

Product Requirements Document (PRD) for Language Learning AI Game

Product Vision

This is for individuals passionate about learning new languages, also for those who seek an interactive and engaging way to enhance their language skills, the Language Learning AI Game is a language education platform that combines immersive gameplay with personalised AI-driven learning, unlike traditional language learning apps, our product provides a dynamic and entertaining learning environment that adapts to the user's progress.

Long-term Mission: This product aims to revolutionise language education by making it more engaging and easy to use through gamification and AI technology, thereby, helping users achieve fluency in their chosen languages.

Background

Industry Overview: The global language learning market has been experiencing significant growth, driven by globalisation, travel, and the increasing importance of multilingual skills in the professional world. The integration of AI and gamification in education is becoming popular in offering personalised and engaging learning experiences.

User Benefits:

- Enhancing language skills through interactive learning.
- Personalised learning paths driven by AI.
- Increased motivation and engagement through gamification.
- Convenient and flexible learning schedule.

Market Availability:

- Competitors like Duolingo, Babbel, and Rosetta Stone dominate the market with traditional language learning apps.
- These platforms offer structured courses but often lack interactive and immersive elements.

reference: https://www.reportlinker.com/market-report/E-Learning/425880/E-Learning?term=elearning%20trends&matchtype=b&loc_interest=&loc_physical=9198752&hsa_acc=9351230540&hsa_cam=15072746546&hsa_grp=131203485358&hsa_ad=565342522997&hsa_src=s&hsa_tgt=kwd-934740783577&hsa_kw=elearning%20trends&hsa_mt=b&hsa_net=adwords&hsa_ver=3&qad_source=5&qclid=EAlaIqObChMliva8gNuWhwMV_YpoCR0TjwDFE_AAYASAAEqK0ifD_BwE

Importance of the Solution: Our solution will address the need for a more engaging and adaptive language learning experience, leveraging AI to provide personalised feedback and gamification to maintain user motivation.

Problem Statement

Problem Description: Traditional language learning methods often fail to engage users and adapt to their individual learning pace and preferences. This results in low retention rates and limited progress. Our product aims to solve this by providing an immersive and interactive learning environment that adjusts to each user's needs.

reference: <https://typeset.io/questions/what-are-the-drawbacks-of-traditional-language-teaching-1jsv3f8x99>

Target Users: Students, travellers, professionals, and language enthusiasts aged 16 and above.

Goals/Objectives

Objectives:

- Develop an AI-driven language learning game that adapts to user progress.
- Create an engaging and interactive learning environment through gamification.
- Achieve high user retention and satisfaction rates.

High-Level Overview of Success:

- High user engagement and retention.
- Positive user feedback and improved language proficiency.
- Significant user base growth within the first year.

Assumptions/Hypothesis

Assumptions:

- Users prefer interactive and gamified learning experiences over traditional methods.
- AI can effectively personalise learning paths and provide useful feedback.
- The target market is willing to invest time and money in an innovative language learning solution.

Hypotheses:

- If the game is engaging and adaptive, users will be more likely to stick with the program and achieve language proficiency.
- Gamification elements will increase user motivation and progress rates.

User Personas

Persona 1: Student



- **Age:** 18-24
- **Goals:** Improve language skills for academic purposes.

- **Pain Points:** Finds traditional methods boring and unengaging.
- **Key Behaviours:** Spends significant time on mobile games and educational apps.

Persona 2: Traveller



- **Age:** 25-35
- **Goals:** Learn basic conversational skills for travel.
- **Pain Points:** Needs quick and practical language learning solutions.
- **Key Behaviours:** Frequently travels and uses mobile apps for learning on the go.

Persona 3: Professional



- **Age:** 30-45
- **Goals:** Achieve proficiency for career advancement.
- **Pain Points:** Struggles to find time for language learning.
- **Key Behaviours:** Prefers flexible learning schedules and bite-sized lessons.

Persona 4: Enthusiast



- **Age:** 16-60
- **Goals:** Enjoys learning new languages as a hobby.
- **Pain Points:** Seeks engaging and fun learning methods.
- **Key Behaviours:** Regularly engages with educational content and games.

Key Features/Functionalities

Features:

- **AI-Driven Learning Paths:** Adaptive learning that adjusts to the user's progress.
 - **User Stories:** As a user, I want the AI to adjust the difficulty of tasks based on my performance, so I stay challenged but not overwhelmed.
 - **Acceptance Criteria:** The AI successfully adjusts the learning path based on user interactions and progress metrics.

- **Interactive Exercises:** Gamified tasks and challenges.
 - **User Stories:** As a user, I want interactive exercises that make learning fun and engaging.
 - **Acceptance Criteria:** Users can complete interactive exercises and receive immediate feedback.
- **Progress Tracking:** Detailed analytics on user performance.
 - **User Stories:** As a user, I want to track my progress and see how far I've come.
 - **Acceptance Criteria:** Users can view their progress through visual reports and analytics.
- **Multilingual Support:** Multiple languages available for learning.
 - **User Stories:** As a user, I want to choose from a variety of languages.
 - **Acceptance Criteria:** Users can select from multiple languages and switch between them seamlessly.
- **Social Features:** Leaderboards and peer interactions.
 - **User Stories:** As a user, I want to compete with friends and see how I rank.
 - **Acceptance Criteria:** Users can participate in leaderboards and interact with peers.

Reference: <https://linkupst.com/blog/ai-app-development>

Core UX Flow

Entry Point:

- **Home Screen:** Users log in or sign up, choose a language, and set learning goals.

Steps to Completion:

- **Interactive Lessons:** Users complete daily interactive lessons and exercises.
- **AI Feedback:** The AI provides feedback and adjusts the learning path.
- **Progress Updates:** Users receive regular updates on their progress.

Final Step:

- **Achievements:** Users unlock achievements and rewards as they advance.

Example:

- **Wireframe:** Users start at the home screen, select a lesson, complete the exercises, receive feedback, and view their progress report.

Success Metrics

KPIs:

- **User Engagement:** Daily active users (DAU) and session duration.
- **User Retention:** Monthly retention rate.
- **User Satisfaction:** User ratings and reviews.

- **Learning Outcomes:** Improvement in language proficiency as measured by in-app assessments.
- **Growth Metrics:** Number of new users and market penetration rate.

Targets and Timeframe:

- **First Year:** Achieve a 50% monthly retention rate and a DAU of 10,000 users.
- **User Ratings:** Maintain an average rating of 4.5 stars.
- **Proficiency Improvement:** 70% of users show measurable improvement within three months.

reference: <https://openfieldx.com/choose-ux-metrics-for-edtech-product/>

Roadmap

Short-Term Goals:

- **MVP Launch:** Release a Minimum Viable Product with core features (AI-driven learning, interactive exercises).
- **User Testing:** Conduct user testing to gather feedback and make improvements.

Long-Term Goals:

- **Feature Expansion:** Add more languages, advanced AI functionalities, and social features.
- **Market Expansion:** Target new demographics and increase market penetration.

Timeline:

- **Month 1-3:** Development of MVP.
- **Month 4-6:** User testing and initial launch.
- **Month 7-12:** Feature expansion and market growth.

Marketing Channel

Channels:

- **Educational Partnerships:** Collaborate with schools, colleges, and language institutes to offer the game as part of their curriculum.
- **Influencer Marketing:** Partner with language learning influencers and YouTubers to promote the game.
- **Content Marketing:** Create engaging content (blogs, videos) about language learning and AI.
- **Email Campaigns:** Targeted email campaigns to potential users and existing customers.
- **Webinars and Workshops:** Host webinars and workshops to demonstrate the game's features and benefits.

Example:

- **Influencer Marketing:** Partner with a popular language learning YouTuber to create a series of videos showcasing the game's features and how it helps in language acquisition.

reference: <https://www.thinkorion.com/blog/digital-marketing-strategies-for-edtech-business>

Product Development Stages

Boilerplate:

- **Purpose:** Establish the basic framework and core functionalities.
- **Value to Customer:** Provides a foundational structure for the game, ensuring stability and scalability.

MVP (Minimum Viable Product):

- **Purpose:** Launch with essential features to gather user feedback.
- **Value to Customer:** Offers users a functional product to start their language learning journey and provide feedback for improvements.

V1 (Version 1):

- **Purpose:** Full feature release with advanced functionalities.
- **Value to Customer:** Delivers a comprehensive learning experience with enhanced AI capabilities and interactive elements.

Resources Needed

Human Resources:

- **Developers:** For coding and technical implementation.
- **AI Specialists:** To develop and refine the AI algorithms.
- **UX/UI Designers:** To design the user interface and experience.
- **Content Creators:** For creating language learning materials and interactive content.

Technical Resources:

- **Servers:** For hosting the application.
- **Development Tools:** IDEs, design software, and testing tools.
- **Marketing Tools:** For managing campaigns and analysing metrics.

Financial Resources:

- **Initial Investment:** For development and marketing.
- **Operational Budget:** For ongoing expenses such as salaries, server costs, and marketing.

Revenue Monetization

Revenue Streams:

- **Subscription Model:** Monthly or yearly subscriptions for exclusive features.
- **In-App Purchases:** Additional language packs, exclusive content, and customization options.
- **Advertisements:** In-app ads for non-subscribers.
- **Partnerships:** Collaboration with schools, colleges, and educational enthusiasts/investors.