Friend2Deaf

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Abstract—A person needs five senses to function properly sight, hearing, taste, smell and touch. Unfortunately a deaf person is deprived from one of the senses which is hearing. As a deaf person suffers from the difficulties of hearing, it is hard for them to communicate and response in many situation. In most of the cases, they use hand and body gesture to express them and need others to do the same if they need to understand what the opposite person is saying . But it is very difficult for everyone to learn hand language neither we can change all our systems which work based on sound. As a result a deaf gets deprived from a proper conversation and other helps and notifications which they could get if they were able to hear. Our project is presents a mobile application which is designed for the deaf. This application will help them to get notified in emergency situations, in case of calls and help them to communicate with others by converting voice to text. Our project aims to help the less fortunate and make their life easier.

I. PROJECT DESCRIPTION

At present almost everyone has a smart phone, so we thought the easiest way to reach to people and help them is to make an app which can always be with them and provide them with necessary help. As a deaf cant hear, many times he is unable to react in situations which need attention. Like in case of door bell ringing or fire alarms buzzing. So our app will be able to detect door bells and fire alarm and give necessary notification like flash light alert and text notification to draw attention. Also as it has a voice to text converter, it will be easier for a deaf to communicate with people who dont know sign language. The flash light alert at phone calls will work as an extra notification for the deaf in case they are unable to feel the vibration. So if we just point out the main features of this app, they will be:

1) Able to detect door bells and fire alarms and notify the user about the incident.
2) Will provide a voice to text converter.
3) Will give flash light alarm in case of call.

Fig. 1. Snippets of Few UIs of the Developed Mobile Application

II. COMPARISON WITH EXISTING SYSTEM

There is already a system which provides similar service. There is an app called tap tap. But there are some differences between Friend2Deaf and tap tap. Those are:

1) This app has voice to text incorporated in it along with the alarm giving service.
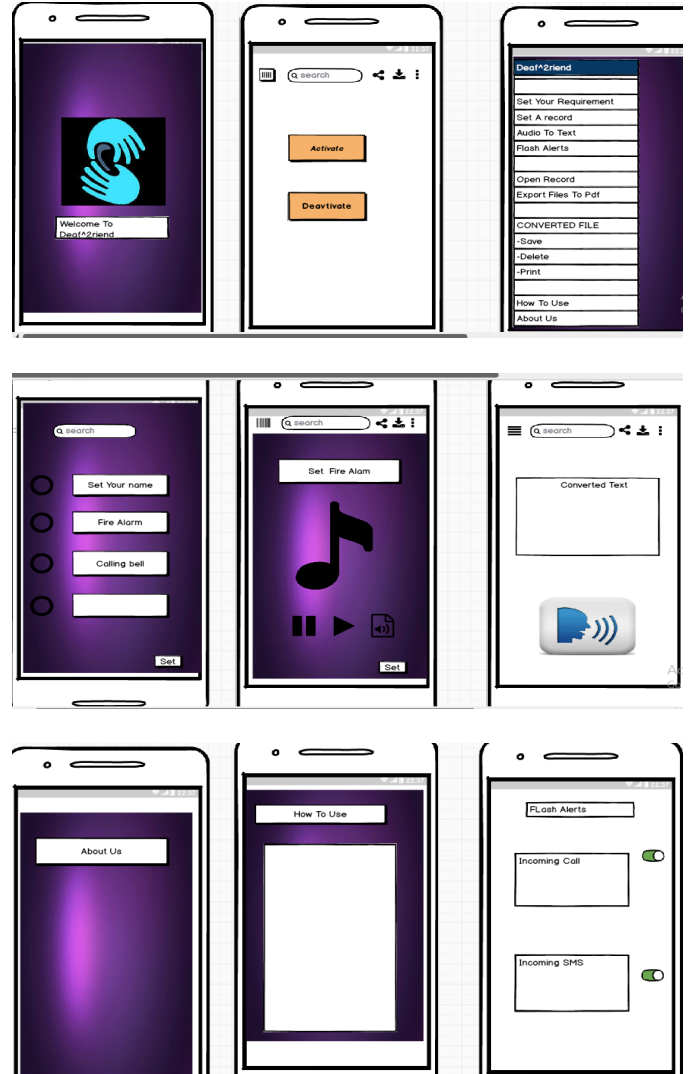2) Friend2Deaf is a free mobile application. As the intention behind making this application is to help people with having impaired hearing, so this application is totally free of cost.

III. DRAWBACK AND FUTURE PLAN

Its true that most of the people use smart phone today, but also there are many who dont. And for those who dont know they use of smart phone this app wont be able to help them. That is a major drawback of our project.

In future, we desire to take this app app more efficient by taking real user feedback and work on sectors that lag behind and add new features as per their requirements.

IV. Humanitarian Aspect

Over 5 % of the world population which is almost 360 million people are deaf. Which is a large amount of people going through the problems mentioned above . It is our responsibility to use our knowledge and advancement of technology to do something for the less fortunate. Friend2deaf will be able to help them to lead a bit better life than they lead now. And if we can do so, at least, problems of 5% people of the world will be a bit reduced.

V. Conclusion

To conclude, we want to say that we worked to create something to help people and this is what we came up with. If it helps even one of the deaf to make their miserable life a bit easy, we will consider ourselves lucky. And we will be more than delighted to work further on it and making it more helpful.