KEEN SECURITY SYSTEM FOR HOMES

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ABSTRACT

Home safety systems are an important article of modern housing and office facilities. Home safety systems must be inexpensive, dependable and efficient. Currentmultifaceted home safety systems include multiple security features such as fire, intruders, electronic door locks, heat, smoke, hotness, and more. Some security schemes may be a mixture of all security measures. In this article, we have strengthened your home's security so you can connect your GSM module to your Arduino when you're not at home and get home information on your mobile. I connect multiple sensors to the system and get this information. When the sensor value exceeds the threshold, information is sent to the registered mobile phone number.

Keywords:*Arduino, GSM, Home security, Sensors*

INTRODUCTION

Home safety alarm schemes are very significant in today's civilization where crime is increasing. Thanks to technical advances made in recent years, landlords don't have to worry about the safety of their home when they leave. Currenthouseholdsafetyschemesdeliver sufficient security from theft, fire and smoke. It also notifies the owner immediately. The goal of this project is to tool a simple, inexpensive but effective home security alarm system. The scheme is intended to detect intruders and alert owners by making a phone call or sending a communication, and Arduino is an open source electronic platform based on user-friendly hardware and software. The Arduino board can read the input-the indicator light on the sensor, the fingers of the button or the convert to Twitter message-output-activate the motor, turn on the LED and post something online. The Arduino board can be programmed to do everything by simply programming the onboard microcontroller using a series of commands. The Arduino board consists of a USB socket for communicating with a computer. " Multiple connection sockets that can be connected to external devices such as motors, LEDs, etc. The goal of Arduino is to introduce the electronic world to people with little or no experience with electronic devices such as amateurs, designers, artists, etc. Arduino is based on an open source electronic project. This means that all design specifications, diagrams, and software are publicly available to all users. Therefore, Arduino boards are commercially available, so you can buy them from suppliers or make your own boards if you wish. In other words, you can download the diagram from d's official website, 'Arduino, buy all components according to your design specifications, assemble all the components

and make your own board. GSM is a modem for mobile message. Abbreviation for GSM (Global System for Mobile Communication). The GSM system was developed as a digital system that uses time division multiple access (TDMA) technology for communication. The phone digitizes and shrinks the data and then sends it over a channel with two different customer data streams, each in its own time slot. The coverage of each cell depends on the implementation environment. Measurement is an important subsystem in all major systems, such as mechanical or electronic systems. Measurement systems include sensors, actuators, transducers and signal processing units. The use of these elements and devices is not limited to measurement systems. They are also used in systems that perform specific tasks to communicate with the actual task. Communication is like reading a signal state from a switch or triggering a specific output to turn on an LED. Simply put, a sensor is aexpedient that detects changes and events in somatic stimuli and provides consistent output signals that can be slow and / or logged. Here, the output signal may be any assessable signal and is normally an amount of electricity.

EXISTING MODEL

A sharp home security system is an important part of today's individual and office contracts. Home safety officers must be rational, powerful and persuasive. Today's complex residential security frameworks include some security features such as fire, gate breakers, electronic access locks, heat, smoke, temperature, and more. Some

security frameworks may be a mix of all your security efforts. The PIR motion identification sensor module has a computerized safety pin. This is related to one of Arduino's computerized I / O pins. The GSM module communicates sequentially with the microcontroller. There are Rx and Tx nails on the card. These pins are related to the Arduino'sTx and Rx pins. While transferring the program (sketch) to the Arduino, the GSM module must be separated as it interferes with sequential communication with the Arduino IDE.

PRAPOSED MODEL

The proposed model is illustrated in Figure 1. A sensor is a device that performs an input function to a system when it "detects" a change in quantity. The greatestsample of a sensor is a mercury thermometer. The amount measured here is heat or temperature. The dignified temperature is converted into a readable value in a calibrated glass tube based on the expansion and contraction of liquid mercury. Digital systems can transmit at 64 kbps and 120 Mbps data rates. GSM systems come in a variety of cell sizes, such as macro, micro, pico and umbrella cells. Each cell is implementation specific. The macro, micro, pico and umbrella cells of the GSM

network.
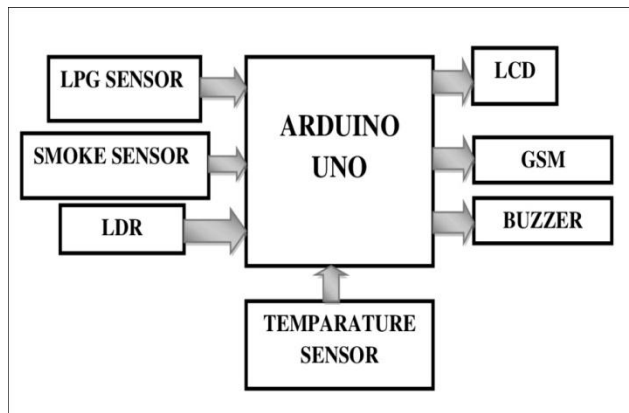
Fig(1): propose model

DESCRIPTION

In recent years, proceedings such as theft, fire and LPG gas leaks are veryshared. People's perceptions of various systems, such as smoke detectors and gas leak detectors, are rare. Here, we designed an integrated home security system to help people protect their homes from such accidents.

The IOT and Arduino-based home safetyscheme projects are designed to assistance someone protect their homes from theft, fire and LPG gas leaks. The project uses four sensors, which send data via IOT to the website. The Internet of Things (IoT) is essentially a "things" network through which physical objects can conversation data using sensors, electronics, software, and connections. This system does not require human interaction. The Arduino-based KEEN security system uses four sensors: temperature, smoke, LPG and LDR sensors. Data from these sensors is sent to the Arduino with an integrated signal converter. We used a GSM module where the SMS is triggered.

FLOW CHART

Flow diagram of the proposed model as shown in Figure (2). First, you need to monitor all sensor values such as temperature, LPG smoke and LDR. And you need to provide thresholds for each sensor. When the sensor value exceeds the threshold, the buzzer is activated and the SMS message sent to the registered mobile phone number is saved in the system. The LCD screen is used for the display and the value is at home. If it is below the threshold, the system is continuously monitored and the value is displayed on the LCD screen.
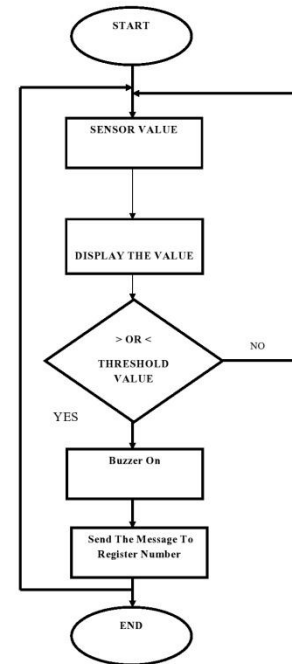
Fig(2): Flow chart of proposed model

APPLICATIONS, ADVANTAGES

Security is the main goal of the project, and the most important application of this system is internal security. By this scheme, you are vulnerable with all the measures that could be produced by fire, theft, LPG gas -REMOTE.

• This scheme can be used in cafeterias, businesses, industrial facilities, banks, etc.

• The keybenefit of this system is that it is fully automatic. Once installed, no human

interaction of any kind is required. It is also very profitable.

• IOT and Arduino based home security systems can be enhanced to identify fingerprints instead of passwords using a keyboard.

• There may also be a voice guidance system that sends voice guidance regarding one of four dangerous conditions detected by smoke, temperature, IR and LPG sensors.
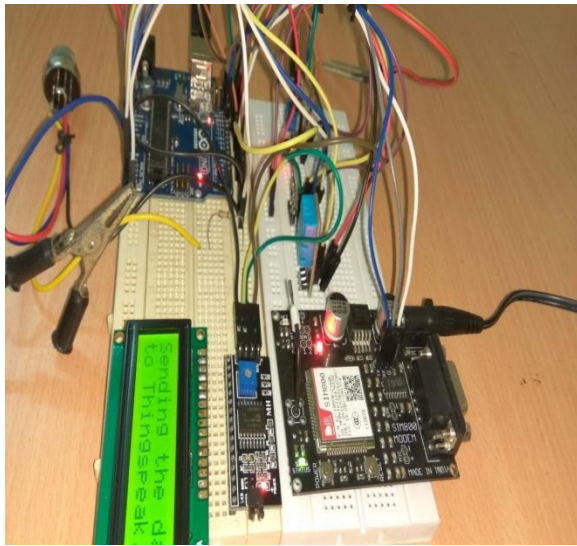
RESULTS

Fig: Keen security system

CONCLUSION

Home-basedsafety systems are ansignificantarticle of modern housing and office facilities. Home-basedsafety systems must be inexpensive, reliable and efficient. Modern complex home security systems include multiple security topographies such as fire, intruders, electronic door locks, heat, smoke, temperature, and more. Some security systems may be a mixture of all safetyevents. These complex systems are not

all expensive and inexpensive. Depending on the requirements, there are individual security systems. In the future, this system was designed using IOT, so it will help to regularly monitor offices or homes around the world.

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