



# Voice Based Notice Board Using Android

Project members

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## Abstract:

There are certain circumstances encountered occasionally where a notice is needed to be urgently displayed on a screen. The station master or announcer does not need to manually type each announcement message onto the screen in busy facilities like railway stations. Therefore, the user here suggests a creative android-based notice display system that enables users to display notices

Without manually entering them in. Here, the announcer or administrator can read out the message using an Android phone; it is then wirelessly transmitted and shown on the screen. Here, messages are displayed on an LCD screen to illustrate the concept. A microcontroller from the ATMEGA328P family is connected to the LCD. Additionally, the user uses a Bluetooth receiver to receive the messages that the android transmits, decode them, and then pass them to the microcontroller for additional processing. The message is then shown on the LCD screen by the microcontroller. Through the use of a transformer, a 12 V supply powers the complete circuit. This cutting-edge technique can be utilised in many locations, such as train stations, schools, universities, and offices, to immediately show emergency announcements on screens by voicing out the message rather than typing it in each time. As a result, voice-based notice board projects are quite helpful in a variety of organizations.

**Keywords:** Notice board, Microcontroller328 P, LCD display, Bluetooth device HC05, Crystal oscillator, Capacitor, Resistor, Connecting wires, Android software.

## I. INTRODUCTION

Users now live in a time when technology is fast advancing, changing daily, and they expect everything to be done intelligently. In order to avoid using paper or a wooden frame to attach the notifications, user engineers designed a smart notice board. The user will use a digital notice board that they can manage on their own. The user only needs to install an Android app on his or her Android smartphone or tablet. Users may encounter scenarios in which they must urgently display notices on a screen. The station master/announcer does not need to manually put in every announcement message on the screen in areas such as railway stations and other such busy facilities. So, in this case, the user provides a novel Android-based notice display system allows the user to display the message without having to type it in manually. Here, announcer/administrator can voice the message into his/her Android phone, which is subsequently wirelessly uploaded and displayed on the screen. To showcase this notion, the user displays messages on an LCD panel. The LCD is linked to a microcontroller. The user employs a Bluetooth receiver to

receive Android-transmitted messages, which are then sent to the Microcontroller for decoding and further processing. The message is then shown on the LCD screen by the microcontroller. This notice board system can be utilized in a variety of settings, such as railway stations, schools, universities, and offices, to display emergency announcements on screen instantaneously, rather than inputting the message all the time. As a result, the voice-based notice board project is quite beneficial in a variety of organizations.

## II. LITERATURE SURVEY

- 1) GSM Wireless Communication System [2010] :[1] This paper mainly focuses on the application of GSM (Global System for Mobile communications). Advantages and Disadvantages of GSM has been marked here. GSM system is the most famous system for the Second Generation mobile telephony worldwide
- 2) Display Message on Notice Board using GSM [2013]:[2] This paper proposes the use of GSM technology for displaying notices on a digital notice board which helps to save time and energy. The notice board is eco-friendly and reduces the use of papers. Information can be given to a large mob in a very effective manner
- 3) Wireless Electronics Display Board Using GSM Technology [2013]:[3] This paper explains a photo type laboratory model wireless notice board system. The board is connected with a GSM modem which enables the user to display the notice in public places using SMS.
- 4) SMART NOTICE BOARD [2013] :[4]This technical paper discusses on the present technology in association with daily life. It explains the importance of the Smart notice board and how efficiently it can be used in day to day life.
- 5) A Protocol for End-to-End Secure Transmission of SMS [2014] :[5] In this paper the Easy SMS protocol and how it can be successfully designed so as to provide end to end secure communication through SMS is discussed. The analysis shows the focus on security and methods to prevent various attacks. Also it explains the other aspects like communication, bandwidth

## III. PROPOSED METHODOLOGY

In this project, an microcontroller is used to regulate every step, a Bluetooth module is used to receive SMS and other messages delivered from a phone, and an LCD is used to show the message.

When an SMS message is sent from a mobile device to a Bluetooth module, the Bluetooth module receives the message and delivers it to the microcontroller. Now that the SMS has been read by controller, it extracts the primary notice message from the received string and stores it in a different string. and then employs the proper commands to broadcast the message that was extracted to a 16x2 LCD.

Through SMS, we can deliver messages or notices like "OK Circuit Digest" and "OK We Welcomes You." In this case, the message string contains a prefix that reads "OK." This prefix is used to indicate the message's beginning

### IV. HARDWARE IMPLEMENTATION

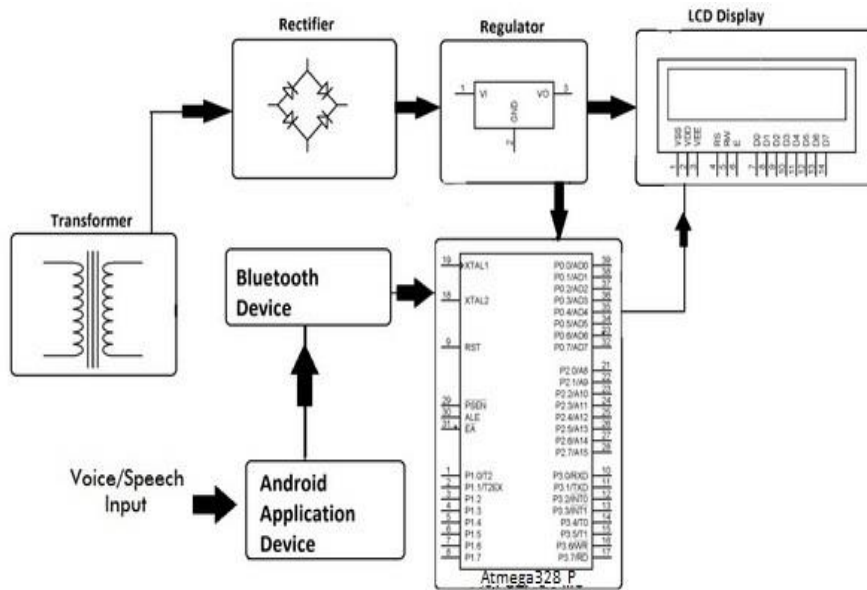


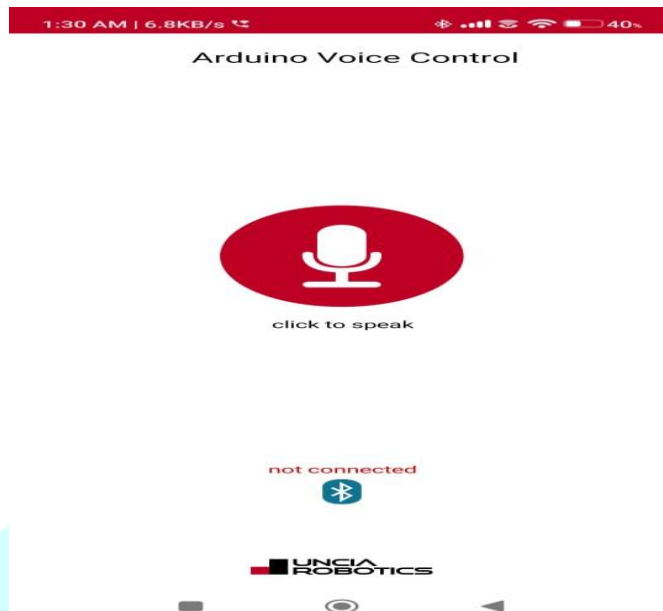
Fig. 2 Block Diagram

### V. HARDWARE MODEL



Fig. 3 Working Model

## VI. SOFTWARE IMPLEMENTATION



**Fig. 4 Software**  
The software was implemented using MC programming

## VII. RESULT AND CONCLUSION

- Messages are disclosed in a matter of seconds ones typed without any delay in their transmission.
- School, colleges, offices for displaying emergency announcement on the screen instantly by just speaking out message instead of typing in each in time
- It is easy to use and easy to install. Speech controlled rolling display is really helpful for disabled people or handicapped people
- This system has provided to be very user friendly. It also eliminates the option of printing out notice and saving tons of paper
- Wireless operations enable services such as long-distance communication that would be impossible to implement with cables. It allows for the rapid transport of data. The system is less expensive to install and maintain. This paper describes a basic method for displaying messages on a notice board utilizing Wireless Technology. It also includes user authentication to prevent unauthorized use of the system suggested system.

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It has been a sincere desire of every individual to get an opportunity to express his views, skills, attitude and talent in which he is proficient so as to give him satisfaction and confidence in his ability to do or produce something useful to mankind. A project is one such avenue through an engineer gives vent to his feeling and expressions. We take this opportunity to express our gratitude towards our internal guide Prof. Sailakshmi K. for his encouragement and guidance in our endeavor ,without which user would have found it difficult to maintain the tempo and enthusiasm. Working with him has been a wonderful learning experience. We would like to express our deepest gratitude to Respected Principal and H.O.D for their encouragement, noble suggestions and guidance which was instrumental in completing the project. We also thank college authorities and professors concerned, who have through meticulous planning, created a comfortable co-existed of the project and college schedules. We would like to thank our friends and classmates for their direct and indirect help in the project.

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