

VOICE ASSISTANT FOR VISUALLY IMPAIRED IN ANDROID

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Abstract: - This is an innovative system for visually impaired people and acts as a voice assistant for them. This system is used to help the visually impaired to have access to the most important features of the phone enhancing the quality of the system making use of different custom layouts and using speech to text. The system has custom messaging features also. It also have dialer options as well. There is an important thing is to know about the current time and location. All the actions are performed by the system. The user also read the contents of the message for checking purpose. The system also allows the user to open the prescribed application using voice. Our voice assistant application give solution for visually impaired people. The custom app doesn't save any data it is dependent on the phones data.

I. INTRODUCTION

Now a days, many android applications are available which provides many smart things to the users. Google's Android Operating System in Mobile phones are still relatively new, however, Android Operating System has been progressing quite rapidly. Easy access to thousands of applications via the Google Android App Market – When you love to install applications or games, through Google's Android App Market can download applications for free. Conceived as a counterpoint IOS, Android is a graph showing a significant development, it certainly cannot be separated from supports major mobile phone manufacturers who participated to bring mobile-phone operating system Android.

II. RELATED WORK

This paper proposed Be My Eyes, a universal voice control solution for non-visual access to the Android operating system.[1]It has been observed that nearly about 60% of total blind population across the world is present in INDIA.[4]As our society farther expands, there have been many supports for second-class citizens, disabled. One of many supports that are urgent is the guarantee of mobility for blind people. There have been many efforts but even now, it is not easy for blind people to independently move.[2] With the rapid growth of wireless communications, the need for voice recognition techniques has increased greatly. Voice applications based on voice interfaces, voice recognition, and voice dialogue management can help users to be focused on their current work without extra effort for hands or eyes.[3].

The application listens to your commands and then responds with voice commands by talking. The application converts your voice into text.[5].

III. PROPOSED SYSTEM

This system is used to help the visually impaired to have access to the most important features of the phone enhancing the quality of the system making use of different custom layouts and using speech to text. The System has custom messaging feature with inbox and sent items, call log and dialer and battery level checking. All actions performed by the user the system speaks out and helps the user to know his current position. The System helps the user to also read the contents of the message along with the sender and the date and time, in whole everything.

IV. FLOW DIAGRAM



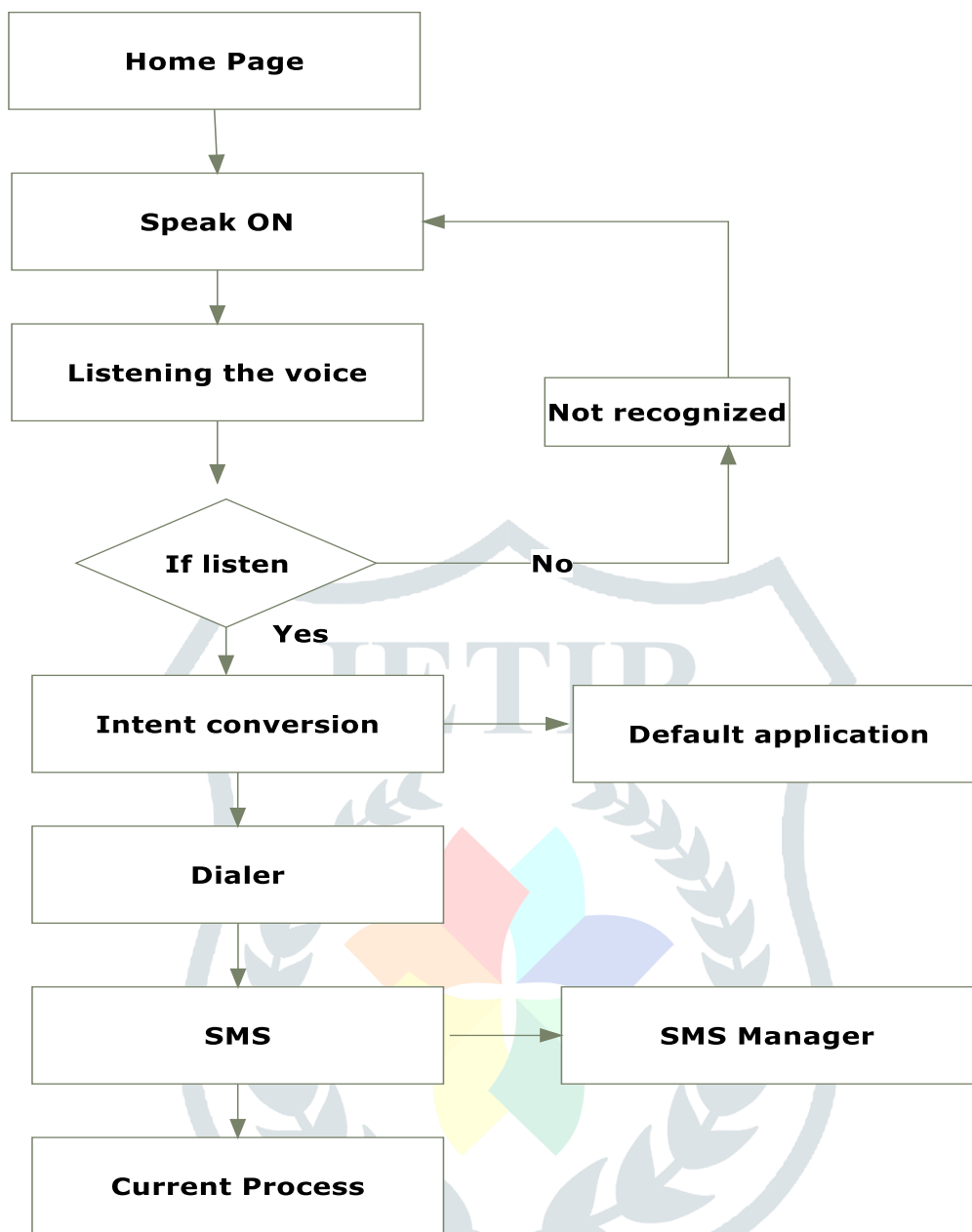


Fig1: Flow Diagram

V. IMPLEMENTATION

The implementation of the proposed system consists of following modules:

Module I – Speech Recognize

Speech recognition is the one of the ways of human and machine interaction. Now a day's smart phones can capable of recognizing users voice and performs actions with respect to their voice. In this module speech recognition technique is used for recognize the accessibility peoples. Here we use the Google voice recognition module for recognize the voice. Voice input is the smartest choice for inputting for sign language generation.

Module II – Intent Conversion

In this module we have to implement default application. When we click on the speech means it will identify the voice. According to the voice it will open the particular applications.

Module III –Dialer Processing

In this module, phone call will be done. When the user click on the microphone means, it will annotate Google speaker. The user need to speak on it. It will recognise the numbers and call to that particular number.

Module IV – Sms Processing

In this module, SMS is sent to the particular number. When the user click on the microphone means, it will annotate Google speaker. The user need to speak on it. It will recognise the particular message body and the phone number and it will send the message to that number.

Module V – Current Details Processing

In this module, current time and current location will be done. When the user click on the microphone means, it will annotate Google speaker. The user need to speak on it. It will recognise the particular word and speak the current details.

VI. CONCLUSION

Thus, our voice assistant has many advantages over the traditional voice system. Some of these advantages are less cost, faster speech results, easy accessibility, accuracy, and low risk of human and mechanical errors.

Future Work:

In future we will help the visually impaired people with Google map voice assistant. For that we need advanced technology of android Google map.

VII. REFERENCES

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