iGest Recognito

Amit Roy , Saif Mahmud , Tauhid Tanjim
Student, Department of Computer Science and Engineering, University of Dhaka

Overview

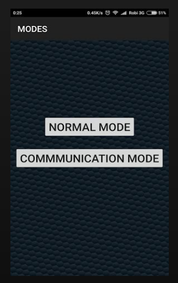
- iGest Recognito' stands for 'Intelligent Gesture Recognition'.
- An android application to create a communication media in sign language.
- Includes an American Sign Language Keyboard and a media player with American Sign Language (ASL) subtitle feature.
- Also incorporates an alphabetical gesture pattern recognition feature.

Application

- According to statistics, Approx. 1 million people of the world are said to be born deaf as well as mute
- We develop an Mobile App which incorporates Sign Language as a communication tools for the people with hearing and talking disability.

Modes

- Normal Mode for the features related to American Sign Language
- Communication Mode is the chatting option for the users of this application



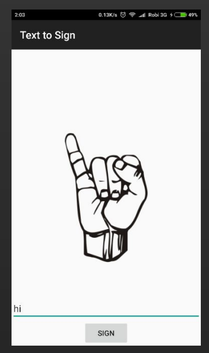
Menu

- Manifests the features
- Features create a platform of processing Natural Language in Sign Language form to Alphabetic Text form.

Sign Subtitle

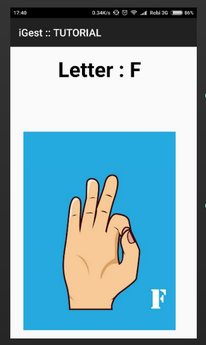
- Media Player with File Selector for Video File and Subtitle file
- Includes Subtitle in American Sign Language

Text to Sign



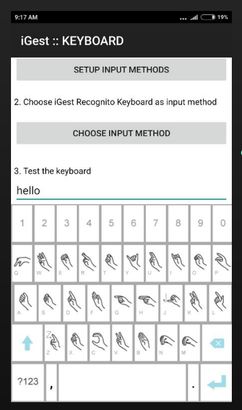
- Takes alphabetic text input
- Converts into American Sign Language

Sign Tutorial



- Sign Language is a great tool for communicating with disable persons
- iGest Tutorial facilitate the user to learn American Sign Language

iGest Keyboard



- Keyboard with American Sign Language layout

iVoice

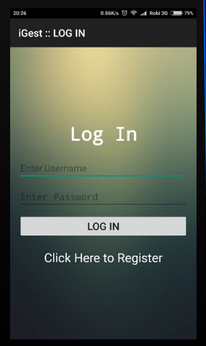
- Voice Recognition using Google Voice API
- Converts voice input into corresponding alphabetic text and sign

iGesture

- Takes input from the drawn pattern in the screen
- Converts it into corresponding Alphabetic Text
- Prediction done using Gesture Builder ML

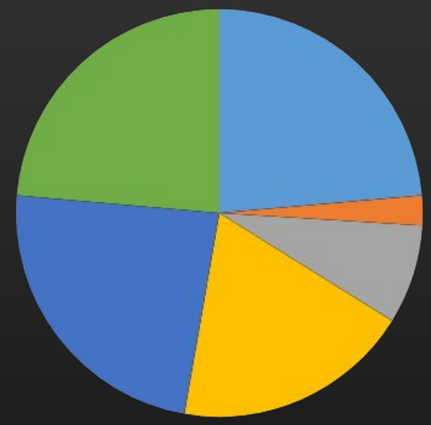
Communication Mode

- Chatting with other users of this Application
- Sign-Up and Log-In done using FIrebase



Motivation

- We have thought of developing a project with Natural Language Processing (NLP) feature.
- Sign Language Processing is one of the field of our interest because it reveals an opportunity to work with text to sign language conversion and vice-versa.



Future Plans

- Survey the feasibility of the proposed approaches with real users.
- Make it more user friendly.
- Add a feature of real time hand gesture detection, which will help easy live communication between disabled and enabled people.

Contact
Amit Roy
aroy7298@gmail.com
01763007067