

An IOT Based Web Page Controlled Digital Notice Board

P. BHASKARA CHARY
M.Tech Student, Dept of ECE, KU College of
Engineering & Technology, Warangal, T.S, India

Dr. T. SRINIVASULU
Professor, Dept of ECE, KU College of
Engineering & Technology, Warangal, T.S, India

Abstract: In this proposed system the idea of IOT Based Web Controlled Digital Notice Board Using GSM Technology has been presented. So our main aim is to reduce paper work and time. At present, when information has to be updated in a notice board, it has to be done manually. To change message on display, it needs to change microcontroller program code again. By adding web controlled IOT based communication interface to this system, we can make smart noticeboard to overcome these limitations. So we have interfaced web controlled IOT based SIM800L modem with microcontroller and implemented a text transmission and reception technique.

Keywords: — ARMLPC2148; GSM; IOT;

I. INTRODUCTION

GSM – an advanced versatile communication framework, which is internationally gotten to by nearly 212 nations and domains. Worldwide framework for versatile work is totally upgraded for full duplex voice communication. At first produced for the substitution of real (1G) innovation, now GSM is accessible with heaps of hitting highlights with the consistent up degree of third era (3G) innovation

Likewise, in trains and transports the data like stage number, ticket data is shown in computerized loads up. Individuals are presently adjusted to the possibility of the world readily available. The utilization cell phones have expanded definitely finished years. Control and correspondence has turned out to be imperative in every one of the parts of the world.

This undertaking is a Web Controlled notice board with a GSM modem at the recipient's end. So if the client needs to show any message, he can send the data by Web server (Thingspeak.com) and hence refresh the LCD show appropriately.

II. PREVIOUS STUDY

This Undertaking portrays the framework that message send from approved client to GSM module which is situated on the notice board. So this GSM module gets the message and showed on see load up, at same time this message will be send distinctive portable number store in memory of microcontroller. At the point when new message is landed at see board than the signal will beep.

Max232 move the level of flag which changes over the flag between the microcontroller and GSM module. After the transformation of flag this message will be shown on see board

III. PROPOSED SYSTEM

In transmission section the information which we want to display on the LCD (20x4) should be entered in the web form as show in figure. The web

form is created by using html and java script script is used to add functionality to the web form.

To display the data that should be entered in enter notice text box and choose field as 1 then click on submit. The data is transferred to the web server (Thingspeak.com)

Receiver section contains power supply, microcontroller, LCD display and GSM800L GSM module. Initially the GSM800L module programmed with AT commands and microcontroller is programmed by using embedded C language in KEIL software. A sim is inserted into the GSM module, once the power supply on AT commands executes one by one. The GSM800L module will download the data from the web server and transmitted to the microcontroller block. Now the microcontroller fetches and executes the information from the GSM module and displays in the LCD.

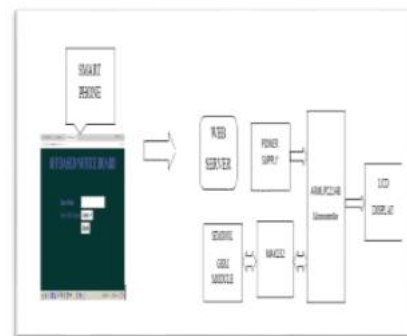


Fig -1: Block Diagram of Proposed System

3.1 HARDWARE & SOFTWARE MODULES

1. Microcontroller ARMLPC2148
2. 20 X 4 LCD Display Normal & Jumbo
3. Power Supply
4. Level Converter MAX 232
5. GSM MODEM
6. Web Server(Thingspeak.com)

7. Keil uVision4

8. AT command

[3] Mr. Smash Chandra K. Gurav, Mr. Rohit Jagtap: " Wireless Digital Notice Board Using GSM Technology "

3.2 ALGORITHM:

Step 1: Allocate storage space in Thingspeak.com server

Step 2: Create html page to enter text/message/data to be displayed on the notice board.

Step 3: Activate GSM SIM800L module by dumping AT commands using flash magic.

Step 4: Send the message/text/data using html page.

Step 5: SIM800L module will receives the data from the server and sends to microcontroller.

Step 6: The microcontroller processes and stores the data in memory which will be displayed in LCD 20X4 display.

FLOW CHART:



Fig -2.Flow Chart

IV. CONCLUSION

1. IOT notice board can be used in various organisations like hospitals, schools, colleges, Offices etc.
2. It provides faster and dynamic displaying of messages.
3. User can send data anywhere in the world.
4. Data is more secure.

It is Eco Friendly, using IOT notice board we can reduce paper usage

V. REFERENCES

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