SmartTalk Honors Capstone

An Annotated Bibliography Sources for the Motivation and Implementation of Video-Based Perception Tasks

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References

[1] S. Astha, "Flutter youtube video player plugin and reference," https://pub.dev/packages/youtube_player_flutter, 2019.

> This is the documentation for a critical plugin for the video-based perception tasks. This is one of two plugins to be used to play videos as the designer user will have a choice of either a Youtube video link or a link to manually uploaded videos in .mp4 format. This is the first solution that offloads the storage of videos to the Youtube platform, saving on storage costs in Google Firebase. However, this will not be applicable for users in China, who cannot access or view Youtube videos.

[2] M. Elfatihi, "The role of nonverbal communication in beginners' efl classrooms," *Sidi Mohamed Benabdellah University*, 2005.

> This paper synthesizes quite a large amount of core issues in teaching English as a Foreign Lanugage (EFL) at a nonverbal level. The chief section of interest, part 1, pages 1-18, outlines many types of nonverbal communication that do impart a significant meaning to a conversation. This is similar to the Geneva emotion recognition test, as similar types of

varied emotions are shown on page 17. This paper is continued motivation and background research that comprises this Honors Extension, as video tasks expose EFL learners to nonverbal English communication and its implications.

[3] Flutter.dev, "Flutterfire firebase plugins and reference," https://github.com/FirebaseExtended/flutterfire.

This is a collection of Flutter Firebase plugins that are used within this project and extension. The key plugins used and researching are cloud_firestore, cloud_storage, and firebase_auth. Cloud Firestore is the NoSQL database system that contains remote download links to Cloud Storage that houses large files such as audio, images, and videos to tie them to learner tasks. Firebase Auth allows for unique users and email account registration, which is a necessary step for the Designer and Learner relationship.

[4] flutter.dev, "Flutter video player plugin and reference," https://pub.dev/packages/video_player, 2019.

This is the documentation for a critical plugin for the video-based perception tasks. This is one of two plugins to be used to play videos as the designer user will have a choice of either a Youtube video link or a link to manually uploaded videos in .mp4 format. This is the second solution that will allow videos to be played via remote links to .mp4 files in Google Firebase Cloud Storage.

[5] D. Goleman, *Emotional Intelligence.* Bantam Books, 1995.

This book is the foundational knowledge behind emotional intelligence. This book serves as the primary motivation for the video based perception tasks as these tasks will allow English Language Learners to understand body language, something that is crucial to connect with conversational partners on an emotional level. Emotional intelligence measures human intelligence beyond the narrow scope of IQ and logical cognition. I seek to train and improve EFL learners' emotional intelligence through video-based perception tasks.

[6] Google, "Firebase cloud storage for large files and media," https://firebase.flutter.dev/docs/storage/usage/, 2019.

This is the documentation for the Firebase Cloud Storage plugin for Flutter. This allows for the uploading files when combined with a file picker plugin in order to push local .mp4 and other files to Cloud Storage for use in loading video tasks. I referenced this documentation and usage heavily when incorporating local video into perception task creation.

[7] A. Julow, "Firestore crud with flutter," https://www.youtube.com/watch?v=zaiE08EWrO0&t=0s.

This two part screencast series helped me form the basis of our Firebase Firestore backend database. This series of screencasts introduced structured approaches to creating a viable backend for a Flutter project. I used these screen casts to create an organized Firebase backend that effectively communicates with our Flutter view controllers to facilitate many types of tasks, such as video tasks.

[8] M. Ruivo, "Flutter file picker plugin and reference," https://pub.dev/packages/file_picker, 2021.

This is the documentation for a critical plugin for the video-based perception tasks. This plugin is used to select local video to be uploaded to Google Firebase Cloud Storage. This plugin, when combined with Flutter Firebase plugins, allows Designer users to select their own custom video files to upload in order to create a video based perception task. These uploaded videos are then pushed to Firebase Cloud Storage and are refereneced via a download linked stored in a Firestore document of the Task collection for the Lesson itself.

[9] S. K. Schlegel K, Grandjean D, "Introducing the geneva emotion recognition test: an example of rasch-based test development." *Psychol Assess*, 2014.

This paper formalized the practice of video based facial recognition exercises that determine ones ability to read body language and facial expressions, commonly referred to as Emotional Recognition Ability (ERA). This expanded test for ERA is a primary motivator for the Honors Extension to the project as similar ERA testing can be done based on questions users are asked about presented video clips and conver-

sations. This is a design inspiration for the video tasks that would introduce language learners to non-trivial elements of effective spoken communication.

[10] M. Sheehan, "How google took on china– and lost." *MIT Technology Review*, 2018.

This article details the history of censorship and banning of many Google products in China. This is relevant to this Honors Capstone as Youtube videos cannot be used and/or accessed in China without the use of a VPN. Google Firebase still does work, as it has a specific Chinese domain name that allows Firebase apps to function there. However, this is usually not the case, as China still has a widespread ban on Google and its services.