Project LinguaLeap's Project Plan Coffee Coders Saira Khan, Chris Gallicchio , Mathew Curto 2/22/2023

CMP 280 Software Engineering
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Introduction

Scope and purpose of document

In this document we explain our project goals and the problem that we are providing a solution to. We explain what makes our application different from our competitors and how our application is beneficial to those wanting to casually learn a language in a way that can fit a busy schedule. Our general purpose is to provide a fun, accessible, and user-friendly experience to those who have always been intrigued by language but did not know where to begin. With lingua we are hoping to provide that to the public.

Overview wise, our app will provide a way for users to casually learn language on the fly in small portions that can cater to anyone's lifestyle. It will provide a platform to users who really want to dive in and spend hours a day mastering a new language, or simply cater to those who would like to learn in small chunks during their free time; Whether it be a 15 minute coffee break or just a check in for the daily word of the day. Our app will provide an interactive interface that has audio outputs for pronunciation and user audio and text inputs to master spellings, pronunciations, and grammar techniques of other languages. (C.G)

System Scope

Problem/Opportunity Description

The goal of LinguaLeap is to provide a language learning app that makes it easy and enjoyable for users to learn a new language. We recognize that learning a new language can be challenging and time-consuming, and we aim to solve this problem by creating an app that uses simple but engaging teaching methods. In the current industry, there are many apps that teach numerous languages in a generic way. It is very roboticized. However, we believe that teaching a human language should be different from teaching a computer language. Thus, our app will make an effort to give an experience that is different from the competition. (S.K)

As part of that effort we will be having the community dictate the quality of life changes that will come with updates to the app in the future. While also giving users the ability to make individual changes to the app as they see fit. We'll do this by making sure we pay close attention to the community for the app whilst engaging with the feedback we receive. (M.C)

Anticipated Business/Personal Benefits

<u>Achieve:</u> We hope that by creating this application that users will be able to have a more positive learning experience in comparison to other language learning apps. This will be

achieved by having the app be more personalized to the user by allowing them to choose how they want to approach various lessons. We hope that by having this be one of the quality aspects of the app that LinguaLeap will stand out from competitors.(M.C)

Benefits to user: Users will be able to add extensions to the app as a way to add extra functionality. The app will do a better job of helping the user with pronunciation by comparing how they pronounce words with how native speakers sound. Users will be able to move at their own pace by choosing how in depth they want to study certain parts of the language they choose such as reading, writing, pronunciation, and grammar. (M.C)

System Capabilities

i. Grammar

1. Structure of Language; shows users how to sound out words in a familiar way.

ii. Audio

- 2. Listening Comprehension (Pre-record voice); allows user to hear the way to pronounce words.
- 3. Correct Pronunciation; sounds out the words and allows user to mimic
- 4. Inputs for speaking; user pronounces to the app and app provides feedback by cross checking against an audio file
- 5. Storage of User Voice; keeps users inputs for progression checks

iii. User Inputs

- 6. Text; user can spell out words to familiarize themselves with writing in new language
- 7. Audio; see inputs for speaking

iv. Daily notifications

- 8. Word of the day; will present the user with a new word to learn each day
- 9. Reminder to check app/practice; pushes user to use the app on a daily basis
- 10. Friends progress; will show users how they compare to their friends progress daily.

(M.C & C.G.)

System Context (M.C & S.K)

Schedule (S.K)

Staff Organization

The team leader for our project is Saira, who handles keeping everyone on track with deadlines and ensuring that everyone is doing their assigned work. Our team has a strong structure, with each member having specific responsibilities. For example, Chris handles Github, Mathew handles Trello, and Saira handles Google Drive. We primarily communicate through

text messages, and we check in once a week to discuss our progress. Tasks are assigned based on each member's strengths, and we also take into consideration their schedules to avoid any conflicts. Our team leader is responsible for ensuring that everything is done on time and keeping everyone accountable. We set earlier deadlines for ourselves to avoid any last-minute issues. Going forward, we are constantly looking for ways to improve our organizational structure and communication channels to ensure that we continue to work effectively as a team. (S.K)

Tracking and control mechanisms

To track changes to this document, we will use version control software. This will allow us to track the changes made to the document and easily revert to an earlier version if needed. We will also make use of comments and annotations in the document to track specific changes or suggestions made by team members. In terms of monitoring progress on tasks, we will have regular meetings to discuss each task's status and any issues that need to be addressed. These meetings will also be an opportunity for team members to supply updates on their progress and share any challenges they are facing. Additionally, we will use groupware such as Trello to keep track of tasks and their statuses. This will allow us to monitor progress on tasks in real-time and ensure that we are on track to meet our project goals and deadlines. We will also make use of shared documents and project management tools such as Google Drive to keep all our documents in-sync and up to date. This will ensure that everyone is working with the most current versions of documents and that there are no inconsistencies or miscommunications. Overall, our goal is to use a combination of tools and techniques to ensure that we are effectively tracking changes and progress on tasks and that we can work together efficiently and effectively tracking changes and progress on tasks and that we can work together efficiently and effectively as a team. (S.K)