

WIRELESS ANNOUNCEMENT SYSTEM WITH NOTICE BOARD

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ABSTRACT

The problems motivated to design this system is that usually in school and colleges about notifying students of new important notices and other college schedule related information. This process is time consuming and so many files need to maintain. This increases lots of human efforts also there is possibility of that the on paper notice will not get attention of some of the students. But here we in this system has The speech input which is delivered through microphone, the speech input is then given to P.C. which is connected to Google API which will convert speech signal in to text and transmit this text information through RF to the receiver. The transmitted signal is received through RF module and through RF it is displayed on notice board. As well as if any student has any query then he/she can transmit the text information to the transmitter through keyboard.

Keywords – Display, Microphone, P.C., Python, Raspberry Pi, RF Module,

I. INTRODUCTION

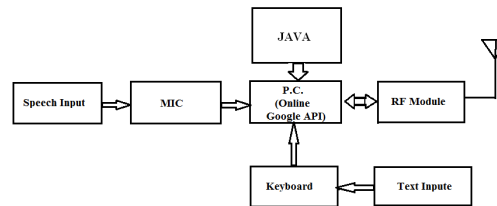
This system introduce new technology which will be economical and easy way to notify the students of new important notices and other college schedule related information. So there will be no wastage of time to go class to class n tell the notice orally. It will totally eliminates human efforts. This system uses the PA system which performs the action of delivering the voice signal towards the receiver and the information will get announced with the help of speakers

II. SYSTEM OVERVIEW

The proposed system consist of two subunits. The transmitter section consist of Microphone for transmitting speech signal & P.C. for accessing the google api and RF module for transmission of speech and text signals. The receiver section consist of raspberry PI and RF module for receiving the signals

2.1 Transmitter Unit:-

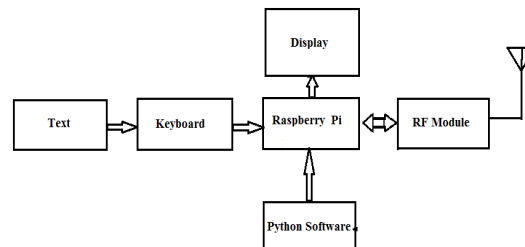
The speech input is delivered through microphone, the speech input is then given to P.C. which is connected to Google API which will convert speech signal in to text and transmit this text information through RF to the receiver.



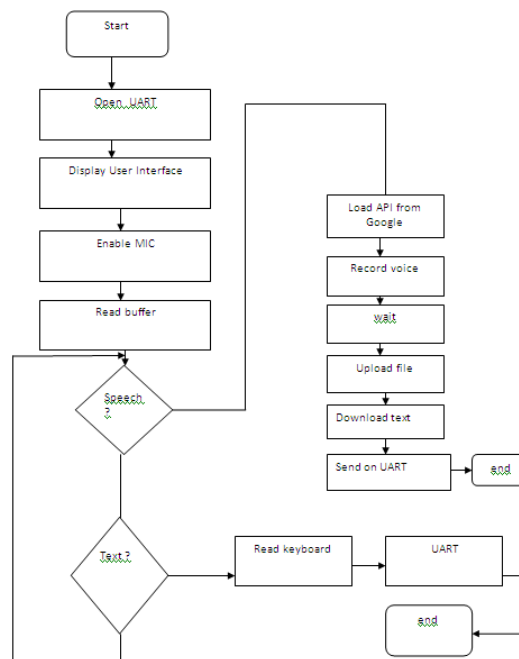
2.1 Receiver Unit:-

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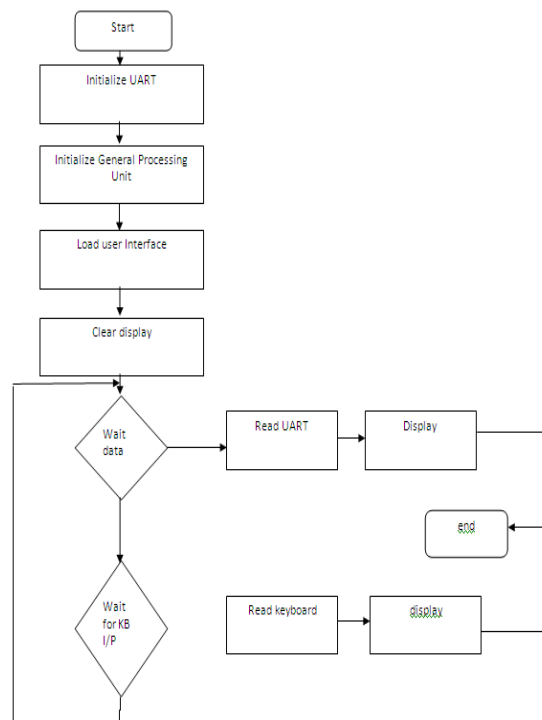
III. FIGURES AND TABLES



3.1 Flowchart of Transmitter

At the transmitter After sending the signal, first open the UART and read content of UART and display user interface and the enable mic and read buffer if there is speech data then it will forward to google API then it will

record voice and wait until speaker stops speaking, then after completing voice signal will search the text data related to the voice input through online. And send it to UART and if user type the data through keyboard then it will directly displayed on the receiver side



3.2 Flowchart of Receiver

Here the system starts the communication first initialize the UART, GPU and load user interface. Then clear the previous readings of display and wait for the data if data arrives then it will store and read by UART and display the information. If data is not received then it will again wait for keyboard input. And after receiving keyboard input it will display it directly

IV. CONCLUSION

In this paper we have successfully implemented system by which teachers (user) is allowed to speak using a microphone to deliver a speech signal and it will be displayed on the screen at receiver and side by side it will announce the notice. This project overcomes the traditional method of going in each classroom and announcing the notice to the students. Here this system replaces the human efforts by delivering the speech to text converted information at the classroom directly. As it is bi-directional communication if any of the student is having query they will ask directly through keyboard input hence our project is time efficient and reduces human efforts.

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