Dialogo – Project Overview

Project overview

Dialogo is Italian for "Dialogue", and is a language learning app. It will have an emphasis on teaching grammar, a feature sorely lacking in other apps such as Duolingo and Drops. It will use Express.js for the backend/frontend.

In terms of features, it will:

- Have a game/section where the objective is to connect the right verb forms to the right pronouns in order to learn verb conjugation. This will then be followed up by multiple choice questions to cement the learning.
- Have a lesson for learning the alphabet of each language (Italian and English use roughly the same alphabet, but with different sounds), where an image and word/sentence will be associated with each letter. This will be followed up with sounds with multiple choice answers where you'll be expected to associate a letter with a sound.
- All lessons will be available offline, but if you create an account an do the lessons online, Dialogo will rank you at the end of each lesson compared to others learning the language based on the number of lessons taken, and the number of right answers.
Sharing this data with the server is how Dialogo will "cater for sharing resources".

Objectives and goals

With this project, we hope to achieve a language learning app that, albeit limited in scope in terms of words and features, will be able to engage users that interact with it. The aim is to make learning languages, and especially grammar, fun, interesting and rewarding.

Dialogo will support *English, Italian* and *Russian*. *Norwegian* **might** be added if time permits. These languages have been chosen because the authors have enough linguistic and grammatical competency to realistically support them. One should be able to learn *English* from *Italian* and *Russian*, and *Russian* and *Italian* from *English*. *Norwegian* is not a priority because it's a small language.

Technology stack

The backend will run on Cyclic, which has a generous free tier. Deployment.

It will use Express.js for the backend/frontend. Because the Cyclic free tier gives away SSL Certificates, Dialogo's authentication scheme will be BAA (Basic Access Authentication).

TTSMaker will be used for Text To Speech capability, either through their API (they've been contacted) or through pre-generated mp3 files. They've been chosen because they're free.

Agile methodology

To keep things simple, we will utilize flexible sprint planning.

Every couple of weeks we will plan a new sprint(s) based on what's been done and what's on our TODO-list. We will use [Trello](#) to keep track of progress, as it has a free tier.

TODO-list

For our TODO list, it makes sense to order in terms of priority.

- The first couple of weeks should be focused on building a proof of concept version of the grammar and alphabet games/lessons for the different languages and tie them together with a basic app UI.
- The next couple of weeks will be spent creating the backend and UI frontend for creating a new user, logging in, and deleting your user. This functionality will also include superuser(s) that can add more words and verbs.
- The following couple of weeks will be spent making sure the backend supports storing user activity logs and the client can send the activity data so it can be compared.
- The last two weeks will be spent on testing, refining functionality, fixing bugs, adding more verbs etc.

Alignment

Difficulty: Moderate to complex

Scope: Moderate to large

Skill alignment: Ok