Variant Technology for Displaying Notices

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Abstract: In previous days , the notices has been displayed using SMS based technology in which notice as a message is sent by mobile phones which is display one's at a time and also it having limited number of characters and it requires charges per message. Further the Global System for Mobile (GSM) based technology was introduced in which Liquid Crystal Display (LCD) is used to display notices. To overcome above mentioned issues we came to conclude with the use of wireless technology to display multiple notices at a run time.

Key Words: GSM, Liquid Crystal Display, SMS.

1. INTRODUCTION:

Displaying notices on notice board is a primary thing in any institution, organization or public utility places. Sticking various notices day-to-day is difficult process. A individual person is required to take care of this notices display. In the case of digital displays if they wants to change the message or styles an operator have to go there and connect the display to pc or laptop, time and money consuming complex method. Now a days notice boards are more important medium for displaying information such as "notices", "images" in the areas like college, restaurant etc. And keeping people informed. The traditional notice boards involve the pinning up of printed or handwritten information on a board. Although the digital displays today can present various media contents to the audiences, most of their interaction modalities so far are still limited to one-to-one interaction. But this has the disadvantages of dependency on a person for pinning up notices and wastage of paper. Some developments in notice boards, in an attempt to overcome above-mentioned drawbacks, include display of data on a wireless notice board[1]. This has been implemented on computer screen or it can be implemented on light emitting diode (LED) and liquid crystal displays (LCD) displays.

2. MATERIALS:

Different material used in variant technologies is mentioned below:
- Removable Disk: it is used in SMS based technology for storing notices.
- GSM (Global System for Mobile): it is used to expand the system easily for conveying notices at anytime any location.

3. METHOD:

In the previous system, there is use of wired communication model which has messy wires so it has complex structure and there is a limitations for displaying notices. In our proposed system to overcome this issue we use large screen display monitor to display multiple notices at a run time.

4. ANALYSIS:

To make improvements in the area of information and message display, there are continued advances in the field of engineering because new knowledge is construct on top of existing knowledge. The Digital Moving Message Display System (DMMDS) was dual line but had the drawback of fixed or permanent message which is display without changes was being made in the message. When key is pressed only pre-programmed messages had been displayed as the input interface is limited. SMS can be used in both P2P as well as in cell-broadcast mode. An SMS message can be at most 140 bytes of data, so one message can contain up to:
i. 160 characters if 7-bit character encoding is suitable for encoding Latin characters like English alphabets is used.
ii. 70 characters if 16-bit Unicode UCS2 character encoding is used. This 16-bit character encoding uses the SMS text messages containing non-Latin characters like Chinese character should use 16- bit character encoding.

Some of the home automation systems like door bell, refrigerator, light board, etc. developed earlier includes a PIC16F887 IC integrated with [2] GSM module enabling SMS based automation. Our project does not use any android application in it. So, it not involved extra task of writing message. A computerised system was developed in [3] where a GSM was interfaced with a desktop computer. Domestic appliances had wired connection with desktop and users were connected through Wi-Fi. Doors and Windows were monitored in [4] using PIC18F452 with security that required ID for entering through the door.

5. RESULT:

Following diagram shows the detail information related to our proposed system and which contain four modules are:

1] Application from Mobile phone
2] Cloud
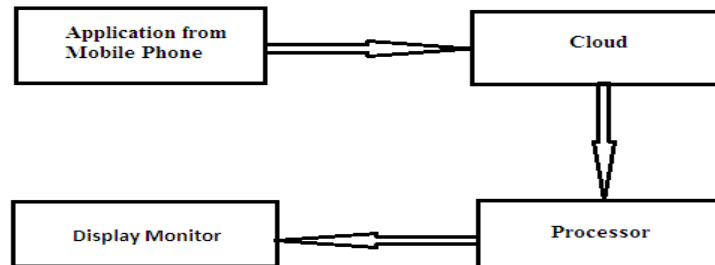3] Processor
4] Display Monitor

Fig. Block Diagram

The above mentioned Fig. contains four phases, in that we create android application in mobile phone through this application authorised person send notices, that notices will be stored on cloud and also the database related to authorised person is stored on it .Then processor will fetch that data along with notices from cloud and send it to the display monitor at a same time it is send to the mobile phones of the particular person.

6. RECOMMENDATIONS:

This technology is useful in various things also such as Railway Station and Airport in which the system is embedded from first only and it does the work of displaying the pre-programmed language on the LED display board.

7. CONCLUSION:

In previous system there is used of wired communication model. It has messy wiring and it also required lots of paper work and it's time consuming process. In our system we have overcome this drawback. The display boards are one of the most important media for transferring information to the maximum number of end users. With the advancement in technology the display board systems are migrating from normal hand written display to digital display. Further to Wireless display units. The concept of this system is to introduce a new technology for notice board display system using Raspberry pi processor technology. A user can send a message from anywhere in the world. This paper deals with development of a modem connected wireless notice board system, which displays the desired message of the user through an SMS in most populated or crowded places or remote places. This proposed system has many remarkable applications in Educational Institutions and Organizations, Traffic Management, Crime Prevention, Railways, Advertisements etc. Being user friendly, long range and speedy means of conveying information are major characteristics of this system. By using this proposed ideology we can improve the security system and also make awareness of the emergency situations and avoid many dangers. In general, Wireless notice board will prove to be an improvement over the existing notice boards used in college campus.

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