Team Phonetic Evolution

Design Review

The Team

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The Problem

What are we here to solve?

So what's the issue?

- What will provide the best experience for older Users?
- Where is the focus on Pronunciation?

Lack of Data Driven Learning Software

Context is often missing from most Language Learning Sites

Lack of Engagement

The Solution

How are we going to tackle this problem?

PANDA

Pronunciation through **AN**alysis of **DA**ta

The Requirements

The Specifics

Library

Database exploration & listening to audio corpus.

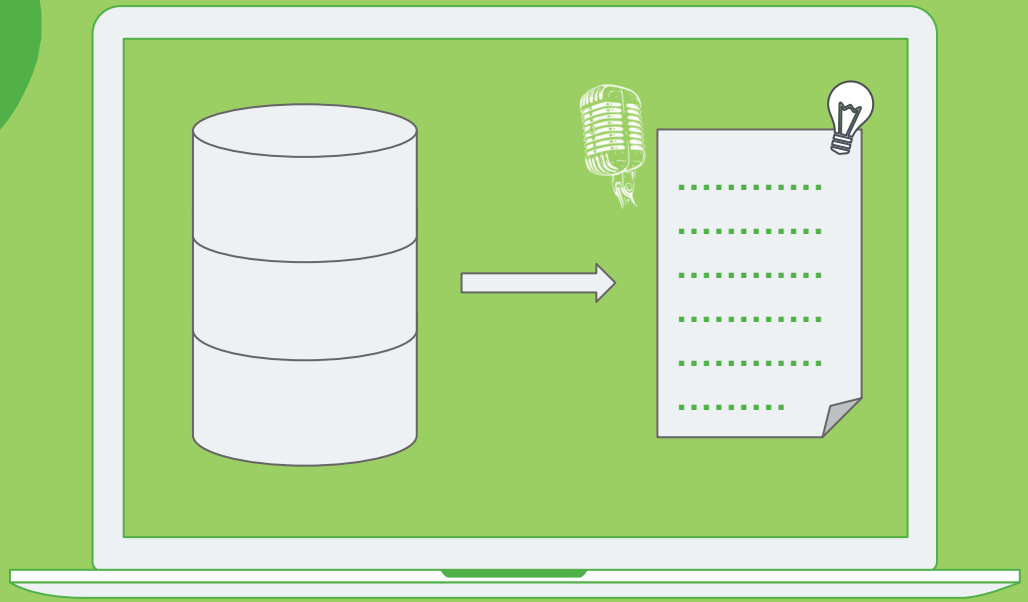
Profile

User's personal notebook & statistics storage.

Practice

Practice with different games & allowing for spaced repetition.

The Library



A fully developed Library connected to a massive audio and text database built for the target user

User’s can search multiple words or phrases to search the Database itself as well

The Personal Notebook

User's will have a personal notebook that stores words users select manually and automatically saves words the user has searched in the Library

Pronounce

Test proper Pronunciation

Context

Learn words based on Context

Dictionary

Encourage learning to define words

Pronunciation Training

User will record themselves, and Rate how they did compared to the audio

Context Practice

Users will be given a sentence from the database with a blank, and be asked to choose the word that fits within the context

Dictionary Discovery

Users will be encouraged to search and define words in their personal notebook, providing personal definitions

The Statistics

PRONUNCIATION

Based on Users times practicing and rating their speech

CONTEXT

Based on the Users time spent in the Context Practice

Based on the Ratio of words in the users personal notebook vs. number of definitions found

DICTIONARY

Based on amount of times Users return back to the website to practice

REPETITION

Current Risks?

SQL Key Leak

SQL key leaks are one of the leading causes to leaked data

Password Leak

If SQL is leaked, trying to decode passwords might become an issue

Lack of Scalability

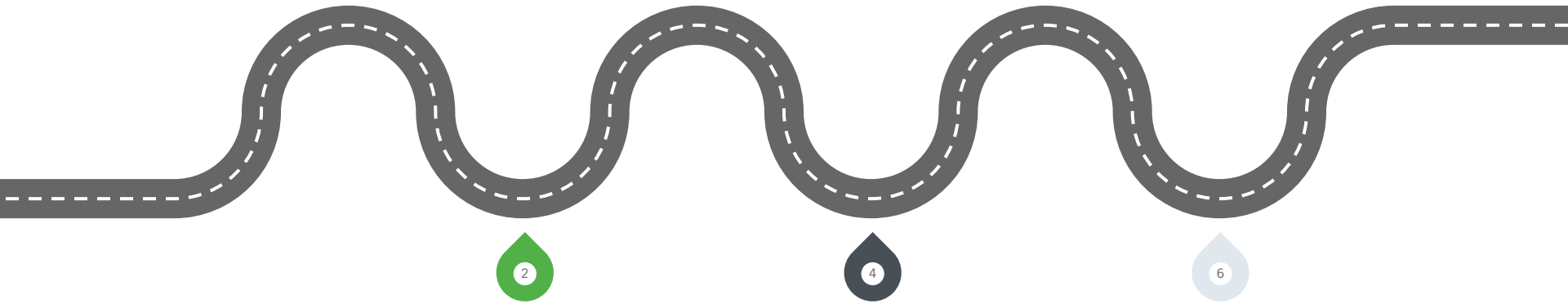
Working with AWS does mean that some point the sheer amount of users could overwhelm the site

Unlikely and Low Impact

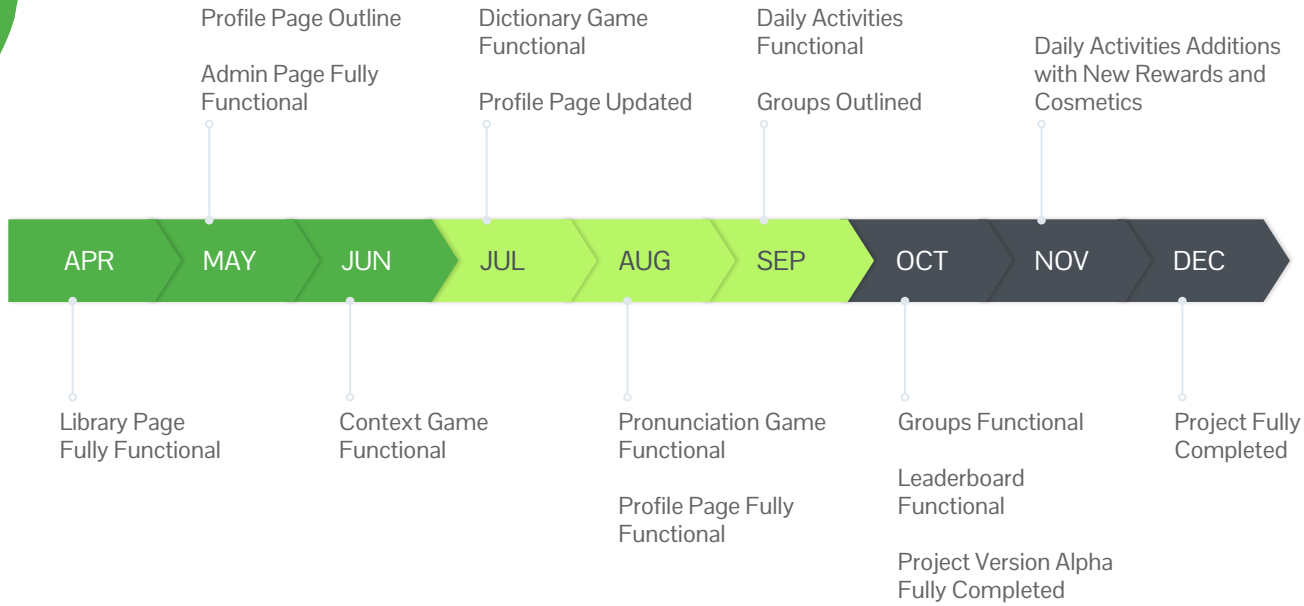
Due to this site currently being used for research, there is no personal information being stored in the database. As well as the idea of scalability and leaks occurring to also be very unlikely due to the current scale of the project

The Milestones

1. The Functioning Library Page
2. The Functioning Profile Page
3. All Three Practice Minigames
4. Groups and Leaderboards Implemented
5. Cosmetics/Customization and Daily Goals
6. Misc. Stretch Goals
   - Group Forum Page
   - A 4th Game



Timeline


APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
Library Page Fully Functional
Profile Page Outline
Admin Page Fully Functional
Context Game Functional
Dictionary Game Functional
Profile Page Updated
Pronunciation Game Functional
Profile Page Fully Functional
Daily Activities Functional
Groups Outlined
Groups Functional
Leaderboard Functional
Project Version Alpha Fully Completed
Daily Activities Additions with New Rewards and Cosmetics
Project Fully Completed

Conclusion

- Lack of user friendly audio/context language learning tools
- Gamified Language Data Explorer web application
- Pronunciation through ANalysis of DAta (PANDA)
- Encouraging self-driven learning for new English learners