

Multiuser display board using gsm module

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Abstract

In this proposed system the idea of Multiuser display board using GSM module. So our main aim is reach up to common people and reduces the paper work and time. The admin adds the users and those users only send message to the display board. In this paper are trying to implement our system in such a way that the message come from authorized users and it's to first send to GSM module and then GSM module send to Arduino kit and then it sends to display board. Admin has authority to add the users and remove also. The admin also checks the history. The message also set on priority bases So in short the GSM module which located at Digital notice board receives the message from authorized user and displayed on notice board which is situated at remote location. Any information can display on the electronic board from the users mobile SMS from any places. This system is more flexibility a multiuser displaying system has been implemented in the system which can display several messages simultaneously

INTRODUCTION

This system deals with an attempt to efficiently overcome the shortcomings of traditional notice boards. Here a system is developed for a modern electronic notice board using SMS-based wireless technology along with secured password protection to allow efficiently people to access a notice at a convenient time. With this systems high officials surely don't need to relay on the peons for the notices to hang over. Whenever or wherever the user is, they can just type what information they want to provide on a cell phone and just press the send button. The message will be sent to the board and displayed. Presently almost all electronic notice boards are designed using a wired system. One of the drawbacks of the design is that the system is inflexible in terms of placement because of the messy wires. Since the proposed system is wireless, this problem is alleviated. This system is user-friendly because authenticated personnel display the message at notice boards situated at different locations through a single SMS from the mobile phone. Thereby it eliminates the wastage of paper and ensures the immediate transfer of information. Information can be displayed page by page and expired notices can be stored in the database for a long time. In addition, people can print out multiple copies of any posted notices. So it can be concluded that the proposed system can used successfully in traditional Schools and Colleges, Waiting Rooms, Company Reception Areas, Factory Production Areas, Hospitals, Public Transport Timetables, Exhibition Centers, Art Galleries, Car Show Rooms, Exhibition etc. without errors and maintenance. The users can read notices posted from anywhere provided that the computer is connected through a local area network (LAN) facility.

The fundamental issue in today Multiuser Display board is to give users the ability to control anyone the messages posted any person. The security has also big issue that time some unwanted things happens. To all the gap, in this system, we proposed system allowing Multiuser system to have a direct control on the messages posted on their walls. The new system provides more security. The admin panel has posting any message means normal user cannot have posted any messages. The proposed system has provided database records means user find their old messages. This is achieved through via flexible rule-based system.

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LITERATURE SURVEY:

Bluetooth and ZigBee Based Display Board: This Bluetooth base system also work on schools, colleges but it cannot work globally like bus stand, railway station, market etc. Because this system has some limitations this system has Bluetooth range problem. Because Bluetooth has only 10m range means message should be send within 10m. Out of 10m range this system should not work proper. So this was the biggest disadvantages of this system and this system works also slow as compare to other system. We developed notice board using the Bluetooth and ZigBee wireless modules shows different characteristics based on many parameters and have different way to access them, thus it is usable at different location, for variable range purposes either local area or medium range notice board. An android based Bluetooth application has been developed to interface update the notice board using the android based mobile phone when using Bluetooth module as notice receiver. Other, using computer ZigBee can be used for data transmission till 250m. Both module is operating on same data communication rate (Baud rate) using UART thus they will share common hardware receiver, without any modification to access notice board. [1]

Internet Base Display board: This Internet base system also work on schools, colleges, hospitals, bus stand, railway station, market etc. This system has some limitations this system has Internet range problem. Because Internet has range issue means at ruler area some network problem occurs so that it cannot reach up to common people and cost of this system is very high because they need smartphone. With the rapid development of science and technology, display technology is also changing. In recent years, LED display was widely used in public places for publicity, because of its advantage in large screen, super-vision, low-power, high brightness, long life and flexible display Simple and practical control system is attracting more and more attention. This paper proposed a convenient control system of the LED display with single chip microcontroller as the core, based on powerful wireless transmission control of nRF24E1. This kind of control system eliminates the electrical connection of controller and the LED display. [2]

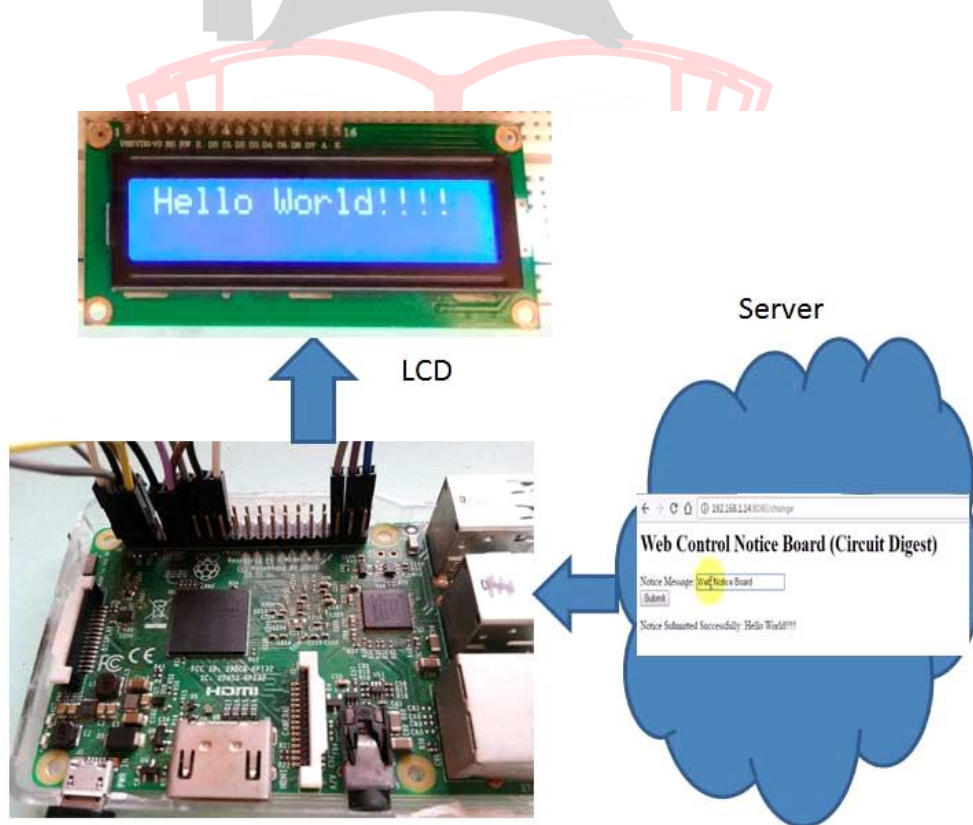


Fig: Internet base

Wi-Fi Base Display board: This Wi-Fi base system also work on schools, colleges, hospitals, bus stand, railway station, market etc. This system has some limitations this system has Wi-Fi range problem. Internet speed problem Because Internet has range issue means at ruler area some network problem occurs so that it cannot reach up to common people and cost of this system is very high because they need smartphone.

PROPOSED SYSTEM

When we send SMS from mobile phone to GSM module then GSM receives that SMS and sends it to Arduino. Now Arduino read this SMS and extract main notice message from the received string and stores in another string. And then sends the extracted message to 16x2 LCD by using appropriate commands. In this architecture the register user sends the message then its first go the to the GSM module its checks whether the number is register or not. If the number is not valid then message cannot send to next stage to the Arduino. If the user is valid then its goes to next phase to the audio Uno kit. In that phase its check message security means its check the whether the message come from particular fix format or not. If the message cannot come in the particular format, then message cannot display if the message come from the particular format then its display on display board. In this architecture the admin adds the users and only added users sends the messages. The messages are displayed on the priority bases means if the higher priority message has first preferences.

CONCLUSION

This paper design a kind of control system of LED display through GSM and Arduino module. That greatly enhanced the stability and reliability of the multiuser display board improved the control efficiency of the LED display. The system has better security The experiments show that the convenience of the system design, stable performance, low cost, high commercial value and market competitiveness, make this system suitable for large-scale promotion of a variety of different places.

References

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