basic memorization.



As a result of these findings, Buzzwords will provide a wide variety of study tools within the app

### UX Findings

All three apps were analyzed from an UX perspective, and had similar strengths and weaknesses. The strengths were focused on simplicity, ease of use, and convenience. Most weaknesses were related to content and lack of variety in features. While all apps offered a free version, all shared an annoyance by having ads interrupt the learning process frequently.

### User Research and Personas

I interviewed 3 people who were currently enrolled in school, or had recently needed to learn new vocabulary or concepts. I was interested in the tools they used, types of problems they have encountered, what success they've had, and what they're preferred environment and style of study they prefer.

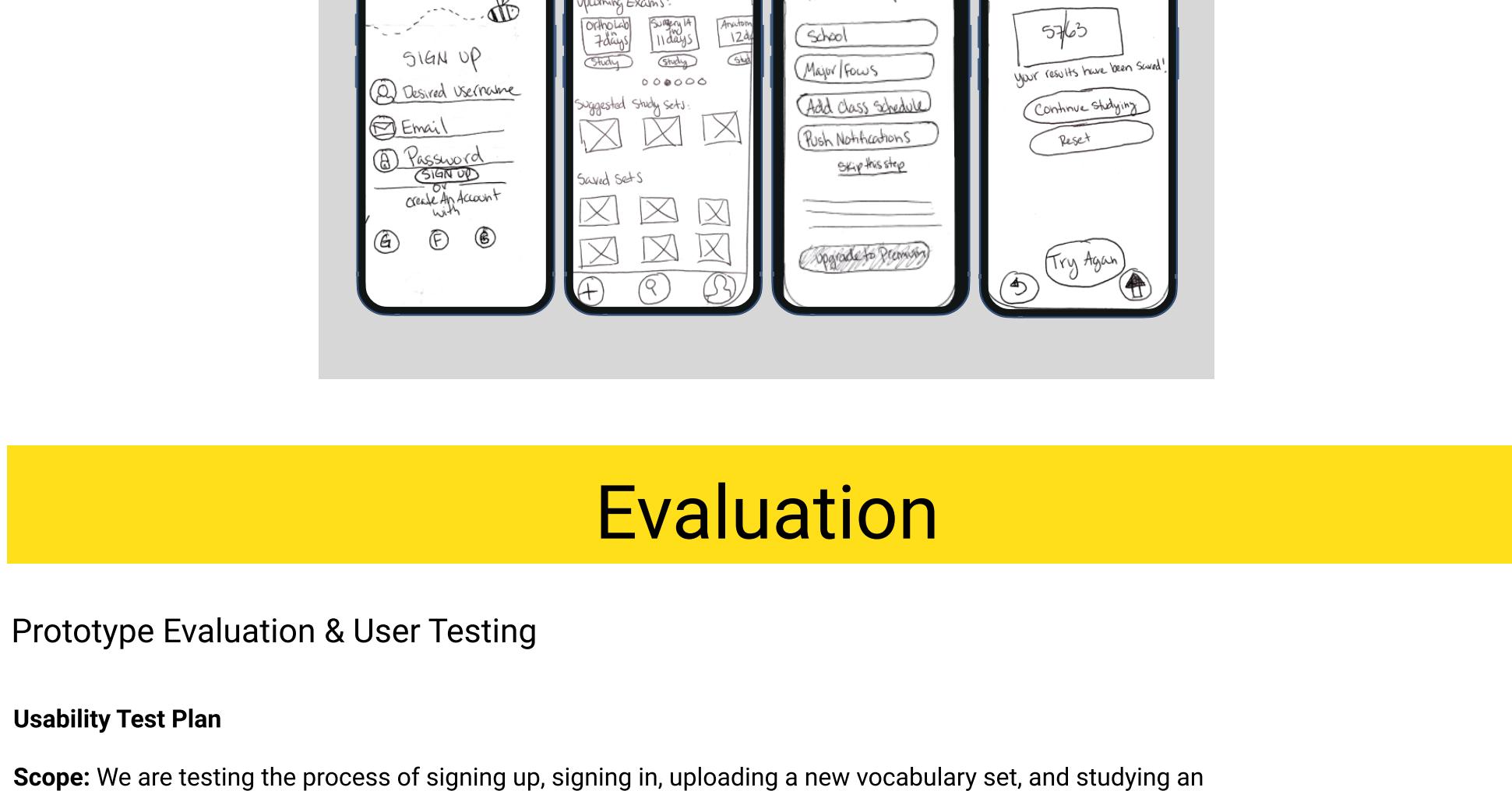
My main takeaways from the interview were:

- All interviewees used mobile apps previously to learn new vocabulary for school, work, or to learn a new language.
- Most like the concept of flashcards, but don't want to go through the time consuming process of creating them manually.
- No one wanted to pay for a mobile app.
- Getting bored using flashcards was common throughout. They all wanted a way to make it more fun and interesting.
- They all liked the convenience of taking their materials with them on their phone wherever they went.

Based on these findings, the biggest problem is keeping people engaged in the content, and to make it less boring and manageable.

Each person interviewed was selected with specific characteristics or needs in mind. As a result, the user persona was created to represent a collection of their thoughts and make it easier to understand their wishes and frustrations.

With more time and resources, I would have interview more people, and created more user personas to better understand my future users to ensure my app provides a solution.



### Personality:

Stephanie is a very hardworking and determined student. She is currently in nursing school, while also working part-time at a local coffee shop. She often feels like there is not enough time in the day, and is struggling to not let stress get to her. She is very outgoing, but doesn't have the time to see friends or join a study group, which she really misses.

### Goals:

- Wants to learn vocabulary and terms for multiple classes without getting them confused
- Wants countdown and reminders of what to study next
- Option to shuffle and see sets in different ways to keep her engaged.
- Wants to be able to study her materials everywhere on the go.

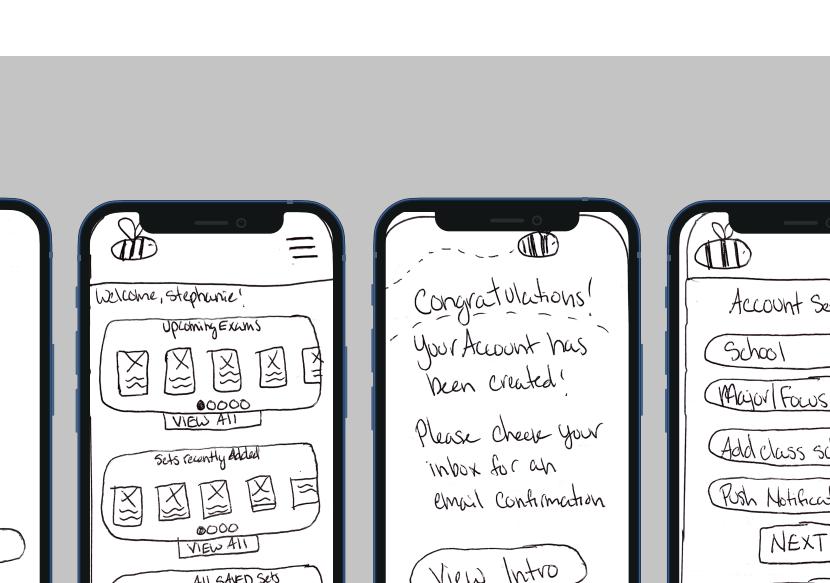
### Challenges:

- My busy schedule makes it difficult for me to stay organized and know what I need to prioritize
- With such a heavy course load, it's impossible for me to bring all my study materials with me everywhere I go.
- I get bored studying, and it can be difficult for me to focus for long periods of time.

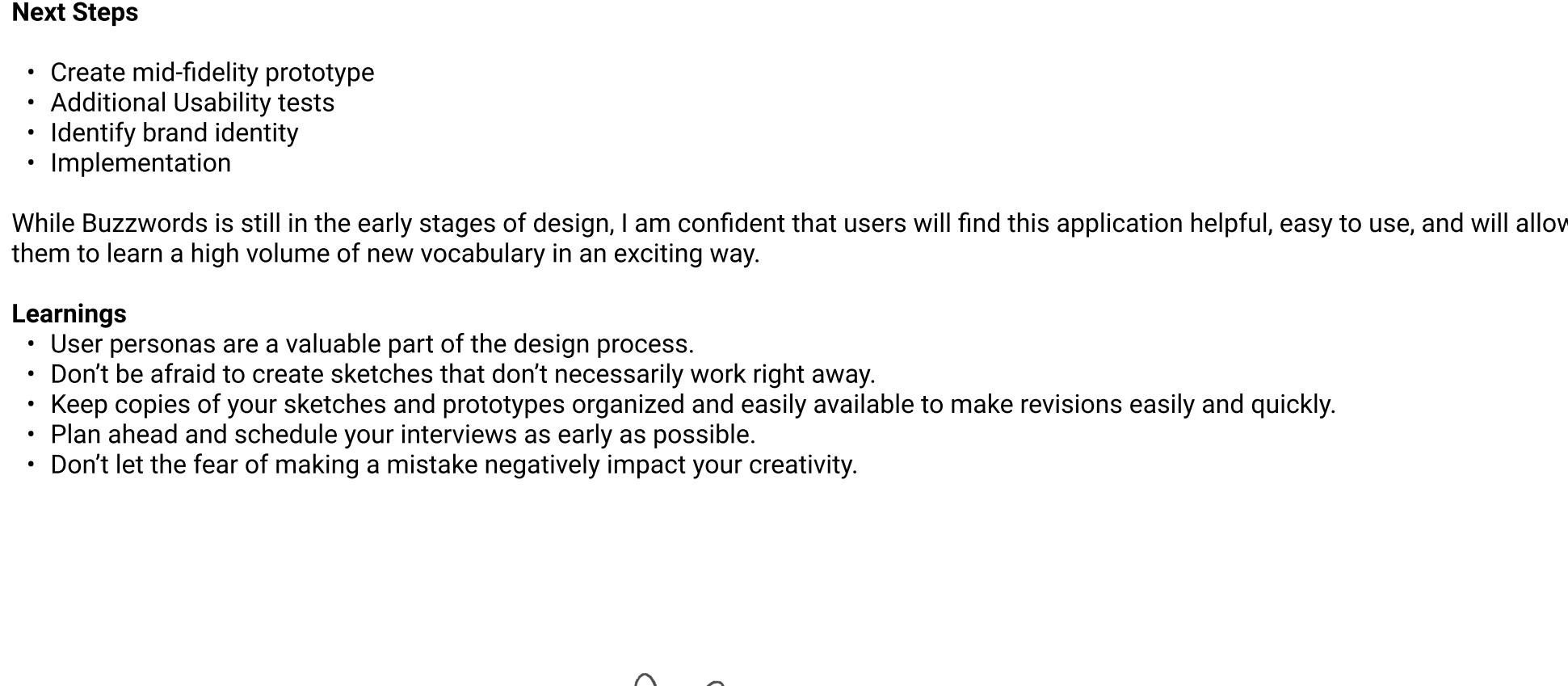
## Design

### Information Architecture

#### User Flow 1: Create Account / Main Menu "Getting Started"



The design goal was to create a working prototype that would show how the user will navigate through the app to achieve their goals. The diagram above depicts the user launching the app, then either signing up and creating an account, or as a returning user who is signing in to their existing account. Since most users would want to get to studying right away, I designed the app to be easy to create an account. Users can either use their email, or sign up with their Google, Apple, or Facebook accounts.



This second user flow was designed to show how the user will navigate through the app to achieve their goals of learning new vocabulary. It was important as the designer to keep it simplified, so users can easily get to their desired lesson or course set without confusion or unnecessary steps. Users will see embedded onboarding UX so if they need guidance, it's there, but does not slow down their navigation or process.

I made several revisions to this map, as I discovered not every user would be interested in the same features. Rather than requiring steps, users have the option to customize and add features only if they wish.

### Wireframes

For this project, I created hand-drawn wireframes since this style is quick, efficient, and easy to make changes. Due to the limited time allowed for this project, they remained as sketches, rather than being implemented into digital prototypes. I found this process very helpful in allowing me to be creative and test different ideas without taking too much time.



After my first version, I implemented a few changes and improvements from a UX standpoint. My testers pointed out several issues which will be discussed in the Evaluation section below.

Overall, my users found the layout to be simple, easy to use, and intuitive. However, there were a few minor design flaws that caused confusion points. Examples of these were buttons being too small or too close to other objects, clutter or too much information on one page, or missing functions such as a confirmation page once a set was completed.

By listening to my users, I was able to make changes that drastically improved my design, and made the app easier to use. Fortunately because these were only sketches, the changes were easy to make and were ready to be transitioned to digital wireframes had time allowed.



While Buzzwords is still in the early stages of design, I am confident that users will find this application helpful, easy to use, and will allow them to learn a high volume of new vocabulary in an exciting way.

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### Findings

After completing the usability tests with my 3 participants, I found the following information regarding my application:

- Sign Up button was too small, hard to find
- Skip step button too close to "next"
- Lack of detail is confusing
- No account confirmation
- No info about Premium perks
- The "reset" and "try again" buttons are confusing for users
- Options to study set again, or find another set are not clear

The gathered feedback was collected into a usability report to organize the information and find similarities in my results. I ranked them by severity to identify which items should be handled first.

Based on the information collected, the following revisions were made to improve the overall design of the application Buzzwords.



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### Usability Test Plan

Scope: We are testing the process of signing up, signing in, uploading a new vocabulary set, and studying an existing vocabulary set in Buzzwords.

Sessions: 3 separate user sessions were conducted for the usability test, which were completed in ~10 minutes.

Schedule: 1 Session was held June 7th, 2021, while the remaining 2 were conducted on June 8th, 2021.

Equipment: 1 participant completed the testing session in person, while 2 participants completed the prototype testing on a video call. All participants used their own smartphones and were able to access the prototype using Marvel.

Metrics: This Usability Test was evaluated using Jakob Nielson's Error Severity Rating Scale.

0 = I don't agree that this is a usability problem at all

1 = Cosmetic problem only: need not be fixed unless extra time is available on project

2 = Minor usability problem: fixing this should be given low priority

3 = Major usability problem: important to fix, so should be given high priority

4 = Usability catastrophe: imperative to fix this before product can be released

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