IoT BASED WIRELESS NOTICE BOARD

Arun Kumar S, Arun Kumar K, Delvin M, Madhesh S R,
Computer Engineering (Internet Of Things and Cybersecurity including Blockchain Technology), SNS College Of Engineering, Saravanampatti, Coimbatore, TamilNadu, 641107, India.

MR. K. Jagadeesh (Guide)
Assistant Professor, Computer Engineering (Internet Of Things and Cybersecurity including Blockchain Technology), SNS College Of Engineering, Saravanampatti, Coimbatore, TamilNadu, 641107, India.

ABSTRACT:

This Project Deals with the interesting manner by providing the announcement or a message to the peoples by displaying the message in the Wireless Electric Display Board which is mainly controlled by the Bluetooth Module. This is used to intimate any message to the peoples immediately without any delay by sending an SMS from the Smart Phone which is more faster and reliable comparedto the old Notice Boards. This Technologycan be used in Public Places, Super Markets, Railways, Stores, Buildings etc.Italso used the improve security system and also helps in the emergency situations and helps to prevent from many dangerous accidents.

INTRODUCTION:

In this Digital Era Mobile Phones are becoming more important needs of our life. Different types of Technologies are arising in the field of Telecommunication .The Use of the Smart Phones are very high so that the Technologies is also have to improved accordingly and in making the regular use of technologies which we would have an adverse effect on the environment issues in where we are presently concerned about.

The Bluetooth module is used to transmit the data from the mobile to the display board. When a message is sent from the Smart phone the Bluetooth Module receives the message from the Smart phone and t message gets extracted with the help of the Microcontroller from the Bluetooth Module and the Bluetooth Module sends the extracted data to the Display Board and the Display Board gets the message and it display in the Display Screen the Proposed System "IoT BASED WIRELESS NOTICE BOARD" is more reliable. Faster and very cheaper and it also reduces the physical efforts.

We are using an Wireless Technology to send notice and this proposed system has many upcoming applications like crime preventions, Traffic Managements, Railways, Advertisements etc. This Notice Board is being more user Friendly, Faster the convey a message for the peoples. It is also aware us from the emergency situations and save us from more dangers.

EXISTING SYSTEM:

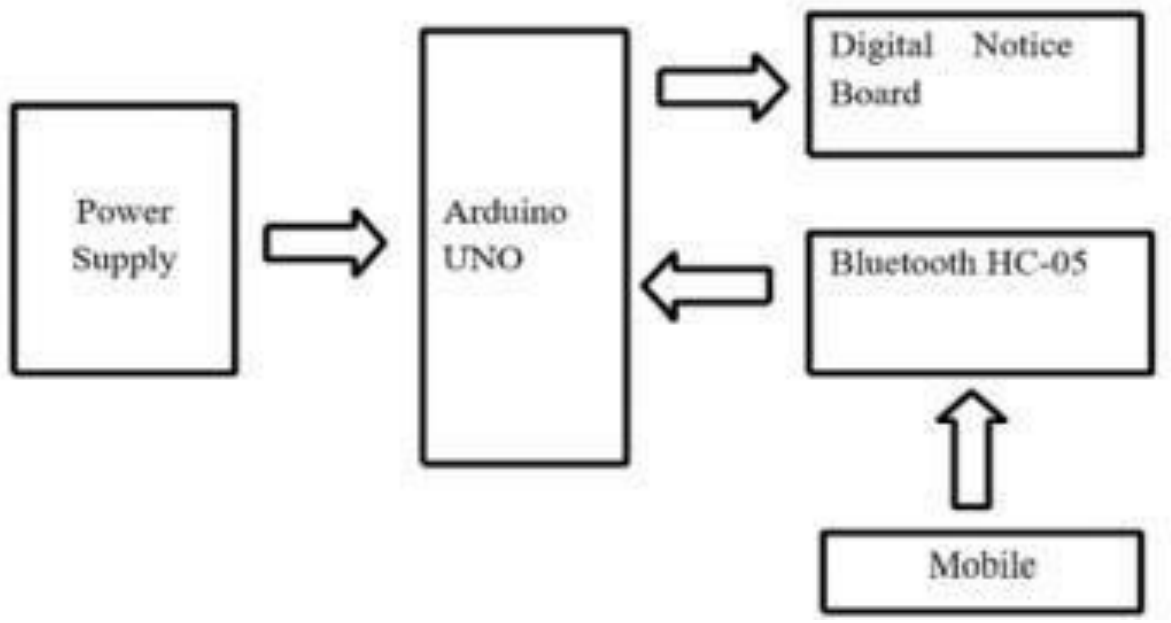
As we Know That the Notice Boards Are First Only Connected With Cables The Data To Be Displayed Are stored in SD cards or other storage devices This Method Is Mostly Time Consuming And Requires maintainance Of Connecting Components. The Existing System Needs a external storing device to store the text file to upload in the notice board. In some other case the Super market or other high stores they use a specific PC for the notice board upload the

text so that the cost of the component to work the notice board

PROPOSED SYSTEM:

In This Project We Are Upgrading The Existing System Using Bluetooth Module. By Using Bluetooth Module we can make the operations wirelessly, So that the text uploading in the SD card or uploading the text directly from the pc the time consumption is being less and the text uploading via Bluetooth module are so quick and easy . In our proposed system the text can also be upload via speaking the application provides the google speak So we can also say any command to display in the notice board it is also display so quickly and accurately. The application providesthe google speech by the online mode

BLOCK DIAGRAM



MODULES DESCRIPTION :

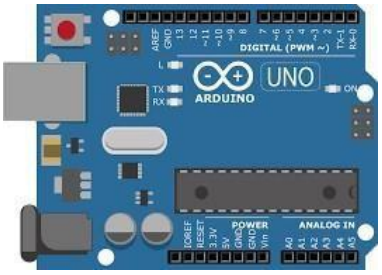
A module is a Hardware and software component or part of a program that contain one or more routines. A module description provides detailed information about the module and its supported components , which is accessible in different manners.

HARDWARE REQUIRED:

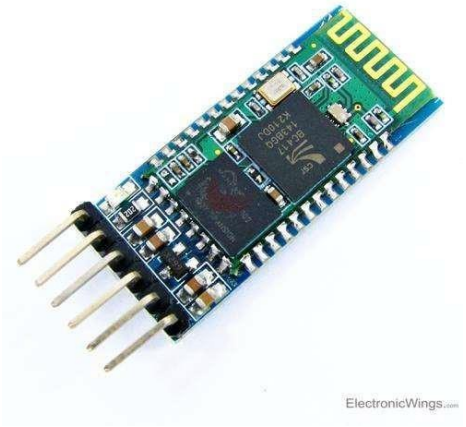
- **ARDUINO UNO**
- **BLUETOOTH MODULO HC-05**
- **LCD DISPLAY 16x2**
- **RESISTOR**

ARDUINO UNO:

The Arduino UNO is the best board to get started with electronics and coding. If this is your first experience tinkering with the platform. The UNO is themost robust board you can start playingwith, the UNO is the most used and documented board of the whole Arduino family.



BLUETOOTH MODULE:



HC-05 is a Bluetooth module which is designed for wireless communication. This module can be used in a master or slave configuration.

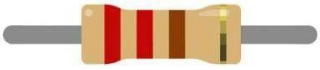
This module works on 3.3 V. We can connect 5V supply voltage as well since the module has on board 5 to 3.3 V regulator.

LCD DISPLAY - 16 x 2:

It is one kind of electronic display module used in an extensive range of applications like various circuits & devices like mobile phones, calculators, computers, TV sets, etc.

These displays are mainly preferred for multi-segment and seven segments. The main benefits of using this module are inexpensive,simply programmable, animations,and there are no limitations for displaying custom characters, special and even animations, etc.

RESISTOR:



A resistor is an electrical component that limits or regulates the flow of electrical current in an electronic circuit. Resistors can also be used to provide a specific voltage for an active device such as a transistor. The main purpose of resistor is to reduce the current flow and to lower the voltage in any particular portion of the circuit. the outer part of the resistor is coated with an insulating paint.

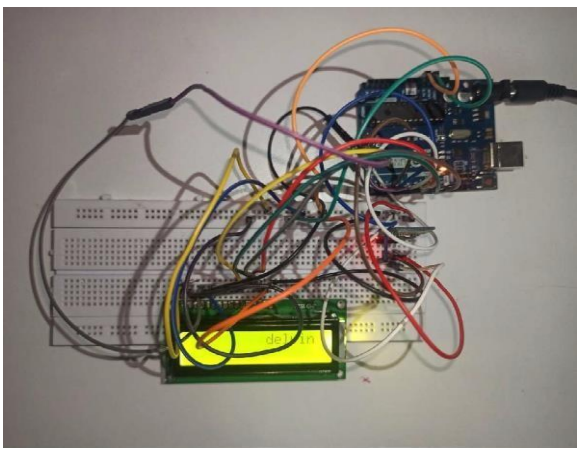
SOFTWARE REQUIREMENTS:

- ✓ ARDUINO COMPLIER
- ✓ ENBEDDED LANGUAGE-C

ARDUINO COMPLIER:

The Arduino Integrated Development Environment - or Arduino Software (IDE) - contains a text editor for writing code, a message area, a text console, a toolbar with buttons for common functions and a series of menus. It connects to the Arduino hardware to upload programs and communicate with them. The Arduino UNO is programmed using the ARDUNIO IDE, our Integrated Development Environment common to all our boards and running both online and offline . The Arduino Integrated Development Environment (IDE) is a cross-platform application (for Windows, macOS, Linux) that is written in functions from C and C.

RESULTS AND DISCUSSION



In our project we use power supply, Arduino UNO, LED module, Bluetooth HC- 05 and mobile application. After uploading the program in Arduino UNO, we will give them external power supply. Due to that all functions of equipment's are on. At that time, we will pass the notice which we want using mobile. Then this notice will receive by Bluetooth. And by using Arduino this noticewill display on digital noticeboard.

ADVANTAGES:

- ➢ Time spent on modifying the result is reduced.
- ➢ Easy to setup.
- ➢ All operations can be carried out by mobile phone.

DISADVANTAGES:

- ➢ If power is turned off, the display message will be erased.

CONCLUSION:

As the technology is increasing day by day the display notice is moving to with wired to wireless This paper develops a phototype laboratory model wireless notice board system with BLUETOOTH connected to it, We are using an Wireless Technology to send notice and

this proposed system has many upcoming applications like crime preventions, Traffic Managements , Railways , Advertisements etc.This Notice Board is being more user Friendly , Faster the convey a message for the peoples .It is also aware us from the emergency situations and save usfrom more dangers

REFERENCE:

1. Ramya R, Bavithra N, Priyanka M “Wireless Enotice board using Bluetooth technology”, IJERT 2018.

2. Dharmendra Kumar Sharma, Vineet Tiwari, Krishnan Kumar, et.al, “Small and Medium Range Wireless Electronics Notice Board using Bluetooth and Zig Bee”, IEEE INDICON 2015.

3. M. Abila Mary, B. Pavithra, R. Sangeetha, Prof.T.C. Subbu Lakshmi “GSM based wireless noticeboards using Arduino”, IJARTET 2019.

4. Pooja Pawar, Suvarna Langade, Mohini Bandgar “IOT Based Digital Notice Board using Arduino ATMega328”, IRJET 2019.

5. Pallavi M. Banait, Nikita P. Bakale, Mayuri S. Dhakulkar, Bhushan S. Rakhonde “Cost effective Android based wireless notice board”, IJETER 2018.

6. Gaurav Bhardwaj, Gunjan Sahu, Rajan Kumar Mishra “IOT based smart notice board”, IJERT 2020.

7. M. Arun, P. Monika, G. Lavanya 2016 “Raspberry Pi Controlled Smart e- Notice board using Arduino”, IJCAT 2016.

8. Aliya Farooquie, Aishwarya sakhre, Balaji Bomade, Madhavi badole, Ashwini Ughade “Design and Implementation of Wireless Notice Board Display based on Arduino and Bluetooth Technology”, IOSRJEN