ISSN No. 2395-0900
International Journal of Engineering Studies and Technical Approach
IJESTA

A Review Paper on Android Controlled Notice Board

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ABSTRACT:

In present scenario notice board is required in many organizations. A notice board display is used to display the message/information sent by the high authorities of the organization. To display various notice a separate person is appointed to do such work & it is also consider as a difficult task. Here this project is dealing with enlistment wireless Electronic notice board. Whenever a notice is sent from the faculty through android device, the notice will be displayed on wireless electronic notice board. This message can be sent from any tablet/smart-phone etc. with Android OS upon a GUI based on touch screen operation. When the user is sending the message from android application device this will be received by the Wi-Fi-modular. As the Wi-Fi module has its own IP address and port number that will be known only to the users who is operating. Later it is sent to the Arduino that further helps in displaying the notice in wireless electronic notice board which is equipped with LCD.

Keywords*—: Arduino, WI-FI(Wire Less Fidelity),TFT(Thin FilmTransistor)Display, Android Phone, GSM module, Connection Terminal App.*

INTRODUCTION

Smart phones are playing vital role in human life. They are easy to use, promising and durable devices that help in performing day to day tasks. Embedded systems using wireless technologies are widely used for communicating with peripheral devices.

In this paper, the development of a simple and low cost wireless Android based notice board is presented. The proposed system uses either Bluetooth or Wi-Fi based wireless serial data communication in displaying messages on a remote digital notice board. Android based Application programs available for Bluetooth and Wi-Fi communication for personal digital assistant (PDA) devices are used for transmitting the alpha-numeric text messages. Using the Bluetooth or Wi-Fi based serial data communication technique, the corresponding transceiver module has been interfaced with microcontroller board at the receiver end. For this purpose, a low cost Arduino board is programmed to receive alphanumeric text messages in any of the above selected communication modes. The proposed system will help in reducing the human effort, paper, printer ink and cost for manual changing of the notices.

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BLOCK DIAGRAM

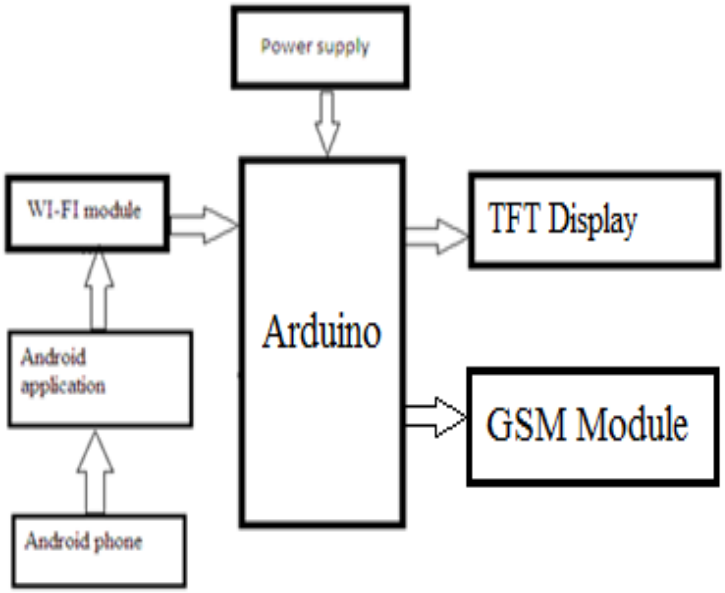

Fig. Android Controlled Notice Board System

LITERATURE SURVEY

1. SaloniSahare, RajatKadwe and SheetalGarg mentioned in their paper work on Android Controlled Notice Board that the project is an electronic notice board that is controlled by an android device and displays message on it. Traditionally, any information or notice had to be stick daily on notice board. This becomes tedious and requires daily maintenance. The project reduces this drawback by introducing an electronic display notice board connected to an android device through Wi-Fi connectivity. The receiver device receives the message from the android device that is sent to a ARM7 controller. The ARM7 controller displays the message on a LCD screen. For displaying any information this project can be used at various places such as railway stations, offices, colleges, or airports.

2. Prof.MadhaviRepe, AkshayHadoltikar, Pranav Deshmukh, Sumit Ingle mentioned in their paper work on Android Controlled Digital Notice Board thatNotice board is necessary thing in any institution or public utility places like bus stations, railway stations, schools, shopping centers, etc. But pasting various notices day to day is a difficult process. A separate person is required to do this task. This project shows about advanced wireless notice board.

The project is built around ARM controller raspberry-pi which is most important in this system. Display is obtained on LCD monitor display. A Wi-Fi is used for data transfer. At any time we can add as well as remove the text according to our requirement. At transmitter authorized android phone is used for sending notices. At receiving end Wi-Fi is connected to

electronic notice board. When an authenticated user sends a notice from the system, it is received by receiver. Wireless is a popular technology that allows an electronic device to transfer data wirelessly over a computer network, including high speed wireless connections. The data is received from authorized user. Then it sends to raspberry pi. This is the model for displaying notices in colleges on digital notice board by sending messages; it is a wireless transmission system which has very less errors and maintenance. The hardware board is replaced by raspberry pi system. The raspberry pi is interfaced with Wi-Fi Module. A LCD MONITOR display is attached to raspberry pi for display. Raspberry system's coding will be done using python language. Many users can access to update notices on the digital notice board by providing them password. We can use a PC with an administrator for monitoring the system.

PROPOSED WORK

As people mostly use the manual process to update the notices, they need to update every time manually which is a tedious process. Following are the modules associated with our android application which helps an individual to easily update notice.

A. Login

User needs to get logged in for uploading the notice. By using this technique the user can be able to update the notice directly from android phone that will be automatically updated on the electronic notice board.

B. Authentication

The purpose of authentication is to see whether the user who logged in is the one who has been given the user login id and password by admin. Authentication is purposely made so that only the faculty of the college or an individual who has authority for updating the notice is able to update the notice on electronic notice board.

C. Displaying Notice on Notice Board

To display a certain notice, at first user will have to enter the notice in an android application which will help in displaying directly on electronic notice board. This happens with the combination of software and hardware. The notice is entered in a software device and displayed on a hardware device. The interface between software and hardware will be WI-FI module.The message to be displayed is sent through a remote place from an authorized transmitter. The Arduino receives the notice and displays the desired information.

D. Clearing Notice Board

There’s an another module called clearing notice board where notice board is being cleared so that another notice can be updated.

E. Logout

When the notice updating work has been completed, users can logout.

ADVANTAGES

- It can reduce use of papers and hence deforestation can be turned into a forestation.
- It can reduce physical effort of printing and distributing paper based notices.
- Multiple users are authorized to update notices on the electronic notice board.
- No printing and photocopying cost. Thus save time, energy and finally environment.
- Prevents unauthorized access of notice board.
- No need of any difficult wires to display the information on the LCD as it is wireless.
- Easy to operate and Consumes less power. This circuit is handy.

CONCLUSION

Thus here by we conclude that the proposed system remove all the drawbacks of existing system and enhanced with the automatic internet and wi-fi notice board system. The proposed system gives the automation in all the processes like updating notices from any remote places. It provides the detailed solution in existing system problem.

By introducing the concept of wireless technology in the Field of the communication, we can make our communication more efficient and faster, with greater efficiency. We can display the messages and with less errors and maintenance. This system can be used in college, school, offices, railway station and commercial as well as personal used. Rotational latency involved in using of papers in displaying of notices is avoided and the information can be updated by the authorized persons.

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