Release Plan

Team Name: EK Health, DataCare

Team Members: Lou, George, Octavio, Karthik, Robin, Kalpana, Marcos

Tentative Project Title: Voice-To-Text

Description: Create an automated framework in the field and in the office for healthcare professionals, who need security-enhanced voice-to-text apps to help with the transfer of patient information.

High Level Goals: Have a speech-to-text option which would be usable on different platforms.

Team Roles:

Octavio (OR) - Software Engineer, Scrum Master for Sprint 2

Kalpana (KC) - Software Engineer

Robin (RS) - Software Engineer, Liaison

Karthik (VT) - Software Engineer, Scrum Master for Sprint 1

George (GA) - Software Engineer

Marcos (MC) - Software Engineer

Lou (LG) - Software Engineer

User Stories for Release:

Sprint 1 (Scrum Master: VT)

Set-up Github - As software engineers, we need to setup a GitHub repository so that the team can efficiently progress.

- 3 Points - VT

Research APIs - As software engineers, we need to research all the possible APIs and choose at least three speech-to-text API's which meet the following characteristics:

- maximum recording length in minutes
- offline recording
- translation accuracy
- efficiency in terms of data usage and device performance

- 13 Points - GA, KC, RS, MC, LG, OR, VT

Research Android Speech Recognizer - As software engineers, we want to research this API, understand the limitations of it, and determine if it meets the criteria for our product.

- 13 Points - LG, RS, KC, GA

Research Pocketsphinx - As software engineers, we want to research this API, understand the limitations of it, and determine if it meets the criteria for our product.

- 13 Points - GA, LG, RS, KC

Research TLSphinx - As software engineers, we want to research this API, understand the limitations of it, and determine if it meets the criteria for our product.

- 13 Points - VT, OR, MC

Implement a voice-to-text prototype in Android - As software engineers, we want to build a working prototype of voice-to-text translation using our chosen API.

- 8 Points - LG, RS, KC, GA

Implement a voice-to-text prototype in iOS - As software engineers, we want to build a working prototype of voice-to-text translation using our chosen API.

- 8 Points - VT, OR, MC

Report status to product owner - As software engineers, we need to present the status of our prototype development to the product owner.

- 8 Points - LG, RS, KC, GA, VT, OR, MC

Sprint 2 (Scrum master: OR)

Network Status - As developers, we need to check when network is on or off.

Tasks:

- Figure out threads in Java
- Check network state
- Implement interrupt when network is lost
- Create an interface for the network listener
- Figure out how to alert user

- 8 points (KC, RS, MC)

Offline network - As developers, we need to understand the sphinx API for offline usage.

Tasks:

- Create an interface for the network listener
- fix inaccuracy
- 8 Points (GA, OR, VT)

Training - As developers we need to find out how to train sphinx.

Tasks:

- Understand how the training app works
- Find relevant sample audio to feed the training app
- Physically train Sphinx
- 20 Points (Everyone)

Google Speech implementation - Implement Google Speech when network is available.

- 8 points (LG)

Android Studio environment - As developers, we need to understand Android Studio and its basic functionality.

- 5 points (Everyone)

Sprint 3

As a user, I would like to have a polished interface.

- 8 Points

As software engineers, we need to present the progress of the project to the product owner.

- 8 Points

As software engineers, we need to improve offline speech recognition accuracy.

- 13 Points

As software engineers, we need to connect to the server to get and give data.

- 13 points

Product Backlog at the end of release 1 :

Network Connectivity - As software engineers, we want to maintain data consistency between the client and the server in possibly volatile network conditions.