Overview

This is a case study for the early development stages of my language learning app, Lexicon. In this case study I will be highlighting the User Research, User Personas and Low-Fidelity Wireframes as I apply the Design Thinking Process.

Project Brief

Role

I'm Jessica, the UX Designer & Project Manager

Timeline

2 weeks

Goals

- Discover what users want in a language learning app
- Create an initial iteration of wireframes
- Test initial wireframes and collect feedback for future iterations

Tools Used

- Figma
- Zoom
- Pen
- Pen & Paper

What is the Design Thinking Process?

Defining the Problem.

In order to better understand the problem that users face with language learning apps, we conducted interviews with potential users.

To read the script, click here.

Users

Adélia (Expat Mom)
- Bachelorette
- Lived in Portugal or worse, I am always attracted to cover from of technology!
- Interested in learning new languages through different methods
- Must-used apps: Google Translate, Duolingo, Reflectionary

"I do concisely try to learn new vocabulary"

Rangel (Gen Xer)
- Immersory Manager & Teacher
- Learns technology during a majority of his day-to-day interactions
- Must-used apps: Instagram, Twitter, TikTok

"I love endless scrolling"

Brittany (Gen Zer)
- Stay Stylish & Healthy Coach
- Uses technology for business purposes and for fun
- Must-used language-learning apps: Google Translate
- Must-used apps: Instagram, Snapchat, Tik Tok, Spotify, Bandcloud

"I only ever learned language out of books because I'm old"

Notes (from User's perspective)

Dating
- I am too busy to learn new words in my free time and I don't want to be tested on them
- I hate my actual dominant language
- I look up vocabulary when it is too late to use it anyway
- I Zone Out when my partner speaks their native language

Thinking
- I think vocabulary is easier to learn through applications
- I think learning a new language is conceptually fun and interesting
- I think learning new vocabulary is time-consuming, but very-time-consuming
- I believe technology is the future of educational means

Feeling
- I feel consistently connected to technology in one way or another
- I feel happy when using technology to connect and sharing with others through it
- I feel productive when I am able to multitask when using technology
- I feel motivated on my own when using a device structure

Persona.

With the research findings in mind, I was able to create a persona to represent the audience we wanted to cater to: individuals learning on the go.

Elizabeth
Age: 27
Occupation: CLL consul
Current: Freelance Dry Jewe Teacher & Competitor

"The normal ER presents the opportunity to mold into others' lives, immerse myself into other cultures, and make impression on those around me."

Needs and Goals:

Elizabeth wants to be able to use the app on the go. She needs a resource that is easy to pick up when she is able or needs to. Her goal is to become fluent in Portuguese while also being able to utilize other languages she knows and is able to learn in this environment.

Behaviors:

Elizabeth travels all over the world teaching in play seminars and competing in tournaments. She uses her phone regularly throughout her day, using social media for self promotion, but also wants to utilize those times to learn. She finds that she doesn't like when she structure, but is able, plan to pick up and drop her thread as needed with her long training, teaching and competing schedule.

Problem Statement:

Elizabeth needs a structured way to learn Portuguese on the go because she is constantly traveling for her career and interacting with students and teachers in Brazil.

We would know she is meeting what she has if Lexicon prompts mentioned:

Olá	Tchau	Bom dia	Como está?	Bem, obrigado
Hello	Bye	Good day/morning!	How are you?	Fine, thank you.

User Stories:

- As a consul, I want the option to learn new languages so that I can adapt and communicate in each new place I travel to
- As a teacher, I want the ability to communicate with my students so that the lessons are understood
- As a play practitioner, I want to expand my knowledge in Portuguese so that I can continue to learn from my athletic community

Hypothesis Statement:

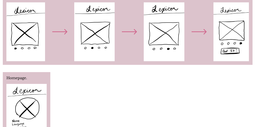
We believe that by rewarding notifications with enticing reminders to practice her common phrases, Elizabeth will be able to internalize and expand her fluency in Portuguese. This will be able to interact with her Brazilian students and teachers in a more multicultural way.

Low- Fidelity Wireframes.

After discussing the needs and goals of Lexicon users, wireframes were made with paper and pen.

Splash Screen.

Onboarding



Homepage.

Review Options.

Spelling Review.

Flashcard Review.

To try the interactive prototype, click here.

Usability Testing.

Users from Reddit participated in a one-group of users were given a specific list of tasks to complete within the app in order to test and gain feedback on their experience.

To read the introductory script, click here.

Direct Tasks

1. Create an account
2. Go through onboarding
3. Review vocabulary
4. Review 5 newly/ phrases to start quiz

Scenario Tasks

1. You want to be kind and want to learn some basic words and phrases so that you can interact with the locals while visiting. You download an app called "Lexicon" open the app and create an account
2. Now that you have made an account you want to learn a little bit about what this app will include
3. After getting a feel for what "Lexicon" has available, try to navigate your way to review options and study basic words and phrases
4. You have successfully reviewed 5 words and phrases in the app! Now that you've got it down, try to find a way to test your knowledge

Scope

Lexicon - vocabulary app

Schedule

Video calls on time allots for participants between March 5th-15th

Sessions

30 minute sessions with 2 participants

Equipment

Notes will be done through a browser using a link to my Marvel prototype

Metrics

0 – I dont 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

Notes

Erin
- Review
- Age: 20

Task 1 - Found it a little confused at first, but once/something pop-ups up it seems like making an account is pretty straightforward.

Task 2 - Onboarding was pretty straight forward, seem like it may only be definitely a quick start.

Task 3 - I would suggest making it a little more interactive, maybe instead of just flipping through the cards, you have to drag the card to the side if you know the word or drag it to the middle if you don't know the word. It's pretty easy and you're basically only left tapping the screen, which is fine, but it could be more fun to do. Maybe have you collect points or points that you can use to unlock more words or phrases or stuff. But with the spelling only everything is a little too easy, I think it would be more helpful if all the vocabs are in lowercase. It may actually make it harder, which is good.

Task 4 - I was able to click into the quiz mode, but I am not sure that I couldn't navigate to quiz.

Arlene
- Book Keeper/ HR
- Age: 60

Task 1 - Easy! Nothing seem to follow, easy to set up. Simple. I like when apps have the option for the sign in using Facebook.

Task 2 - Onboarding was straightforward. It seem to be a little too short and maybe could have used multiple learning styles.

Task 3 - Review options seem to be good for an person to be able to be engaged for all ways to learn. I like the option to review the words I've learned. I like how good and easy to bookmark an word. I like how there is a reminder button. On the speed learning process, I did like the option to review the words I've learned.

Task 4 Easy to maneuver and visually appealing.

Tyler
- Software Engineer
- Age: 29

Task 1 - Easy and straightforward, simple and without pop-ups.

Task 2 - Found myself a little annoyed that I couldn't navigate around the app while the flashcard or spelling. But for a short-term review, it was fine.

Task 3 - Overall good and easy to use, just wish it was harder to navigate to.

Task 4 - Quiz section is good.

Summary

Task	Observation	Severity	Recommendation
1	Creating an account is straightforward and User Friendly. Could use some clean up on the sign in screens.	0	In Figma/ Adobe design, I would like to see a cleaner mock up with clearer details and structure.
2	The topics of onboarding is easy to understand, and all users together better in higher fidelity prototypes.	1	Adding a video link to the onboarding screens for audio learners to elevate the experience.
3	Buttons for review need to be more distinct, and the Flashcards, Matching, and Spelling options are cohesive between review types.	2	Adjust flashcard and matching review options to be more distinct. Lexicon needs to be more cohesive in the review options per slide.
4	The quiz page looks good, but users want to be able to take the quiz after completing.	0	Further down the road, creating a link to a spacing function for users to go through.

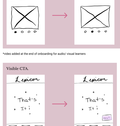
Improvements.

After carefully review feedback, the following adjustments were ade based off of the severity chart (above).

Onboarding.

**video added at the end of onboarding for audio/ visual learners*

Visible CTA.



**action added to make interaction areas more obvious*

Findings.

What's Next?

- High Fidelity Wireframes and Prototyping: extensive Design Thinking Process
- Adding extra review options: sentence structure, self-made flash cards, etc.
- Creating lesson segments and gamification with spoilers pinned to each
- Utilizing the "Explore" button: to augment learning on a real world level

Moral of the Story!

For this project, the user made most the impact on the "Ideif" of each design decision. Being able to apply the design thinking process made this a good learning experience on the iterative process of design. Lastly, great to try something out, gain perspective and practice writing an study for research and usability testing.

Improving for Future Projects

Pros of using the Design Thinking Process:
- Creating a user-friendly product
- Feedback is the number, and goal for each task
- Stress and mistakes are expected! there is always room for improvement

Cons of using the Design Thinking Process:
- Detail consumption is major: decreases room for interpretation and human error
- Creating rough drafts is necessary for each part of the process