Project Pitch

Group 61

Team

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Overview

Our project is aimed at developing a software solution dedicated to language learning. It will encompass the essential functionalities necessary for efficient language acquisition. Additionally, we plan to integrate a suite of features designed to gamify the learning experience, thereby making it more engaging for users. Following slides will more deeply embark on:

- Basic functionality
- Main type of users
- Customization/Extensions
- Features

Basic functionality

- Our software implementation will have a simple GUI, that will be used to navigate the user throughout the application and enhance their learning experience
- Onboarding users and determining their starting level
- Creating/Modifying/Removing levels
- Importing/Exporting levels
- Gamified way of learning, rewarding users for persistence
- Overview of users learning statistics

Users

- Based on statistics indicating that most of the users are aged between 18 to 34 years old, our GUI will be therefore tailored to appeal to younger users
- As the majority of users' first language is English, our software implementation will use English as language of instruction
- Given that the majority of users are from the United States of America, we will adhere to US grammar standards in our software implementation
- These decisions were made after analysing data from: https://www.usesignhouse.com/blog/duolingo-stats

Customization/Extensions

- Learning a language isn't just about acquiring new words and using them; it also involves adapting to the sound of the language. Therefore, we will implement a feature that allows users to listen to the words they have just learned
- Learning a new language from the beginning might be unnecessary in case you already possess basic knowledge. To avoid this, we will implement a feature which will assess your knowledge before you start learning.

Feature 1

Name: Manage levels

Description:

Users should be able to create, update, and delete levels. These are divided based on difficulty, which is determined by the performance of the user on the levels. Failing a level increases its difficulty.

They can also perform these operations on individual flashcards and their accompanying solutions.

Champion: Ties Schasfoort

Feature 2

Name: Learning Mode

Description: The user can start levels and progress across their corresponding flashcards on a step-by-step basis with gamification elements. These elements include points earned by completing levels, as well as achievements for completing certains "tasks", for example earning a set amount of points, completing a set amount of levels, etc.

Champion: Michal V. Luptak

Feature 3

Name: Persistence

Description:

Levels and flashcards will be persisted as JSON files

Exporting/Importing from a predefined folder will be possible

Champion: Tomas Busa

Feature 4

Name: Smart Review

Description:

An overview of completed achievements, tracking the users learning progress

Champion: Samuel Sameliak

Feature 5 (bonus)

Name: Play the pronunciation

Description: When learning a new language, learning how words are pronounced is just as important as learning how they're written. Without learning the proper pronunciation you won't be able to communicate in the language you're learning in person properly. Therefore, we implemented a feature so you can learn exactly how to pronounce any word in the flashcard.

As for the implementation, we will use Merriam-Webster's API to pull the pronunciation of the word to be able to play it back to the user. We will only support Spanish. A user will be able to click on the word to hear its pronunciation.

Champion: Michal Vladimír Lupták

Feature 6 (bonus)

Name: User onboarding

Description:

When users start their learning journey, it is important to understand their level of proficiency in a given language. Not all users start with the same knowledge.

If a user embarks on lessons that are too advanced, the experience can become discouraging due to the lack of progress. Conversely, starting at a level that's too basic can lead to boredom and potentially result in the user discontinuing their use of our software.

This feature will prevent any of these two situations from happening, therefore once a user starts the app for the first time, there will be an initial assessment which will determine his starting level that reflects his proficiency level.

This assessment will be a level that will consist of flashcards from different levels, flashcards will be more difficult as the user progresses through the level. The final score from this level will determine the starting level of the user.

Champion: Tomas Busa

Time log

	Member	Activity	Week number	Hours
1	**Team number**		61	
2	**Member**	**Activity**	**Week number**	**Hours**
3	Ties	Write social contract	1	1
4	Ties	Define feature 1 and think of bonus feature	1	2
5	Tomas	Create overview and think about a bonus feature	1	2
6	Michal	Define feature 2 and think of a bonus feature	1	2
7	Samuel	Define one feature and think of a bonus feature	1	2
8	Michal	Fill the time log	1	2
9	Ties	Read about state machine diagrams	2	4
10	Tomas	Learn about package diagram and object diagram	2	4
11	Michal	Learn about the sequence diagrams	2	4
12	Samo	Learn about class diagrams	2	4
13	Ties	Make state machine diagrams	3	6
14	Tomas	Create package and object diagrams	3	6
15	Samo	Create class diagrams	3	6
16	Michal	Create sequence diagrams	3	6
17	Ties	Finish up state machine and transfer it to Java	4	6
18	Tomas	Finish up package and object diagrams	4	6
19	Michal	Revise and finish up sequence diagrams	4	6
20	Samo	Revise and finish up class diagrams	4	12
21	Ties	Implement 1 basic feature	5	12
22	Tomas	Implement basic feature and start thinking about the bonus feature	5	12
23	Michal	Implement 1 basic function (likely learning mode) and see if a bonus is	5	12
24	Ties	Finish basic feature and start bonus	6	10
25	Tomas	Finish basic feature and work on the bonus feature	6	10
26	Michal	Finish up the basic feature and work on the bonus	6	10
27	Samo	Finish the basic feature and work on bonus	6	10
28	Ties	Finish bonus feature	7	12
29	Tomas	Finish bonus feature	7	12
30	Michal	Finish the bonus feature	7	10
31	Samo	Finish the bonus feature	7	12
32		TOTAL		202

Signed contract

https://drive.google.com/file/d/11L2WrSTseyiwrUn4nfHnybbEogM4yPUE/view?usp=sharing