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TOTAL HOME SECURITY

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ABSTRACT

Home Security is very important aspect these days particularly with the kind of theft or vandalizing we hear. The home security system has moved to a next level where the controls in the hand of the house owner. Home security has changed a lot from the last century and will be changing in coming years. Security is an important aspect or feature in the smart home applications. As with the home security aspect we are adding the Home Automation system which is further makes this system very useful for society. Home Automation contains the fire detection alarm also temperature sensing and managing system that adding value to this system. In this system, we are using Gsm module for user and system interface as the system detects any theft or any unauthorized activity to attempt of unlocking the door via finger print scanner which then module sends message to user also we are providing the android app which is connected to system that gives user to home door lock access through it. It is useful in if the user not present at home but any guest outside waiting for them.
When there is an unauthorized entry on finger print scanner then it will ask for the keypad password and both the entry does not match then it gives security alert in terms of sms and a mail is delivered to the owner.
Keywords— Fingerprint Sensor, controller, Gsm Module, buzzer, Web Cam

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I. INTRODUCTION

A smart home security system offers many more benefits. When there is an unauthorized entry on finger print scanner otherwise by webcam which is connected through mobile app and both the entry does not match then it gives security alert in terms of sound and a mail is delivered to the owner.
The second method sends SMS which uses GSM-GPS Module (sim548c) and atmega 32 microcontroller. sensors and buzzers are used for automation purpose.
In this system the android app is developed for the accessing the lock system to open it.

II. LITERATURE SURVEY

[1] Home automation and security using Arduino and IOT" (IRJET) Vol. 5 Issue.02

Deals with the implementation of smart home using a ARM. This paper presents the design and implementation of a low cost but yet flexible and secure phone based home Security system.

[2] GSM security system Design& Implementation" (JESTR) 30 june 2015, with a minicomputer raspberry pi different input and output is interfaced. In input section there is calling bell, PIR sensor & wireless camera. In processing section a minicomputer raspberry pi is used. Raspberry pi is equipped with WI-FI dongle and on the output terminal there are LCD, magnetic door lock, emailing & tweeting services.

[3] IoT based smart security and home automation system", (ICCCA) 2016.one of the most effective modern technologies for home safety is a security system. These systems monitor the most critical areas of the house in order to detect intrusions or other anomalies that might

otherwise go unnoticed. During recent past, a number of systems were introduced for security measurements based on wired networks.

III. SUMMARY OF LITERATURE SURVEY

Design and implementation of a low cost but yet flexible and secure phone based home Security system can be developed. The different system uses the different controllers for make system more efficient.

IV. METHODOLOGY

A. *System Design*

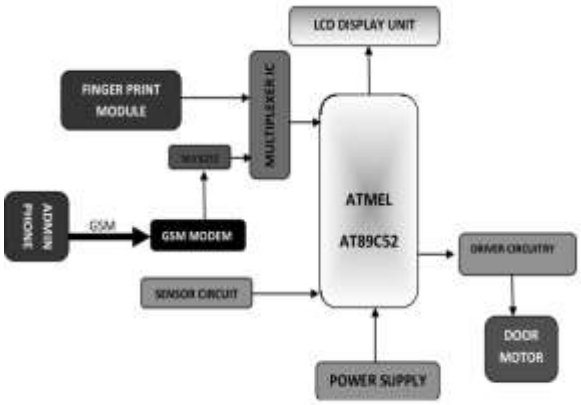

Fig. 1 Block Diagram

B . System Development

This system will be based on the security of homes and also adding home automation with respect to this system. As the methodology of this system is starts with the fingerprint scanner which is fingerprint sensor module 307 as the authorized person add its finger scans to this module after if other person tries to scan it denied access to other person if the fingerprint doesn't match as after the signal from sensor comes to controller and activate the gsm module and by that the registered number 0f owner gets theft message from system and the buzzer gets turn on on the spot.

The no of fingerprints is decided by the owner or by the user. Other method for unlocking the door is to we give to the system to manual key pad which has its own password to access if the fingerprint system gets fails to open the door, and other main element in this system is the android app which is connected to the system via internet the app has its own method to access of unlocking to prevent theft .this app works on single or dual bit signal which is recognized by the controller and gets you the access through it.

Also at the time of fire in home , the sensors gets activated and sends alert message to user by gsm module. If the room temperature is exceeds its standard degree than it will activate the cooling fan and it controls the temperature of the system.

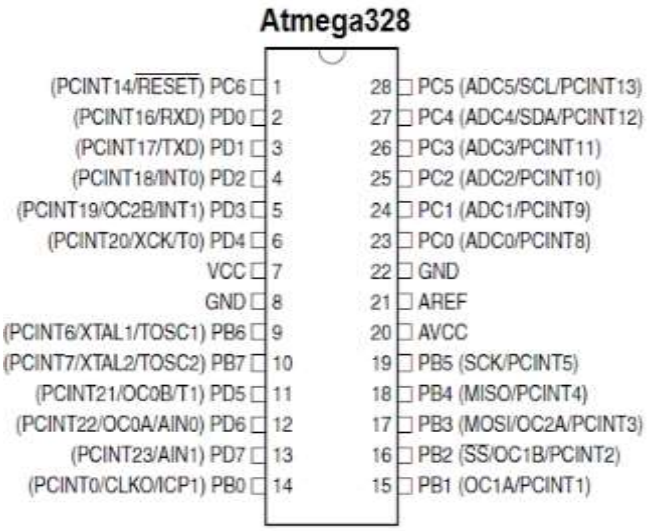

Fig. 2 Pin Configuration

Fig. 3 Fingerprint Module

Fig. 4 ESP-32 CAM

C. *System Specifications*

1. ESP32-CPU- Xtensa dual-core 32-bit LX6 microprocessor, Memory: 520 KiB SRAM ,Wireless connectivity: Wi-Fi: Bluetooth: BLE

2. R305-- Power DC : 3.6V-6.0V.Interface UART (TTL logical level)/ USB 1.1.
Working current : 100mA.
Peak Current : 150mA.
Character file size: 256 bytes.

E. Results

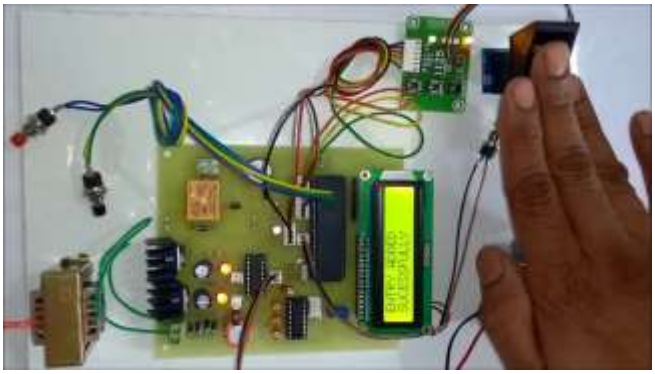

Fig. 5 Result

V.CONCLUSION

The project presents a real-time home security system to detect the theft and also inbuilt home automation

VI.REFRENCES

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