Language App Application

Software Requirements Specification

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1. Introduction

Purpose

As globalization continues to connect everyone from different parts of the world, there is increasingly higher demand for individuals proficient in multiple languages. This is especially true in the United States as there are so many groups of people living in America. In 2023, the language learning industry was valued at 61.5 billion USD and is projected to grow annually at around 20%. Our team Dropshippers believe that we can tap into this market and create a successful product to help people learn languages in an engaging, simple, and most importantly free app. We want to create an app that appeals to beginners with simple minigames while also providing enough depth for more advanced users to enjoy the app as well. Our app will provide daily structured lessons to users so that they can learn the language one topic at a time instead of being overwhelmed with extra complexities.

Source: [Language Learning Market Size & Share | Growth Trends, 2024-2032 (gminsights.com)](gminsights.com)

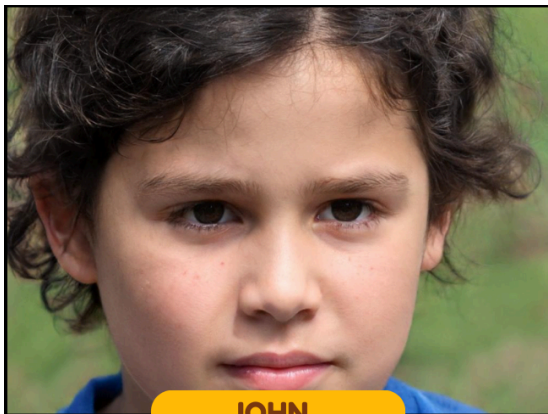Scope

This document will cover:

- The personas of potential users and stakeholders of our application

- Time, monetary, and technical constraints we face

- A description of our application and how it stands out from other apps already in the industry

- A competitive analysis of our competitors and how we plan to compete against them

2. Stakeholders

- Learners

  - University Students

  - PreK-12 Students

  - Any person who desires to learn a new language

- Tutors

Personas:

ROSIE TAYLOR

Rosie Taylor has been a Science teacher for sixth graders for over twenty years but she has recently retired due to her husband's promotion at his job. She has always enjoyed gardening and currently spends her free time tending to her collection of plants in her backyard.

Personal Info:

Gender: female
Age: 58
Location: Memphis, Tennessee
Occupation: Recently retired

Scenario:

Rosie is scrolling through TikTok when she comes across a video made by a Hispanic user. Unable to understand the video, this gives Rosie enough motivation to begin studying Spanish. When she looks up a language learning app on the App store, she sees LAA (Language app application) and she really likes the look and design of the app so she downloads it

Personality:

Communicative

Professional

Enthusiasm

Motivation:

- Rosie has always wanted to learn Spanish ever since she started dating her hispanic boyfriend Jose. She always felt left out when Jose and her would be spending time with Jose's family and she didn't understand what was going on. Now that she has retired and her kids have gone off to college, Rosie has all the time in the world to actually begin studying Spanish seriously. She knows a few words from being around Jose and his family but her level is still a beginner.

Goals:

- Gain enough fluency to be able to have conversations with others.
- Be able to understand Spanish from music and the radio.
- Understand the instructions from recipes and instructions on Spanish groceries

Frequency:

Everyday for 1-2 hours

JOHN TAYLOR

John is a 3rd grade student who just moved to San Diego for his fathers new job. He enjoys sports, movies, video games and ice cream.

Personal Info:

Gender: Male
Age: 8
Location: San Diego, California

Frustrations:

John dislikes having to sit in place for an extended amount of time. He wants an app that can be used as a supplement to his instruction in school rather than a replacement i.e he can use the app for around 30 minutes a day and not feel like he has accomplished nothing in that time.

Personality:

Communicative
Professional
Enthusiasm

Motivation:

Due to his family moving recently John has begun at a new school that offers multiple language immersion programs. John's parents feel he may be slightly behind and might need supplemental help in order to catch up to some of the other students who have already been in the immersion program for a year.

Goals:

- Gain a basic understanding of nouns and verbs in another language.
- Become fluent enough to introduce himself and have a very basic conversation with a fellow classmate or teacher.
- Continue to learn and improve on his chosen language with the use of supplemental help outside of the classroom.
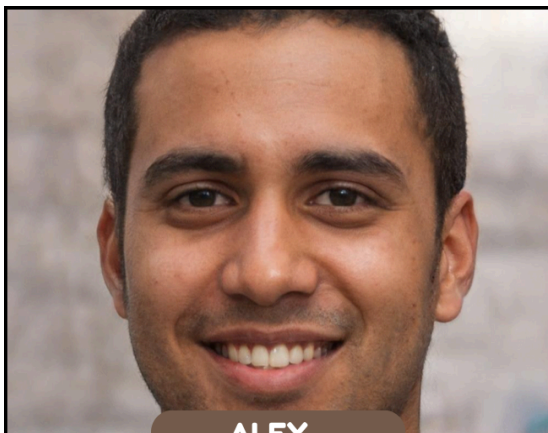
Frequency:

3-5 hours a week

ALEX MARTINEZ

Alex is a successful entrepreneur and business executive with over 15 years of experience in international trade and negotiations. Alex has built a global network of contacts and frequently travels between Europe, Asia, and Latin America for business deals. While fluent in English and Spanish, Alex is eager to learn additional languages to strengthen relationships with international partners and gain a competitive edge in the market.

Personal Info:

Gender: male
Age: 32
Location: Houston, Texas
Occupation: entrepreneur

Motivation:

- Business Success: Driven by the potential to close deals and expand business operations by breaking down language barriers.
- Personal Growth: Sees language learning as a way to grow personally and professionally, enhancing communication skills and cultural intelligence.

Personality:

Communicative
Professional
Enthusiasm

Challenges:

- Time Constraints: Limited time to dedicate to traditional language classes due to a demanding travel schedule.
- Retention: Concerned about retaining new vocabulary and phrases, especially when not using them frequently.

Learning Preferences:

- Practical Vocabulary: Focused on learning industry-specific terms and phrases related to finance, trade, and contract negotiations.
- Conversational Practice: Prefers interactive dialogues that simulate real-world business scenarios.
- Cultural Insights: Interested in tips on cultural norms, negotiation styles, and polite expressions in different languages.

Goals:

- Language Proficiency: Alex wants to achieve conversational fluency in languages like Mandarin and German to negotiate deals and communicate more effectively with partners in China and Germany.
- Cultural Understanding: Beyond just language, Alex aims to understand cultural nuances and business etiquette to navigate international meetings smoothly.
- Efficiency: With a busy schedule, Alex is looking for a language learning tool that can be integrated into daily routines, such as during flights, in between meetings, or while commuting.

Frequency:

Everyday for 1-2 hours

3. Constraints

Time Constraints

- The project must be completed before early December.

Monetary Constraints

- We have a budget of $0 for this project.

Technical Constraints

- The project must be written in Java
- The project must be accessible for users on PC, mobile and laptop devices
- The project will not include a voice to text option

4. Overall Description

The main objective for this app is to allow users to educate themselves on another language. The app will allow users to go through short lessons on different topics in a chosen language. It will also allow for users to answer questions in both English and the chosen language (Does not account for hardware restrictions). The user will be able to choose between various different types of lessons. Some examples of these lessons include matching games, Q&A, etc.

5. Competitive Analysis

Here's a competitive analysis of three popular language learning platforms: Duolingo, Babbel, and Busuu. This analysis will focus on their strengths, weaknesses, and target audience or focus areas.

1. Duolingo

Strengths:

- Gamified Learning Experience: Duolingo uses a highly engaging, game-like interface with points, streaks, and levels, which keeps users motivated and makes learning fun.
- Free Access: Duolingo offers a robust free version, making language learning accessible to a wide audience without any cost barrier.
- Wide Language Selection: Duolingo supports a vast range of languages, including less commonly taught languages like Welsh and Hawaiian.
- Bite-Sized Lessons: Lessons are short and designed to fit easily into daily routines, making it easier for users to practice consistently.

Weaknesses:

- Limited Depth: While great for beginners, Duolingo may not provide the depth or advanced content needed for achieving fluency, particularly in complex grammar or conversational skills.

- Ads in Free Version: The free version includes ads, which can disrupt the learning experience.

- Repetitiveness: The app's repetitive nature can lead to boredom for some users, particularly those at intermediate levels.

Audience/Focus:

- Casual Learners: Ideal for beginners or those looking to learn a language for fun or travel.

- Gamification Enthusiasts: Appeals to users who enjoy gamified experiences and need a fun way to stay motivated.

- Budget-Conscious Learners: Perfect for users who want to learn a language without spending money.

2. Babbel

Strengths:

- Structured Lessons: Babbel offers well-organized, curriculum-based lessons that build on each other, making it easier for users to progress systematically.

- Focus on Practical Conversations: Babbel emphasizes real-life dialogue and phrases, helping users learn how to navigate everyday situations in the target language.

- Grammar Explanations: Babbel includes detailed grammar explanations within its lessons, which is beneficial for users who want to understand the rules of the language they're learning.

- Multiple Proficiency Levels: Babbel caters to learners at various stages, from complete beginners to intermediate learners.

Weaknesses:

- Subscription Required: Babbel is a paid service with no free tier, which might deter users who are looking for free options.
- Limited Language Selection: Compared to Duolingo, Babbel offers fewer languages, focusing mainly on popular languages like Spanish, French, and German.
- Less Engaging: The learning experience is more traditional and less gamified, which might not appeal to users who prefer a more interactive approach.

Audience/Focus:

- Serious Learners: Best suited for users who are committed to learning a language thoroughly and are willing to invest in a structured program.
- Professionals and Travelers: Ideal for those who need to learn a language for work or travel and require practical conversational skills.
- Grammar Enthusiasts: Appeals to users who want to understand the language's grammar in detail.

3. Busuu

Strengths:

- Community-Based Learning: Busuu integrates a social component, allowing users to practice with native speakers and receive feedback, enhancing the learning experience.

- Personalized Learning Plans: Busuu offers personalized study plans based on the user's goals, making the learning process more efficient and tailored.

- Certifications: Busuu partners with McGraw-Hill Education to offer language proficiency certificates, which can be useful for professional or academic purposes.

- Offline Mode: Lessons can be downloaded for offline use, making it convenient for users who are frequently on the go or have limited internet access.

Weaknesses:

- Premium Subscription: While Busuu offers a free tier, most features, including the community interaction and personalized plans, require a paid subscription.

- Limited Free Content: The free version is quite limited compared to competitors like Duolingo, which might not be sufficient for serious learners.

- Less Gamification: Busuu's approach is more traditional, lacking the gamified elements that might engage users who prefer that style of learning.

Audience/Focus:

- Social Learners: Ideal for users who benefit from interaction with native speakers and peer feedback.

- Goal-Oriented Learners: Suited for users with specific language goals, such as earning a certification or achieving fluency for professional reasons.

- Frequent Travelers and Busy Professionals: The offline mode and personalized plans are particularly useful for users with busy schedules who need flexible learning options.

<u>Summary</u>

Each of these language learning platforms has its unique strengths and caters to different types of learners:

- Duolingo is best for casual learners who enjoy a fun, gamified experience and want a free or low-cost way to start learning a language. It's perfect for beginners but may lack the depth needed for advanced learners.
- Babbel offers a more structured and practical learning experience, making it ideal for serious learners and professionals who need to learn a language for real-life use. However, it requires a subscription and offers fewer language options.
- Busuu stands out for its community-based learning and personalized study plans, making it suitable for users who prefer social interaction and tailored learning paths. Its premium features are valuable, but the free version is limited.

Choosing the right platform depends on your learning style and goals—whether you're looking for a gamified experience (Duolingo), a structured course with practical dialogues (Babbel), or a community-driven, personalized approach (Busuu). Our aim with this program is to look at all of these apps as an example in order to create a platform that limits some of the negatives and downsides that these programs possess while simultaneously adding upon the best attributes we believe these programs have . One main takeaway from each app is their structured lessons, this is a great way to immerse and engage a user into a lesson. Each app does this differently but they all do effectively the same thing, get a user to learn a specific topic rather than overwhelming them with too much information. Another takeaway from our research is the importance of

access, with our project having a budget of $0 we understand the importance of accessible software and want our program to be cost free and ad free. This will allow for users to be fully immersed in the program and not have to worry about opening their wallet or having their lessons interrupted by ads. We feel duolingo has the best structure to accommodate all types of learners and want to keep that in mind during development. It is the best at the difficult task of getting the user to want to learn, which we feel is the most important aspect of a program designed for the user to learn.