# Bangladesh University of Business and Technology

## Wireless electronic Notice Board using Arduino UNO with Bluetooth

Course Name: Microprocessor and Interfacing
Course Code: EEE320

**Team: KINETIC VISION**

# MEET OUR TEAMMATES

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# Kinetic Vision

# AGENDA


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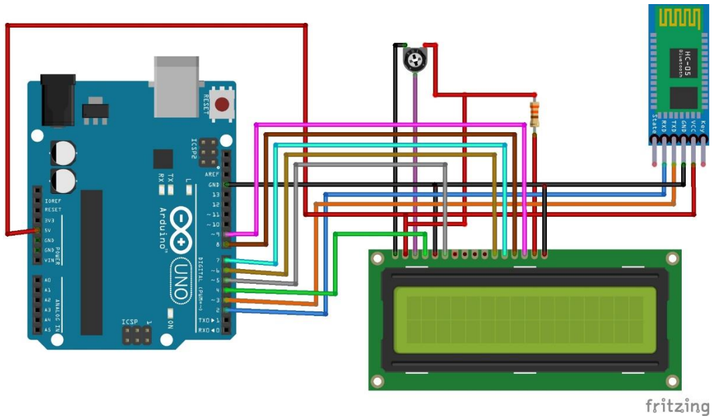
# ABSTRACT

We have made a project about the wireless electronic notice board using Arduino with Bluetooth. In this project we have made a notice board by Arduino UNO and we have C-language. In this project, we have used 4682 LCD display as notice board and the notice board receives serial data from the wireless module receiver and displays it on the graphical liquid crystal display.

# INTRODUCTION




This deals with an innovative rather an interesting manner of intimating the message to the people using a wireless electronic display board which is synchronized using the Bluetooth technology. Nowadays information displaying is going digital with a high speed. This will help us in passing any message almost immediately without any delay just by sending a SMS which is better and more reliable than the old traditional way of passing the message on notice board.

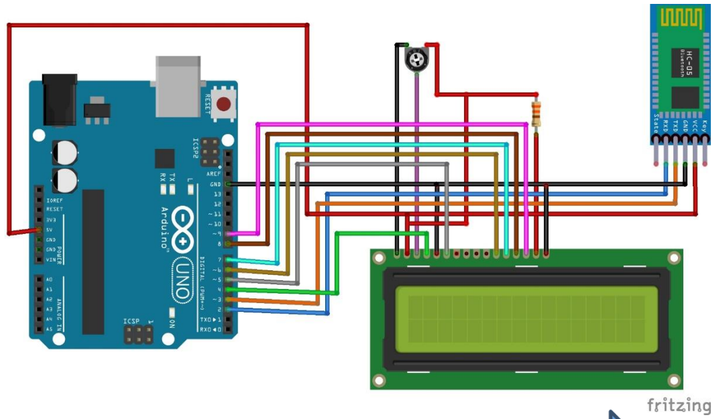
**To know about the making of digital wireless notice board**

**To know about the internal connection of this project.**

**To know about the Arduino and how does it work**

**To know about the working principle of LCD display and embedded microcontroller**

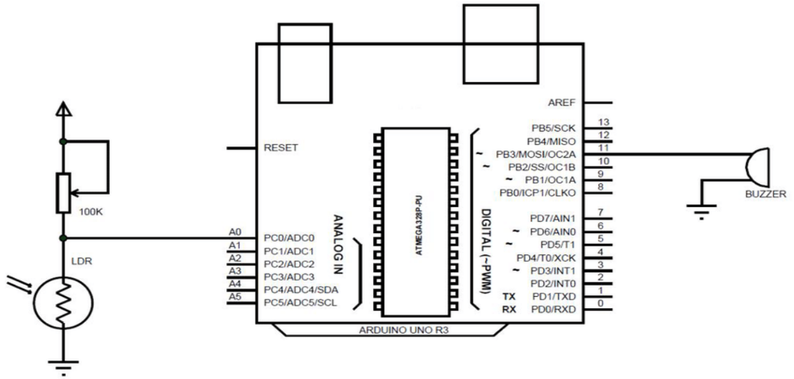
# BACKGROUND

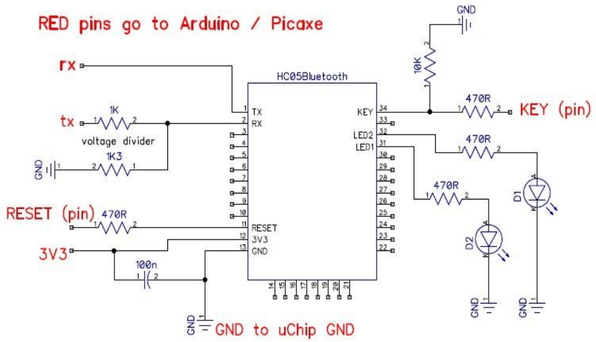


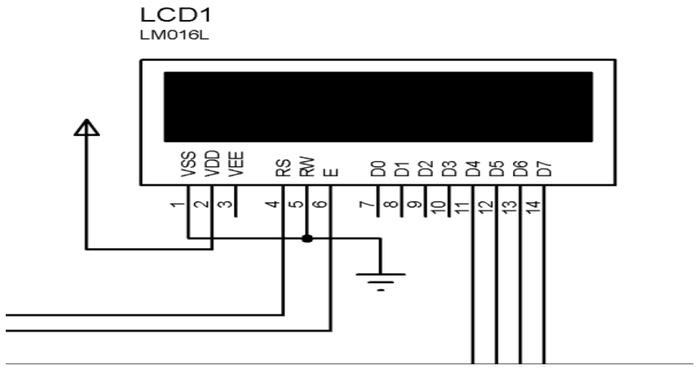

A wireless notice board is a digital display system that allows information to be transmitted and displayed without the need for physical connections.

- Real Time Update
- Flexibility and Multimedia Capability
- Control and Management
- Increase Visibility
- Cost Efficiency

# LITERATURE REVIEW




## Arduino UNO

Arduino Uno can be used as a control unit in a wireless notice board system to control the display and communicate wirelessly with the display panel

## Bluetooth Module HC-05

A Bluetooth module can be used in a wireless notice board system to enable communication between the control unit (such as Arduino Uno) and the display panel

## 16*2 LCD Display

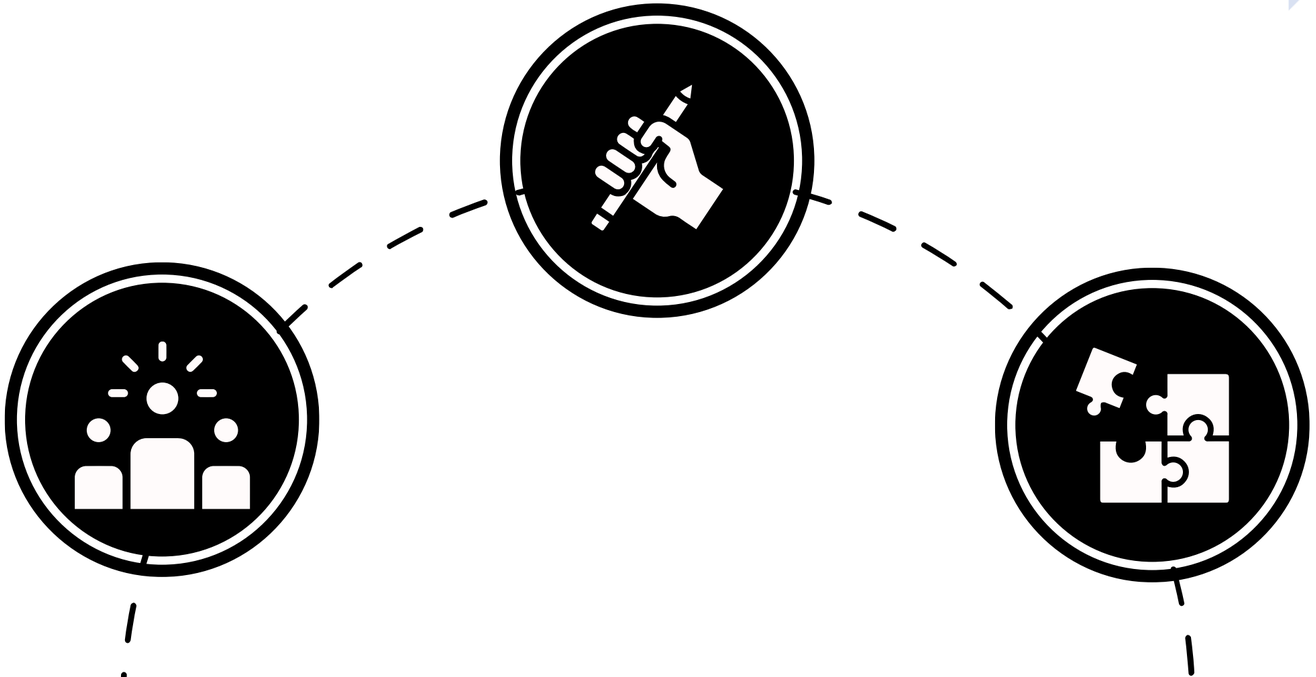
A 16x2 LCD (Liquid Crystal Display) is commonly used as a display panel in a wireless notice board system. Here's how it works in a wireless notice board

# METHODOLOGY

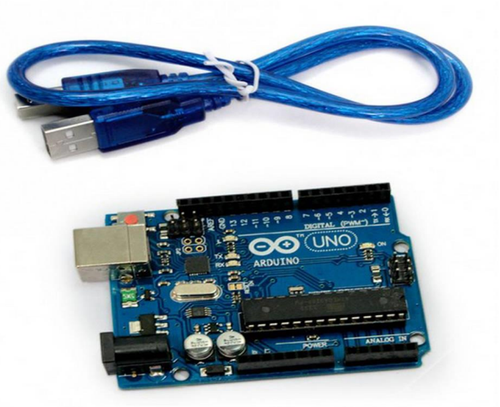
**Connection**

**Installing Required Libraries**

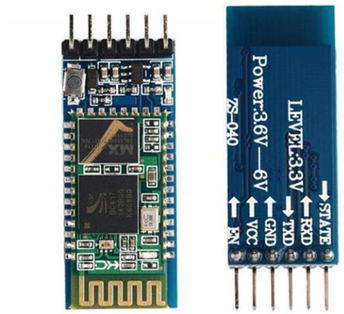
**Uploading the Code**



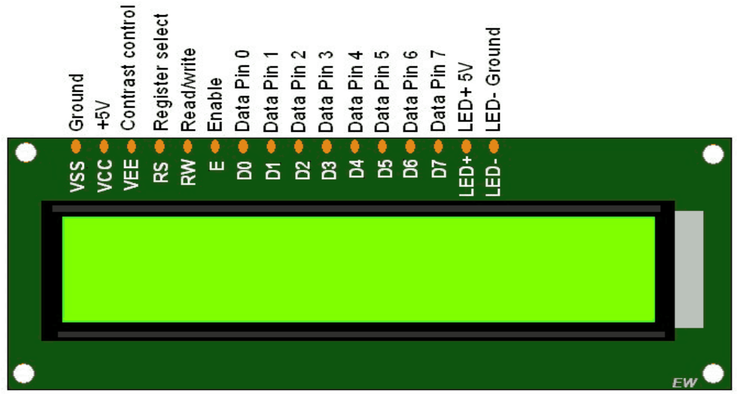
# EQUIPMENTS



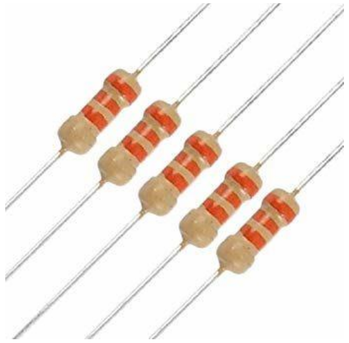

Arduino UNO



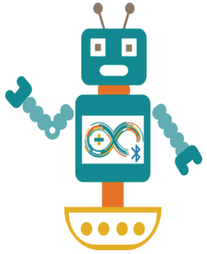

Bluetooth Module HC-05



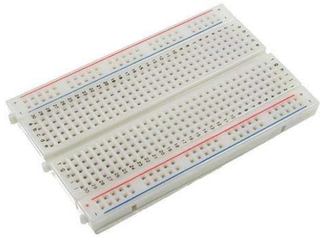

16*2 LCD Display



Resistor



Arduino Bluetooth Control



Half Breadboard

Jumper Wires

# CODE EXPLANATION

```
#include <LiquidCrystal.h>
#include <SoftwareSerial.h>

LiquidCrystal lcd (4, 5, 6, 7, 8, 9);
SoftwareSerial mySerial (2, 3);   //(RX, TX);

String val = "No Data";
String oldval;
String newval = "No Data";
int i = 0;

void setup()
{
  // put your setup code here, to run once:
  lcd.begin(16,2);
  mySerial.begin(9600);
  Serial.begin(9600);
  lcd.setCursor(0, 0);
  lcd.print("Wireless Notice");
  lcd.setCursor(0, 1);
  lcd.print("     Board     ");
  delay(3000);
  lcd.clear();
  lcd.print("Welcome!");
}
```

```
void loop()
{
  val = mySerial.readString();
  val.trim();
  Serial.println(val);
  if(val != oldval)
  {
    newval = val;
  }
  lcd.clear();
  lcd.setCursor(i, 0);
  lcd.print(newval);
  i++;
  if(i >= 15)
  {
    i = 0;
  }
  val = oldval;
}
```

# SOCIAL ECONOMY IMPACT

- Improved Communication and Information Sharing
- Support for Local Businesses and Community Initiatives
- Cost Savings and Resource Efficiency
- Support for Local Businesses and Community Initiatives

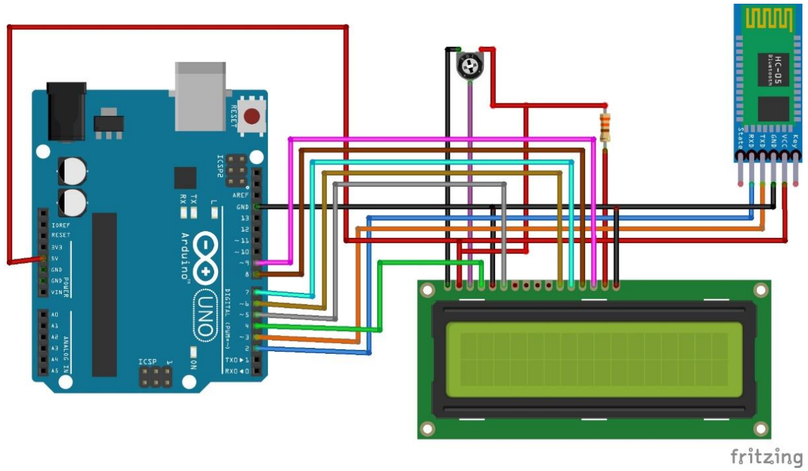
Future Plan

Can be increased the range

Can be added notification indicator

Can be reduced the size of the device

# CONCLUSION





- **Here by introducing the concept of wireless technology in the Field of the communication. We can make our communication more efficient and faster, with greater efficiency. We can display the messages and with less errors and maintenance.**

# THANK YOU

## For Your Attention