## CS 4720 - F17 - Final Project Proposal

Device Name: Spearow Platform: Android
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App Name: SmartLang

## **Project Description:**

Our project is a self-driven language learning app that will allow users to be able to save relevant resources to aid in their learning process. Many language classes require you to learn a language in a specific way that the course has structured, including pre-made vocabulary lists that may not be relevant to the user or have enough practical application. Also, language teachers in the Curry school have expressed interest in services that would allow students to save listening media, such as videos or music, that interest them and encourage investment in the language's culture. Through this app, a user can save YouTube links, create a vocab lists, take and save images, record and save audio snippets, and forward these saved resources to other peers through email.

What we propose to do is create an app that will do the following:

- The system shall allow a student to create a profile using their computing ID;
- The system shall allow a student to select from a list of supported languages, which will include some pre-populated material;
- The system shall allow the student to save various media specific to the languages they have chosen;
- The system shall display different the sections for different forms of media when the user selects the language. This includes sections for: links to YouTube videos using the Youtube app, saved vocabulary, recorded audio, and photos;
- The system shall allow a student to rank vocabulary by how confident they feel with it, and move learned vocabulary lower on the list;
- The system shall use voice recognition to record vocabulary;
- The system shall allow a student to send an email with included media items for review or sharing;

## We plan to incorporate the following features:

- Camera A user can take and save a picture of a resource to reference later.
- Audio A user can record and save a snippet to use for pronunciation or language fluency. They can also use voice recognition features to record vocabulary.
- Open shared activity / features User can email a resource.
- Data storage using SQLite We will store the user's resources by language and media type so that they can access the info later on
- Data storage using key/value pair for username/password logins;