

A Project Report on

AndroEar

“An Android app for the hearing impaired”

Submitted by

JASEEM ABBAS

4SN10CS050

JOSE BABY

4SN10CS054

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Prof. Shivakumar G.S

Head of the Department



Department of Computer Science & Engineering

SRINIVAS INSTITUTE OF TECHNOLOGY

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ABSTRACT

Android has been one of the biggest trends in modern era of mobile telephony. The introduction of Android to the modern world of technology lead to a great evolution of mobile apps. These modern innovations are mostly meant for individuals having no disabilities. If taken a glance, it turns clear that there are not many of these technologies used for the disabled class of the society. Hence, being responsible Software Engineers as well as human beings having care for our fellow disabled persons, it turned out to be our objective to develop an android application for the hearing impaired mainly by converting speech (of the person communicating with the hearing impaired) to text and vice versa(90% of the hearing impaired are also mute) , alongside numerous innovative functionalities. Thus making it easier for them to communicate and live better.

The application is expected to provide a set of innovative functionalities, of which the important one being the facility to convert from text to speech and from speech to text making it easy for the hearing impaired to communicate. Another innovative idea is to provide a 'hearing test' using which the user gets an idea of what his hearing capacity is. The application also provides the user with the facility of automated messages to be sent in case of emergency to a set of predefined numbers notifying them of the landed trouble and of the user's current location on earth by simply just shaking the device a couple of times. The application contains a set of inspirational quotes which encourage the physically challenged. The application has the capacity to inform the user if someone is trying to call or alert the person by whistling by 'whistle detection'. The application provides links to blogs and community sites dedicated to the physically challenged and specifically the hearing impaired .Finally, the application comes preloaded with a few videos teaching the 'Hand Gesture' communication method. AndroEar also provides the provision of future development and a separate stand alone section does the job. And the section already has 'Leave Mail' in it , a handy leave application mail writer included in view of the limited versatility or expertise of the disabled in such areas.