

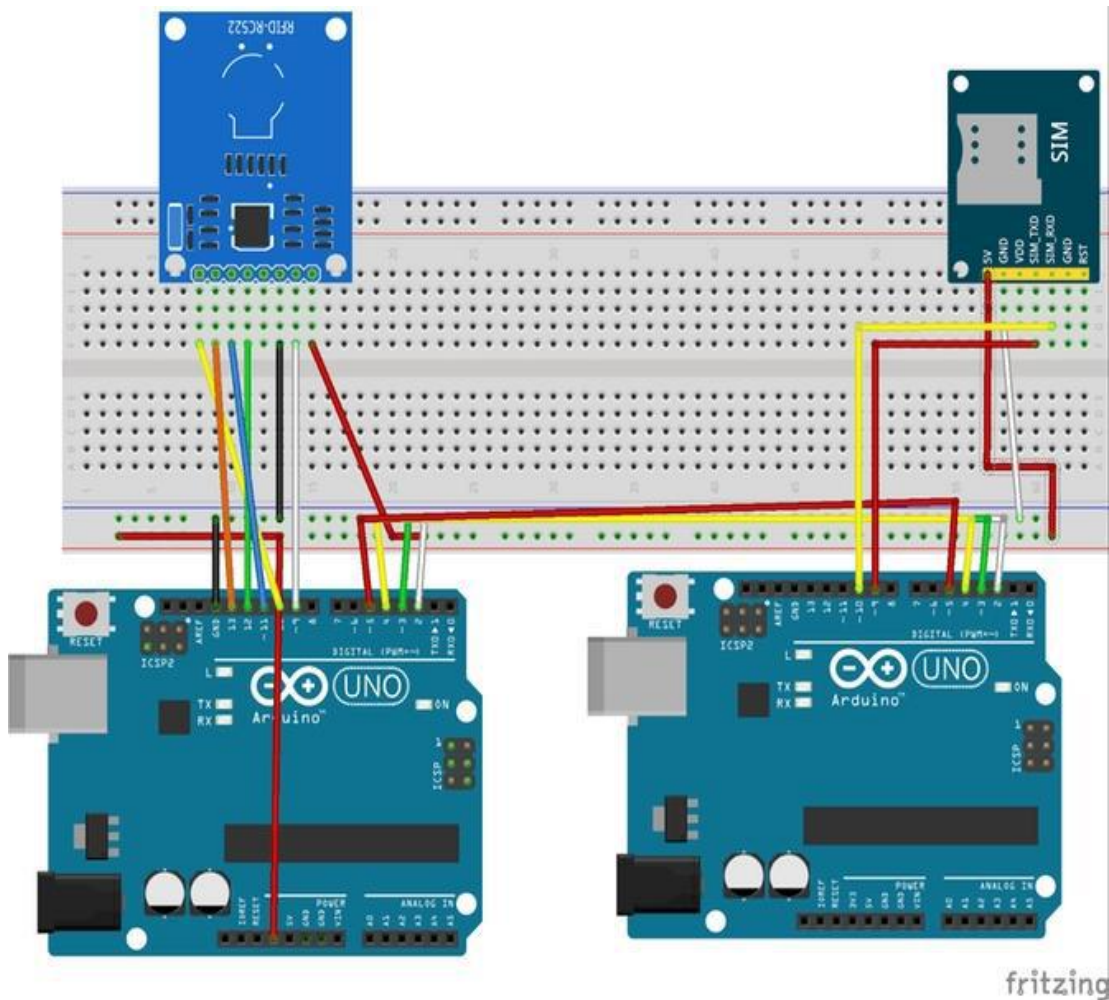
RFID ATTENDANCE

With gsm notification

Date

BASIC

The project Arduino and RFID Based Attendance System With GSM is a simple and is used at any place where attendance is



taken for maintaining register.

In this project we used

1. Ardunio uno
2. RFID-MRC522
3. SIM900A/Sim800c GSM Module
4. Breadboard
5. Connecting Ware

We Divided this project into Two part-

1 . RFID to arduino part

The software of Arduino and RFID Based Attendance System is written in arduino programming language and comde. Before using code, you must first add RFID tag code and its corresponding name (name of person to whom that RFID card is assigned).

RFID to arduino Connection RFID Code-

```
#include <SPI.h>

#include <MFRC522.h>

int count = 0;


#define SS_PIN 10

#define RST_PIN 9

#define sw3 2 //define green LED pin

#define sw4 3 //define red LED

#define BUZZER A4//buzzer pin

#define sw1 4

#define sw2 5

MFRC522 mfrc522(SS_PIN, RST_PIN); // Create MFRC522 instance.
```

```

void setup()
{

    Serial.begin(9600);    // Initiate a serial communication
    SPI.begin();           // Initiate  SPI bus
    mfrc522.PCD_Init();    // Initiate MFRC522


    pinMode(sw3, OUTPUT);
    pinMode(sw4, OUTPUT);
    pinMode(sw1, OUTPUT);
    pinMode(sw2, OUTPUT);
    pinMode(BUZZER, OUTPUT);
    noTone(BUZZER);
    digitalWrite(sw3, HIGH);
    digitalWrite(sw4, HIGH);
    digitalWrite(sw1, HIGH);
    digitalWrite(sw2, HIGH);

    Serial.println("Put your card to the reader...");

    Serial.println();

}

void loop()
{
    // Look for new cards

    if ( ! mfrc522.PICC_IsNewCardPresent())

```

```

{
    return;
}

// Select one of the cards
if ( ! mfrc522.PICC_ReadCardSerial())
{
    return;
}

//Show UID on serial monitor
Serial.print("UID tag :");
String content= "";
byte letter;
for (byte i = 0; i < mfrc522.uid.size; i++)
{
    Serial.print(mfrc522.uid.uidByte[i] < 0x10 ? " 0" : " ");
    Serial.print(mfrc522.uid.uidByte[i], HEX);
    content.concat(String(mfrc522.uid.uidByte[i] < 0x10 ? " 0" : " "));
    content.concat(String(mfrc522.uid.uidByte[i], HEX));
}
Serial.println();
Serial.print("Message : ");
content.toUpperCase();
if (content.substring(1) == "50 64 D8 A4")
{
    Serial.println("Authorized access");
    Serial.println();
    delay(500);
    //digitalWrite(sw3, HIGH);
    tone(BUZZER, 500);
}

```

```

    delay(300);

    noTone(BUZZER);

    digitalWrite(sw3, LOW);

    delay(300);

digitalWrite(sw3, HIGH);

    delay(400);

}

if (content.substring(1) == "57 E0 5C 74")
{
    Serial.println("Authorized access");

    Serial.println();

    delay(500);

    //digitalWrite(sw4, HIGH);

    tone(BUZZER, 500);

    delay(300);

    noTone(BUZZER);

    digitalWrite(sw4, LOW);

    delay(300);

digitalWrite(sw4, HIGH);

}

if (content.substring(1) == "E0 F1 77 A4")
{
    Serial.println("Authorized access");

    Serial.println();

    delay(500);

    // digitalWrite(sw1, HIGH);

    tone(BUZZER, 500);

```

```

    delay(300);
    noTone(BUZZER);
    digitalWrite(sw1, LOW);
    delay(300);
    digitalWrite(sw1, HIGH);

}
if (content.substring(1) == "82 4C 3F 65")
{
    Serial.println("Authorized access");
    Serial.println();
    delay(500);
    // digitalWrite(sw2, HIGH);
    tone(BUZZER, 500);
    delay(300);
    noTone(BUZZER);
    digitalWrite(sw2, LOW);
    delay(300);
    digitalWrite(sw2, HIGH);

}

}

```

2.RFID to arduino to Arduino to GSM part

Now you have to need connecting two arduino and GSM Module
Flowing Image



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

7

```

lastState = state;

    state1 = digitalRead(3);
lastState1 = state1;

    state2 = digitalRead(4);
lastState2 = state2;

    state3 = digitalRead(5);
lastState3 = state3;


GPRS.begin(9600);
Serial.begin(9600);


GPRS.println("AT+CMGF=1");


delay(1000);
}


void loop()
{
    while(GPRS.available()) {
        Serial.write(GPRS.read());
    }


    lastState = state;

    state = digitalRead(2);

    lastState1 = state1;

    state1 = digitalRead(3);

    lastState2 = state2;

    state2 = digitalRead(4);

    lastState3 = state3;

```



```

        state3 = digitalRead(5);

    if ( state != lastState ) {
        sendSMS();
    }

    if ( state1 != lastState1 ) {
        sendSMS1();
    }

    if ( state2 != lastState2 ) {
        sendSMS2();
    }

    if ( state3 != lastState3 ) {
        sendSMS3();
    }

    deLay(500);
}

void sendSMS() {

    //GPRS.println("AT+CMGF=1");    //Sets the GSM Module in Text Mode
    // delay(1000); // Delay of 1000 milli seconds or 1 second

    GPRS.println("AT+CMGS=¥"+8801723673803¥"¥r"); // Replace x with
mobile number
    deLay(500);
}

```

```

GPRS.println(" This is SAKIB");// The SMS text you want to send

delay(100);

GPRS.println((char)26);// ASCII code of CTRL+Z

delay(500);

//GPRS.write( 0x1a ); // ctrl+Z character


//delay(500);
}

void sendSMS1() {

//GPRS.println("AT+CMGF=1");    //Sets the GSM Module in Text Mode
// delay(1000);  // Delay of 1000 milli seconds or 1 second


GPRS.println("AT+CMGS="+8801723673803+"r"); // Replace x with
mobile number

delay(1000);

GPRS.println(" This is MOSTAKIN");// The SMS text you want to send

delay(100);

GPRS.println((char)26);// ASCII code of CTRL+Z

delay(100);

//GPRS.write( 0x1a ); // ctrl+Z character


//delay(500);
}

```

```

void sendSMS2() {

```

```

//GPRS.println("AT+CMGF=1");    //Sets the GSM Module in Text Mode

```

```

// delay(1000); // Delay of 1000 milli seconds or 1 second

GPRS.println("AT+CMGS="+8801723673803+"r"); // Replace x with
mobile number

delay(1000);

GPRS.println(" This is SUKUMAR");// The SMS text you want to send

delay(100);

GPRS.println((char)26);// ASCII code of CTRL+Z

delay(100);

//GPRS.write( 0x1a ); // ctrl+Z character

// delay(500);
}

void sendSMS3() {

//GPRS.println("AT+CMGF=1"); //Sets the GSM Module in Text Mode
// delay(1000); // Delay of 1000 milli seconds or 1 second

GPRS.println("AT+CMGS="+8801723673803+"r"); // Replace x with
mobile number

delay(1000);

GPRS.println(" This is Hasssan");// The SMS text you want to send

delay(100);

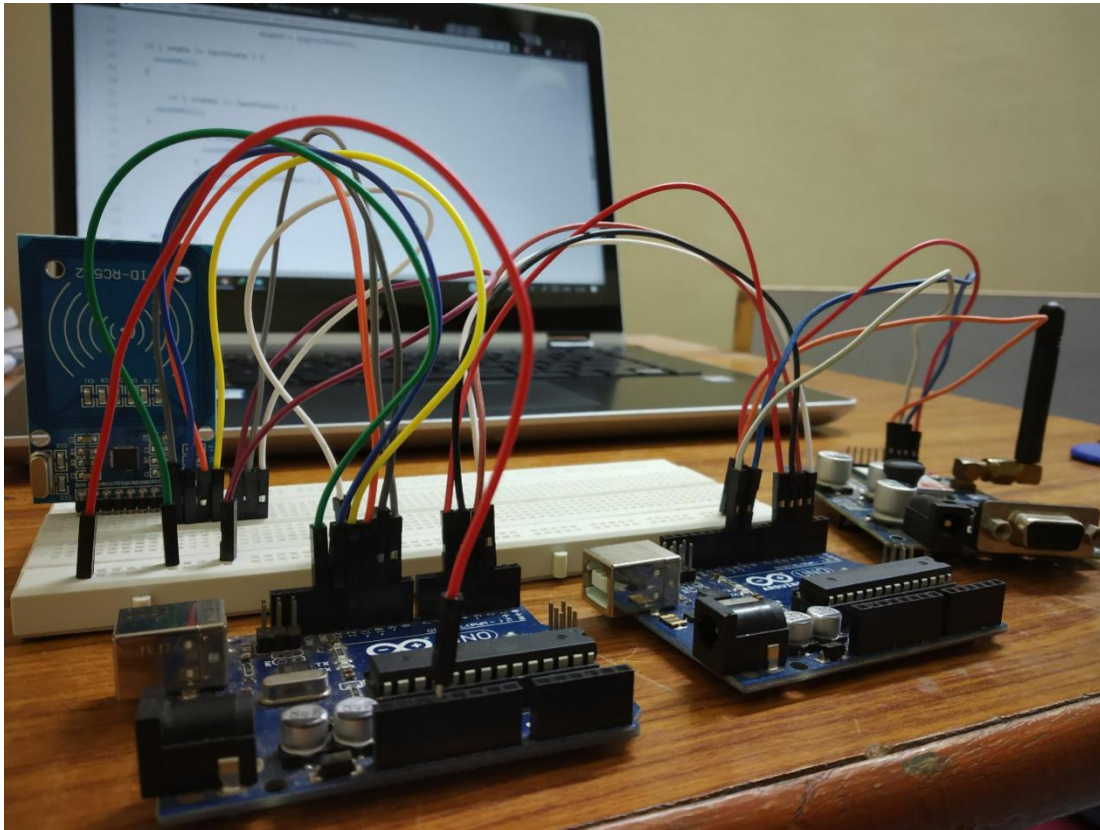
GPRS.println((char)26);// ASCII code of CTRL+Z

delay(100);

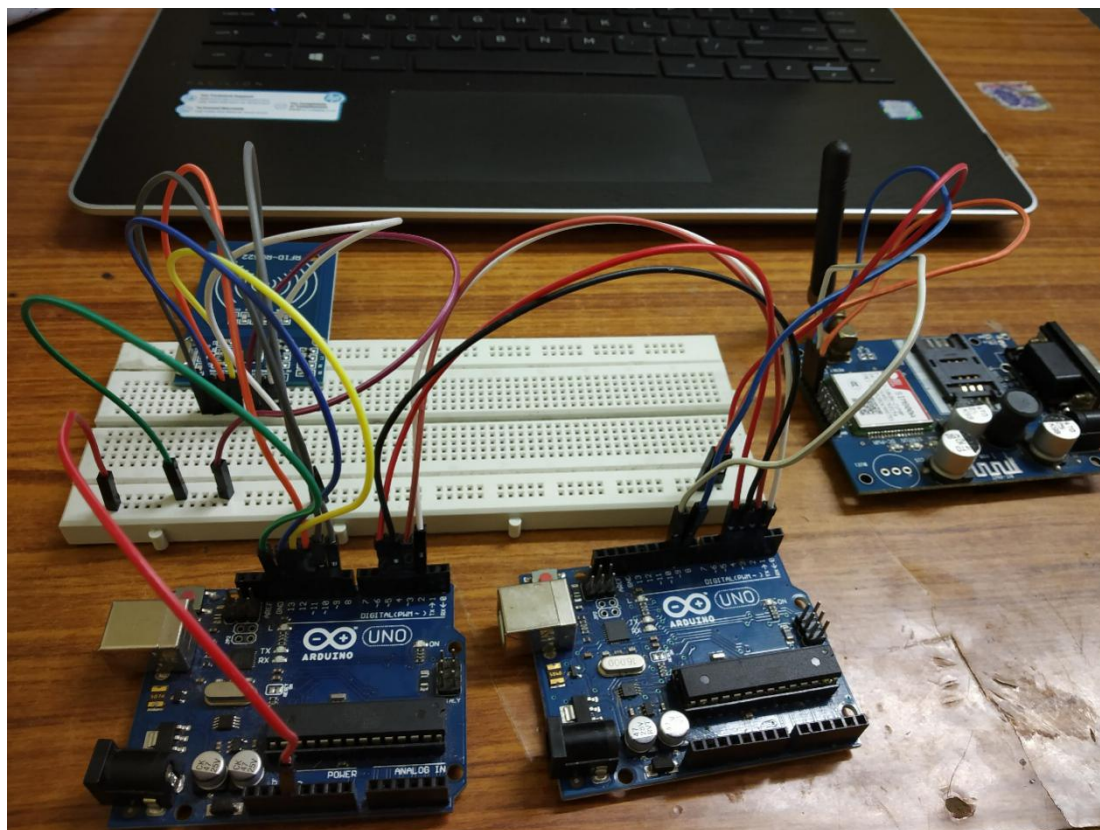
//GPRS.write( 0x1a ); // ctrl+Z character

//delay(500);

```



}



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