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"Digital Notice Board"

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Abstract—Notice Board is basic concern in any organization or institution and also it is use in many public places including bus stations, railway stations and malls etc. The Traditional way of dis playing notices is sticking print of notices on notice board which is difficult task. This project is mainly about digital notice board with ESP32, which is connected with LED display via ESP32in these systems the main feature is scheduling of notices on the basis of priority and also backup facility and notification facility for the user is also provided. Here the admin can control notice board through internet. So information can be send anywhere in the world and can be displayed within seconds. Information may be in the form of text, etc. PC is used for sending information and ESP32 is connected to internet at the receiving side. It may be to display informative news, notices , interview sequence (candidate/student name)etc. This traditional system is being continued for years.

Here the teachers or other staffs of the organization should prepare the content manually and the students has to remember it by looking at it. If the data displayed are names, then there is a well prepared sequence or list of the candidate already.

Keywords (OLED display, ESP32, notice, internet, information, PC)

I. INTRODUCTION

Notice board is an essential information gathering system. In our day-to-day life we can see notice boards in various places. So here we are using digital notice board for the interview purpose.Only respective authority can send information. ESP32 which is the Heart of our system. A monitor is interfaced with ESP32. So information in the form of text can display on the LED Screen. Our primary aim is to get more people's attention on the display. By the usage of high definition display devices people can get more attention on the noticeboard rather than conventional notice boards.

So displaying these types of information make our system more user friendly. Digital system is more preferred by the people because they can interact with people easily and it require less time. The main objective of this project is to develop a wireless notice board that display message sent from the user and to design a simple, easy to install, user friendly system, which can receive and display notice in a particular manner with respect to the provided data which will help the user to easily keep the track of notice board every day and each time they uses the system

II. NEED OF SYSTEM

1. The main aim of the digital notice board is to locate all college events like interviews, workshop and other college events.
2. In educational institutions, the organization use circulars and notice boards for conveying information to the students. This methodology takes additional time for updating also many students may not be aware of the information displayed on notice boards due to non-eye catching notices.
3. This system can be implemented for many important places where latest information can be displayed.
4. For example, if implemented in colleges all information for students and college management to display any information and it also provides greater speed and reduced time consumption.

III. PROPOSED WORK

Notice board plays a vital role to convey the message in any organization. To achieve the green IT, it is mandatory to use the Digital media rather than earlier conventional media like paper printing. In this paper, we have been implemented a Smart Notice Board which uses ESP32. The work of the system is to make the notice board digitally by controlling them from anywhere. So our system is working with the help of ESP32. So firstly established a connection between our system and ESP32, for making this connection we have used ESP32 development board. Here we are using two ESP32, one is connected to the LED display and another one to the switch. On pushing the button, ESP32 receives command and will perform the assigned task like displaying the next candidate name. In the code , the task is to display upcoming name of the candidate.So basically, data is stored in the cloud and the list of the candidate is shown on the fire based. There we can see the candidate registration sequentially which contain basic detail

like name, city, mobile number etc. When we push the button command is given to the ESP32 and task is carried out and the name of next or the previous candidate displayed on OLED display.

- To develop a cloud based technology for user.

• To design simple user friendly system.

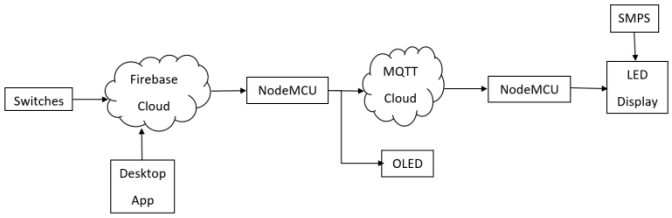
• To easily keep track of notice board by the user with respect to token number and name of candidate which can receive and display notice in a particular manner with respect to the provided data which will help the user to easily keep the track of notice board every day and each time he uses the system.

• To get more user friendly by providing switch button so that it can display the next token number or the name of the next candidate.

IV. PROBLEM STATEMENT

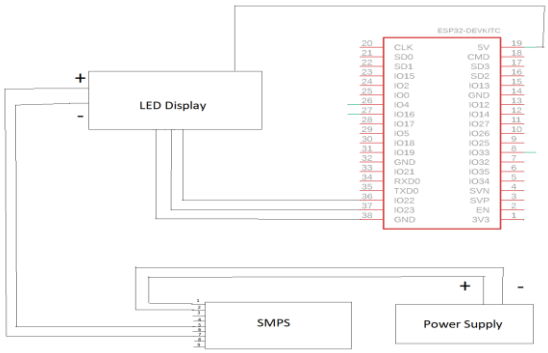
A person is needed to stick those information on the notice board. It will lead to lose of time as well as usage of manpower. This problem is resolved by the implementation of our digital notice board. It will bring an advanced means of passing notices around in the world in a much easier and efficient way.

V. BLOCK DIAGRAM



In curtain control system ,major work is done by following components :
1. NodeMCP ESP32 WIFI Devlopment board
2. LED Matrix Dislay
3. OLED Dislay
4. switch
5. SMPS 200

VI. CIRCUIT DIAGRAM



In curtain control system ,major work is done by following components :
ESP32 WIFI Devlopment board
LED Matrix Dislay
O LED Dislay
switch
SMPS 110v- 220v
Resister 10 kohm
So basically information is Register in Firebase cloud and then fire base sends the information to ESP32 (upgraded version of NodeMCU ESP8266). Then further process is carried out by the MQTT cloud then It passed over the info to another ESP32 and then Name is display on LED Matrix (SM16188)

VII. ADVANTAGES

• By providing changeable option it makes the newly proposed system become user friendly.
• This system provide first step to achieve paperless community. Due to the reduced usage of paper in a community which make the community environmental friendly.
• Main aims of all type of notice boards are to pass information on peoples as much as possible.
• This system can pass information on more peoples than conventional wooden type notice board.
• Any failure in the power supply does not effect on the stored data. Due to these advantages the proposed system can extended to live telecasting of information on the world.

VIII. APPLICATION

• This module can be used in any sectors which is used by the list management system. By using this system it is possible to give notification when the person name is in process nearer to his/ her name.
• Digital notice board refers to the LED screen display which is used to convey the messages.
• This project is also used in organizations, school and colleges.

• Aside from making announcement during interview process we can also post the information related to other notices like test schedule, holiday, etc.

IX. FUTURE SCOPE

1. Helps in timely providing information about many more stuff such as test sessions , important
notices , holidays, and other organization related stuff.
2. It maximum and minimum work load for a organization and TP department.
3. By providing Next , Previous and reset option button it makes the newly proposed system
become user friendly.
4. We can reset data any time and form any where.

X. CONCLUSION

As the technology is getting advanced day by day so notice board are getting replace by digital notice board. We have developed the model of digital notice board system through NodeMCU ESP32 connected to it. Thus NodeMCU ESP32 being a small yet powerful device and work efficiently in digital notice board connected with software. This proposed system has much upcoming application in educational, institution etc. In Firebase we can see Candidate registrations which contain a basic detail like name, city and mobile number. When we push the button, command is giving to the NodeMCU ESP32 and then task is carried out and the name of the next or the previous candidate name is display on LED. Applying this system we can make our first step towards paperless community as we are going to display a information on digital boards we can reduce the use of papers we can make the community environmental friendly. Also we reduce the use of man power , as person don't need to go to the notice board to stick notice paper , Also we save the time. This system can pass information to the more people than wooden notice board. Designing of notice board may be a simple task but compiling it with a high-level language will charge a bit brilliance. With the help of NodeMCU ESP32 a developed web application is provided with a well secured system. We are also using cloud facilities in which we are using MQTT cloud for transfer the data. Also in Firebase we can see the detail information of the candidate When compared to the past, where paper notices were crucial, we endowed this digital notice board due to vexation of paper work. I surely expect that this kind of Display board rules system the forward decades and a good sound in technology. This proposed system has much upcoming application in educational, institution, railways, malls, advertisement etc.

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