El Chicos Worldwide Spanish Learning Application

Software Requirements Specification

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El Chicos

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1. Introduction

Purpose

The world is estimated to have 8.1 billion people. With more than 40% of the world only being able to know one language, the demand for multilingual people is always high throughout the world. Learning a new language can seem to be very challenging, time consuming, and stressful. That is why we want to create a website/application that prevents people from having a language barrier. Our application will have an easy-to-use interface that allows users to see all the options for selecting a language that they want to learn and provide them with a variety of simple and proficient ways to learn their preferred language. It will have comprehensive curriculums, interactive exercises, and practice sessions based on individual learning styles and progress to best tailor the user.

2. Stakeholders

Professionals
- Business professionals
- Healthcare workers

Students

- High School
- College

Government and public sector

- Government agencies
- Public service providers

Corporate Training programs

- Human resource department
- Corporate learning and development

Personas

Maria

age: **30**
residence: **Miami, Florida**
education: **Bachelors Degree**
occupation: **Marketing Coordinator**
marital status: **Single**

"I value learning languages as a bridge to both professional success and personal enrichment, seeing it as the key to unlocking meaningful connections and new opportunities in my journey."

Maria Rodriguez is a 30 year old marketing coordinator who lives in Miami, Florida. She has been considering learning Spanish for a while due to her job in a multicultural city with a significant Spanish-speaking population. Her primary motivation is to enhance her career opportunities, as bilingual employees are highly valued in her field. Additionally, Maria has a personal interest in connecting more deeply with her Spanish-speaking friends and colleagues, and she enjoys traveling and experiencing different cultures.

Comfort With Technology

INTERNET

SOFTWARE

MOBILE APPS

SOCIAL NETWORK

Criteria For Success:
Professional advancement and personal enrichment

Needs
- The app must have easy to learn information
- The app must work for Spanish
- The app to track progress and set achievable milestones
- The app to have interactive exercises that include speaking, listening, and writing to practice all aspects of the language

Wants
- To achieve conversational fluency in Spanish, enhance career opportunities, and connect with the local Spanish-speaking community
- To be able to hold conversations in Spanish with confidence, both in her professional and personal life

Values
- Consistencey
- Adaptability
- Time management

Fears
- Campaign failures
- Missed deadlines
- Technical challenges

Dario E. Warner

age: **24**

residence: **944 Walnut Street Hattiesburg, MS 39402**

education: **Associates in Software Engineering**

occupation: **Staff Software Engineer**

marital status: **Single**

"I'm so excited to visit my family in Argentina next summer! I need to brush up on my Spanish skills."

Dario travels to South America every two years to visit distant family. His first language is English and know a little Spanish from his grandparents which lives in Argentina. He really wants to improve his Spanish to impress his family next year.

Comfort With Technology

INTERNET

SOFTWARE

MOBILE APPS

SOCIAL NETWORK

Criteria For Success:

To set a end-goal and surpassing that waypoint. He's a overachiever.

Needs

- Review how to describe activities in Spanish.
- He also has to talk about free time and form the present tense.

Wants

- He wants to carry a full conversation in Spanish.
- Wants to explore the towns in Argentina and ask for directions in Spanish.
- Eat in a formal restaurant with family and read the menu fluently.

Values

- His degree in Software Engineering.
- His job.

Fears

- Small spaces.
- Feel like a failure.
- Won't be able to understand Spanish next year.

Robert J. Green

age: **64**

residence: **4041 White Oak Drive Kearney, MO 64060**

education: **DOCTOR OF BUSINESS ADMINISTRATION**

occupation: **Retired Doctor**

marital status: **Married**

"My retired life is getting a little boring. I might learn a foreign language to pass the time."

Robert J. Green just retired from working as a doctor after 42 years. He always wanted to learn another language but couldn't committed the time due to his profession. After two years of being retired, Green decided to download a language learning program.

Comfort With Technology

INTERNET

SOFTWARE

MOBILE APPS

SOCIAL NETWORK

Criteria For Success:

To set a set of tasks for a day and complete it

Needs

- To complete certain activity to be satisfied .
- To have fun while learning the language.
- Accessibility for the app; bigger font size and easier to read.

Wants

- Successfully converse with Spanish people in their native language.
- Talk about his profession in Spanish.
- Brag about learning another language to his friends.

Values

- His free-time
- His family

Fears

- To offend anyone by saying something wrong.

3. Constraints

Time Constraints

- This project is to be completed within two weeks.

Monetary Constraints

- This project's development has been allocated a budget of 0$.

Technical Constraints

- The code must be done in visual studios.
- The website must be accessible on a variety of different devices including PC, mobile devices, and laptops.

4. Overall Description

This app must be accessible to users across the entire world. Users will be able to access this app from their mobile devices, laptops, and PC. The app will collect a variety of data to enhance user experience, track progress, and improve effectiveness of their learning process worldwide. The user will be given three options to decide on what level of difficulty that they would want to start on (Beginner, intermediate, advanced). The application will contain a database of personal info, activity tracking, interaction data, feedback and ratings, communication data, personalization data, location, behavioral data, voice recognition data, and data usage and privacy considerations.

5. Business Use Cases
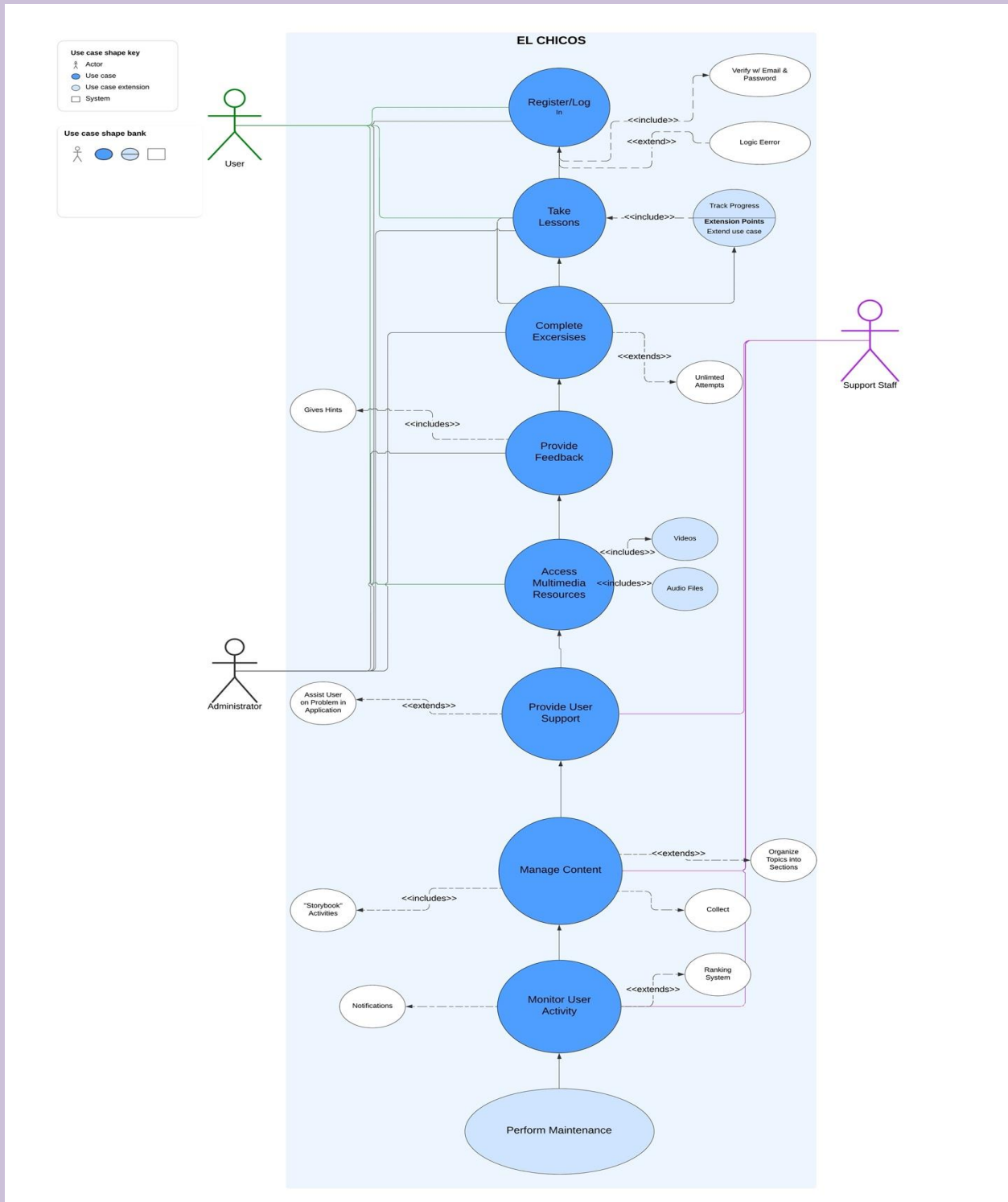
6. Functional Requirements

[Software Requirements Spreadsheet - Google Sheets](#)

Feature 1: Register/Login

Requirement 1.1 The program shall allow users to create an account or log in.

Rationale: Essential for users to access personalized features and track their learning journey.

Priority: High

Feature 2: Complete Exercises

Requirement 1.1: The program shall allow users to practice through exercises and quizzes.

Rationale: Allows the user to have a better learning development.

Priority: High

Feature 3: Track progress

Requirement 1.1: The program shall allow users to view their learning progress.

Rationale: The program shall allow users to view their learning progress.

Priority: High

Feature 4: Provide User Support

Requirement 1.1: The program shall have a support staff to assist with user issues.

Rationale: Allows users to get quick help when facing difficulties with the app.

Priority: High

Feature 5: Solo or Group?

Requirement 1.1: Allows the app to know the user's preference.

Rationale: Allows the app to know the user's preference.

Priority: Medium

Feature 6: Access Multimedia Resources

Requirement 1.1: The program shall allow users to engage with audio and video resources.

Rationale: Enhances learning through varied formats like audio and video.

Priority: Medium

Feature 8: Manage Content

Requirement 1.1: The program shall allow administrators to create and update learning materials.

Rationale: Gives the user a better learning experience.

Priority: Medium

Feature 9: Monitor User Activities

Requirement 1.1: The program shall allow administrators to track user engagement and activity

Rationale: Enables users to monitor their learning progress, set goals, and stay motivated.

Priority: Medium

Feature 10: Ranking

Requirement 1.1: The program shall reward the user for their progress with a ranking system.

Rationale: Motivates the user to continuously use the app.

Priority: Medium

Feature 11: Provide Feedback

Requirement 1.1: The program shall allow users to give feedback on the app's content and functionality.

Rationale: Allows the administrators to know whether there needs to be a change in the app.

Priority: Medium

Feature 12: Question types

Requirement 1.1: The program shall present users with a sentence containing one or more missing words. The program shall present users with 4 or 5 options to select from.

Rationale: Allows users to understand the mechanics behind each question.

Priority: High

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7. **Non-Functional Requirements**.

Look and feel requirements
- Colors
- Layout
- Typefaces

Usability requirements
- User Interface
- Accessibility

Performance requirements
- Response time
- Load Time
- Concurrency

Maintainability and support requirements
- Code quality
- Modularity

Security requirements
- Data Protection
- Authentication
- Privacy

Cultural requirements
- Language support
- Cultural adaptation

Legal Requirements
- Data Protection and Privacy Laws
- Intellectual Property Laws
- Consumer Protection Laws

8. Definitions and Acronyms

- Concurrency: The app should handle at least 1,000 concurrent users without performance degradation
- Code quality: The app's code should be well-documented and follow best coding practices to facilitate easy maintenance and updates
- Modularity: the app should be designed with modular components to allow for easier updates and feature additions

9. Competitive Analysis

	Duolingo
Strengths	• Gamified Learning: Uses game-like features to make learning engaging and fun. Includes levels, points, and streaks to motivate users. • Free Access: Offers a robust free version with an option for a premium subscription that removes ads and provides additional features. • User-Friendly interface: Easy-to-use design suitable for all ages.
Weaknesses	• Limited depth: Focuses on basic and intermediate levels, which might not be sufficient for advanced learners. • Repetitive content: Some users find the repetitive nature of exercises monotonous over time. • Grammar focus: Minimal focus on in-depth grammar explanations.

Audience/Focus	• Casual Learners: Ideal for beginners and casual learners who want a fun, interactive way to learn Spanish. • Budget-Conscious Users: Appeals to users who prefer free or low-cost educational tools.
	Rosetta Stone
Strengths	• Immersive Method: Emphasizes immersion and contextual learning through visual and auditory cues, which helps in developing natural language skills. • Speech recognition: Includes advanced speech recognition technology to improve pronunciation. • Comprehensive Curriculum: Offers extensive content across different proficiency levels.
Weaknesses	• Cost: More expensive compared to other platforms, with a high subscription fee. • Less Interactive: May be perceived as less interactive compared to gamified platforms. • Limited Grammar Explanation: Less focus on explicit grammar instruction, which can be a drawback for some learners.
Audience/Focus	• Serious Learners: Targets users looking for an immersive and comprehensive learning experience, often with a higher budget. • Pronunciation focus: Ideal for those who want to improve their pronunciation and conversational skills.
	Babbel
Strengths	• Affordable: Pricing is relatively affordable compared to other competitors • Real-Life Conversations: Includes dialogues and exercises based on real-

	life scenarios, which helps in practical language application. • Structured Lessons: Offers well-structured lessons with a clear focus on grammar, vocabulary, and practical language use
Weaknesses	• Less Emphasis on speaking: While there are speaking exercises, they may not be as extensive as other platforms. • Repetitive exercises: Some users may find the exercises repetitive and less engaging over time. • Limited free content: The free version is very limited, and users need to subscribe to access full features.
Audience/Focus	• Practical Use: Appeals to those interested in practical language skills and real-life application. • Intermediate learners: Suitable for learners who have a basic understanding of Spanish and want to deepen their knowledge.

	Strengths	Weaknesses	Focus
Duolingo	• Gamified learning • Free option	• Focuses on basic and intermediate levels. • Repetitive content	• Budget-Conscious users • Casual learners
Rosetta Stone	• Comprehensive curriculum • Speech recognition	• Cost • Less interactive	• Serious learners • Pronunciation focus
Babbel	• Affordable • Real-life conversations	• Limited free content • Repetitive exercises	• Intermediate learners • Practical use

Competitive Analysis Summary

To effectively position our Spanish learning software, we will combine strengths from competitors while addressing their weaknesses, such as providing advanced content and engaging speaking practice. After analyzing our competitors, we realize that we must cater to both beginners and advanced learners with tiered content and features. We're prepared to offer our customers a compelling free version with premium options that deliver added value. We plan on back tracking into our app to incorporate gamification and interactive elements to boost user engagement and satisfaction. To better improve our app constantly were going to provide features for interaction with native speakers and continuous improvement based on user feedback. Therefore, by strategically addressing these areas, we can create a unique, appealing product that stands out in the competitive landscape of Spanish learning apps.

10. References

https://blackboard.sc.edu/ultra/courses/_1277509_1/outline/file/_22724238_1

11. Appendices

https://blackboard.sc.edu/ultra/courses/_1277509_1/outline/file/_22724238_1

Link to Spreadsheet:

https://docs.google.com/spreadsheets/d/16rp0IoXXdxK3cuXC7kRWrJIVK3t5xeL5N5innzbTjlg/edit?gid=0#gid=0