

GSM BASED AUTOMATIC SECURITY SYSTEM

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ABSTRACT:

Safety and security is of utmost importance in our day to day life. The approach to home security system design is almost standardized in these days. In this presentation, it is intended to improvise these standards by employing new design techniques and developing a low-cost home security system. The design of simple hardware circuit enables every sensor and electronic component at any private place.

Keywords: Ultrasonic sensor, Crystal oscillator, RS232, GSM, ARDUINO UNO.

I. INTRODUCTION:

According to the Maslow's needs security is one of the factor for every one's life. Our life is secured by the buildings, offices, military etc .But the property also need some security to secure the property by using GSM technology is a challenge.

In this project we are intended to design a GSM based Automatic security system to provide security in different places like offices, industries, homes and some public areas. By making a phone call to users or owners and making a buzzer sound to interrupt the neighbours.

II. PROPOSED SYSTEM:

- In this proposed system rectify the drawbacks of existing system by giving wireless security system.

- The basic components of a home automation security system are ultrasonic sensor and buzzer.
- In this presentation, our group emphasis to add more functionality to existing security design standards. The device has

1) Detection system 2)

Buzzer

3) GSM module

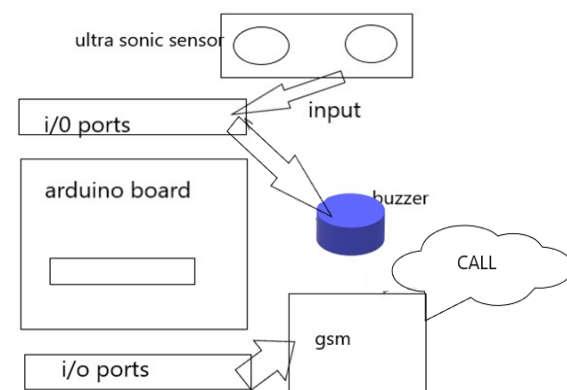
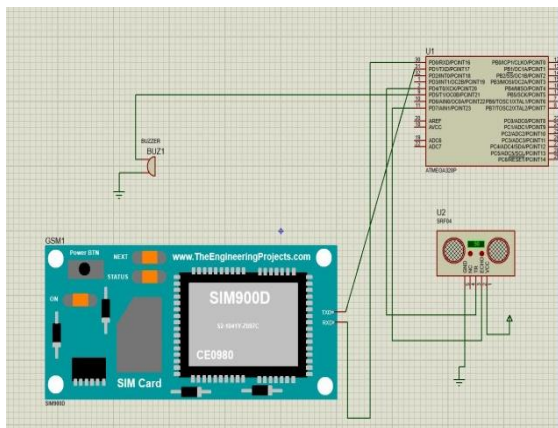


Fig-1: Block diagram

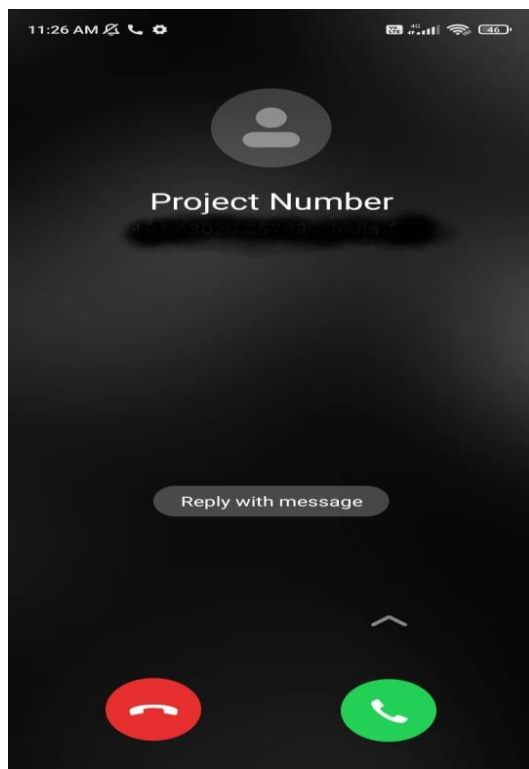
SCHEMATIC:



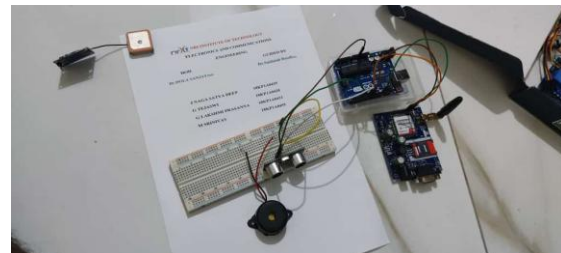
III. WORKING:

In this proposed system the embedded system makes a phone call to the user or owner when any person enters into the personal area ultrasonic sensor detects the person by receiving echo signal due to that echo signal the Arduino Uno interrupt the GSM module to make a phone call and a buzzer is on.

IV. OUTPUT:



V. CONNECTIONS:



Connections for ultrasonic sensor to Arduino:

Trigger pin to Digital-11

Echo pin to Digital-12

GND to GND

VCC to 5V Power supply

Connections for GSM TO ARDUINO:

TX -8, RX-9

GND –GND

12 V ADAPTERS FOR POWERSUPPLY

CONNECTIONS FOR BUZZER TO GSM:

RED-VCC

BLACK TO GND

Advantages:

- Low cost
- Accuracy
- Automatic
- Getting phone call

VI. CONCLUSION:

The embedded system is able to make a call within seconds when an unknown is enters into the room.

VII. FUTURE SCOPE:

There are some draw backs for this project to overcome the drawbacks we have to interface a camera (ESP8266 Cam). To detect the system but it was low cost and it was hard to design.

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