Abstract

Sign to Voice is an application that serves as a communication tool that is devoted to the special needs community is deaf and speech impaired. Not only as a communication tool for people with special needs (deaf and speech impaired), this application also teach people who are not special needs to understand sign language.

Sign language used in this application is BISINDO language ("Berkenalan Dengan Sistem Isyarat Indonesia") because sign language is created by the deaf.

This application is implemented on the Android smartphone that making it easier for users to access them. The final project is implemented using the Java programming language at the Android platform and used Haar Cascade Classifier algorithms contained in the JavaCV library to detect hand movements to be translated into sound. Based on the results of the implementation, application Sign to Voice is needed by the deaf because they can facilitate in communication with others, but the application needs further development related to the accuracy of which is still bad, expected in the future accuracy can be improved.

Keywords: *Sign to Voice, Bisindo, HaarCascadeClassifier, android*