DEVICE THAT NOTIFIES YOU OF ROOM TEMPERATURE

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Abstract

The "Room Temperature Notification Device" is an integrated device made with an Arduino processor and a GSM (Global device for Mobile Communications) module.This project helps us keep the computer room from catching on fire.It has a lot of things in it, like tools, racks, a cable system, power, and a UPS. If the temperature in a computer room goes up, the user will be notified. A temperature indicator tells you how hot or cold a computer room is.Arduino is a business, project, and user group for open source hardware and software. They create and make single board microprocessor kits for making devices and interactive items that can sense and control things in the real world and the digital world.GSM is used to let users know about things by calling and sending messages.The temperature is shown on this gadget by an LCD (Liquid Crystal Display).If the temperature rises by more than 40 degrees, a buzzer will sound in the computer room.If the temperature goes up, the following things happen:If the temperature rises from 30 to 35 degrees, it will send a message to the user. If the temperature rises above 35 to 40 degrees, it will call the owner. If the temperature rises above 40 degrees, a bell will sound. With the help of the GSM module and microprocessor, these tasks can be done.

Keywords: monitor for temperature, microcontroller, server room temperature

I.INTRODUCTION:

These days, computers are an important part of everyone's life.In this way, it helps people learn more.The computer was As the hub of most businesses, the server room is an important part of their IT system. It's where they support and organize their computer networks and do other IT-related chores. A lot of problems were found inside the rooms, so the company put in a lot of security to keep the server room air conditioner from breaking down. This helps keep the computer systems running at the right levels.There are many reasons to raise the temperature in the room. The main reasons for not maintaining the room and minimum area properly are that there are too many systems that keep an eye on or send alerts about the temperature all the time.It will go down because of accidents. One type of temperature tracker keeps an eye on the temperature in a room and saves the information in a database. Overheating a server can cause a fire in the server room, which lowered the number of deaths in the previous paper. This paper will keep an eye on the temperature and send a message only to registered users.It only saved the temperature data and couldn't keep the computer room from opening.This paper talks about how to use the GSM module in Visual Basic 60 and the programming language C to connect to four server rooms and send a message to a registered user in order to make a call.

II. LITERATURE SURVEY

2.1.A Microcontroller- based Room Temperature Monitoring System

Authors:TheophilusWellem,BhudiSetiawan
Year:2012

A Microcontroller- based Room Temperature Monitoring System it will monitoring the temperature of the computer server room.it is an critical task in this paper designed or implementation by using Atmel Atmega8535 microcontroller and national semiconductor LM35 temperature sensor LCD to display the room temperature. GSM modem to send and received the SMS to only registered users .when the room temperature is above threshold, which is 28°C.embedded system to make a connection between each other.

2.2.A Web Based Temperature Monitoring System

Authors: M. Kassim, M.N. Ismail and C.K.H. Che Ku
Yahaya Year:2011

A Web Based Temperature Monitoring System that is

used to continuously access and monitoring the temperature related information from the users. in the existing system the temperature monitoring is that this prototype system allowed the data to be monitored anytime and anywhere from the internet.there aretwo parts developed in this project paper hardware part building by used the temperature sensor board and software part building using the programming language write a program in c coding the program can be uploaded that microcontroller to create the visual basic 6 0 application to display the temperature and save the temperature related information from the data in the form of the database.

2.3.Remote temperature monitoring using L35 sensor and intimate android user via C2DM service

Authors: Yusuf Mulge
Year:2013

Now a days the technology is increased in daily life,It send the message only to the registered user.Arduino Uno board and ethernet using a wireless sensor applications are used to prevent the fire accident in server room via using GPRS. It is always used to identifying the position.

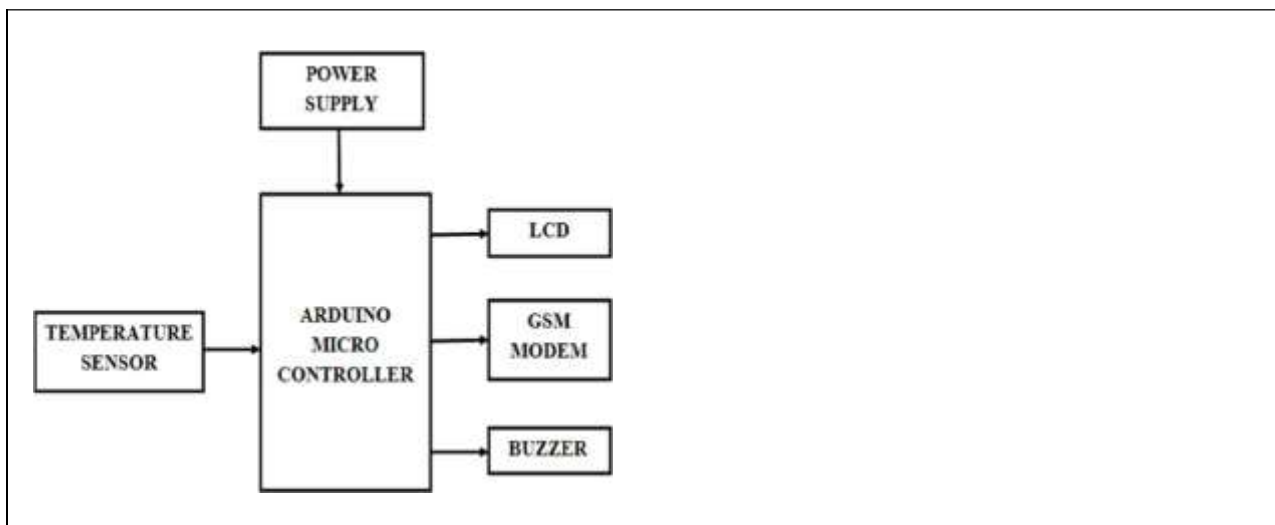## III. SYSTEM BLOCK DIAGRAM

Fig 3.1 Proposed system block diagram

IV. WORKING METHODOLOGY

This project is mainly designed to avoid fire accident in the server room.the power supply is given to microcontroller DHT11 temperature sensor detects the room temperature LCD to displays the actual temperature of a server room. GSM module is used to send message and make a calls to user .if the temperature increases it performs the following operations.

Temperature increases from 30-35 degree it will send the message to user emperature

creases from 35-40 degree it will make a call to registered user Temperature increase

more than 40 degree it will produce sound in buzzer

These operations are performed with the help of GSM module and microcontroller.

V. RESULTS

5.1. MODULE 1

Fig :1GSM MODULE

5.2. MODULE 2

Fig:2ARDUINO MICROCONTROLLER

5.3. MODULE 3
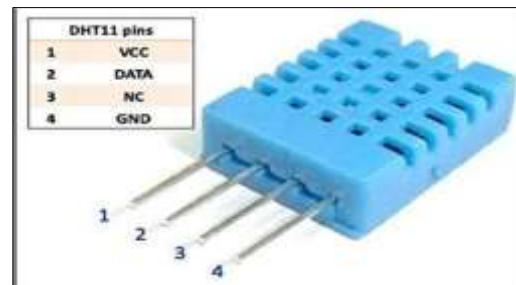
fig:3 TEMPERATURE SENSOR
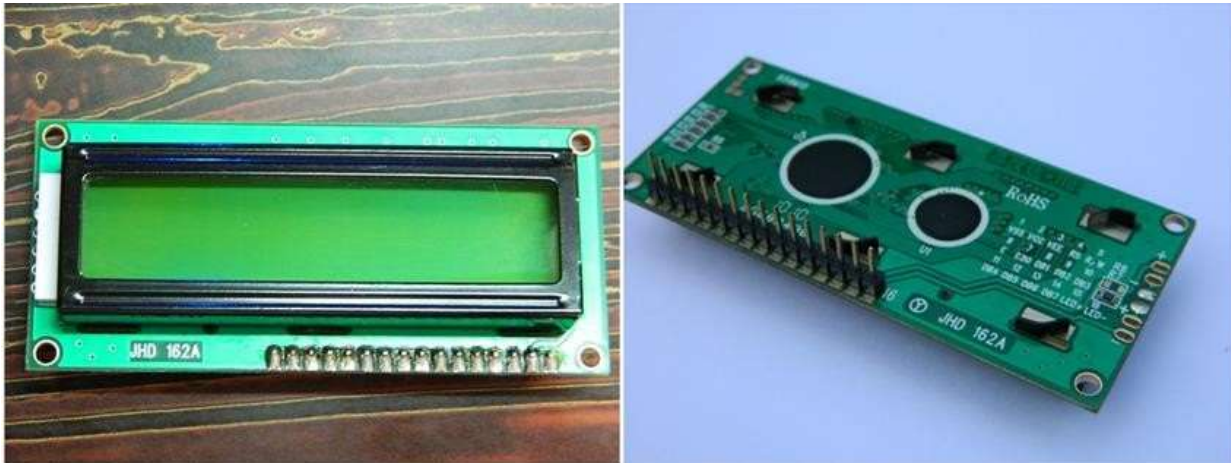
5.4. MODULE 4

Fig 4:LCD (front and back view)

5.5. MODULE 5

Fig 5: send and received the message(temp mode 1)

5.6. MODULE 6

Fig 6: make a call to registered users

5.7. MODULE 7

Fig7 :buzzer

VI. CONCLUSION

The project was titled as "ROOM TEMPERATURE NOTIFICATION DEVIUCE" was developed to avoid fire accidents in server room. It is used to monitor the temperature of server room .It reduces the number of fire accidents .If the temperature increases it leads to fire accidents .The device is mainly implemented to overcome these problems Easy to implement this method. It is very useful for companies and industries. LM35 temperature sensor produce accurate temperature and it is easily available .Arduino microcontroller is efficient module for sensing and controlling the operation of a device. GSM module is widely used for communication purposes.

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