Ida Chow | 15-112 Term Project | “Language Journal”

**Design (Updated from Project Proposal)**

**BACKGROUND**

The final product of this term project is intended to work as a “Language Journal” with its goal of being implemented into a usable tool for those learning a language of a country other than their own. This expands the usability of the project to travelers and students, but also potentially refugees who have been recently relocated to foreign countries.

The inspiration for this project comes from the work I have done as an active member of CMU FORGE – a club that deals with aiding refugees that have been recently relocated to the Pittsburgh area. In my case, the Nepali-Bhutanese family I personally help is one that has moved here mere months ago, and experiencing difficulties adapting to cultural and lingual differences. The mother of the family knows a sparse amount of English that makes not only communication between myself and her hard, but also the adjustment to her new South Side community quite strained. While she has a job, I’ve come to understand that work is tedious and lonely without being able to communicate with those around her. In order to help directly with this issue – one faced by many of the refugee population here – a more adaptive, customizable, and simple language learning app could be of help.

**APPLICATION**

The app itself would have a focus on being a “journal” or “phrasebook”, without a set curriculum, since the importance of settling in a new community is the need to adapt to a new colloquial lingo. More important than actual formal grammatical structures are phrases, conversational openers and closers, questions, and specific tidbits that may be important to the user – it is much more essential to get a grasp of general phrasing when in a foreign environment than it is to simply practice conjunctions and prepositions. I want to emphasize the ability to integrate customizable audio (pronunciation of phrases and vocabulary by native speakers, or also just notes from the user in the language of their choice), and being able to change the audio/phrases/definitions at any time.

In terms of code, a .csv file is being edited and updated with phrases or vocabulary entries, definitions, time stamp, as well as the corresponding audio file name. The actual audio will be saved in a folder (and the module PyAudio is utilized to work with all audio handling). Since there is no curriculum, and everything is customizable, this means that all wording/audio will be personally set by the user. Adding entries does not require audio to be added in that moment, as words can created and audio added at a later time. Viewing of all the entries is done through parsing through the entire CSV and allowing the phrases to be selected via listbox. Editing of the entries allows individual & separate editing of the phrases, the definitions, and the audio (which can be re-recorded at any time). The timestamp allows for organization of the listed phrases to be in chronological order, having older phrases at the top. If a word has become familiarized and does not need to be learned anymore, it can be easily removed.

**USER INTERFACE**

In terms of user interface, while there is a bit of text used to organize and clarify, I tried to supplement the text with signs of what everything meantRelying on the more universal language of imagery, record buttons included “o”’s and play buttons included “>”’s, that lend to a more minimalistic suggestion of their actions. The main page uses more “graphical” buttons that mean either to view a list of entries (three lines like lines on a page) or to add an entry (a plus sign). The simplicity of the overall application should help streamline the learning process as well.

*Early sketches of the UI can be seen on the storyboard on the next page.*

