



OPEN ACCESS INTERNATIONAL JOURNAL OF SCIENCE & ENGINEERING

HOTEL ORDER SERVICE SYSTEM

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Abstract: Technology is never ending process. To be able to design a product using the current technology that will be beneficial to the lives of other is a huge contribution to the community. This paper present the design and implementation of a low cost but yet flexible and secure is wireless. This system designed to be low cost and scalable allowing variety of devices to be controlled with minimum changes to its core. Password protection is being used to only allow authorized user from accessing the appliances at home.

Keywords: Twitter social network; reputation; credibility; machine learning.

I INTRODUCTION

Technology is such a term which can change the complete operation of a particular system. In today's world we find that each and every field is based on the use of some kind of technology. In such a world wherein developments are being taking place in many field, but we find that the most commonly visited place by every person that is a hotel, is still the same. No advancements have been made in the ordering system of a menu in the hotel. We will still find the earlier paper based systems in many of the hotels. People visit a hotel in order to have a tasty food in less time and of their desired choice. The customer requirements are very necessary while considering the hotel business. If we analyze the different types of customer requirements, we will find that they are almost the same. The customer needs a good service, good quality food, less time consumption, no confusion in placing and receiving an order, quick billing with no errors. All this can be made possible with a new type of system named as the zigbee based ordering system for hotels [1].

For this system there will be a system administrator who will have the rights to enter the menu with their current prevailing prices. The system administrator can enter anytime in the system by a secured system password to change the menu contents by adding or deleting an item or changing its price. Now when the customer enters the restaurant, customer will place his order with the help of the touch screen using the intuitive graphical user interface, right from the selection of

menu items, confirming the order and viewing offers. The customer will select from the food options according to his choice and the system will display the payment amount customer has to make once finished with the order [11].

To get order of each table waiter requires more attention to all tables. If he do not get attained one of customer on time, the customer get bored and angry, so we develop system to this system to place order from table customer itself place order from table customer itself.

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There are two types of units, one in kitchen which displays (indicates) item ordered & table number. Another is at each table from which customer can place order by using up, down, enter, shift, keys & LCD display. Once order placed customer, if customer wants to cancel it, can be cancel within 1 minute only. After item ready in kitchen waiter cancel its status. Bill is automatically generated when order placed. At the other end, a LCD interface is designed for taking the order from different table and to give the confirmation [12].

II LITERATURE SURVEY

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III PROPOSE SYSTEM

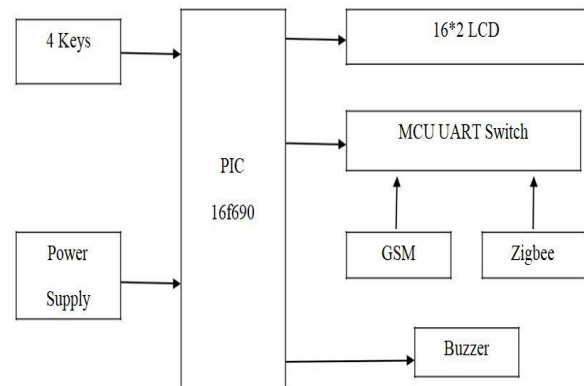


Fig 1: Block Diagram of Table Unit

The proposed system would attract customers and also adds to the efficiency of maintaining the restaurant’s ordering and billing sections. It can provide many benefits and gains to consumers where they can save time to users and ease of use and greatly helpful in the hotels. Zigbee based chef alerting system clearly shows improvements in the use and effectiveness as it is more systematic and effective than the existing manual ordering system. The middle man (waiter) is now removed by this paper. User can give orders directly to the chef simply by using this paper.

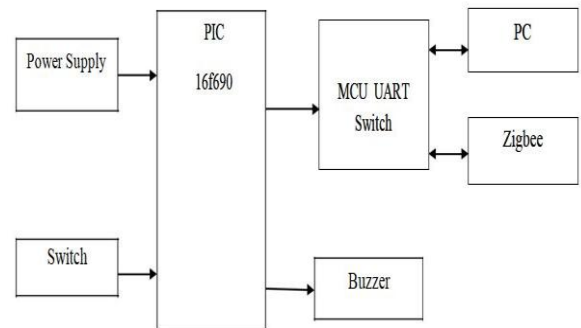


Fig 2: Block Diagram of Kitchen Unit

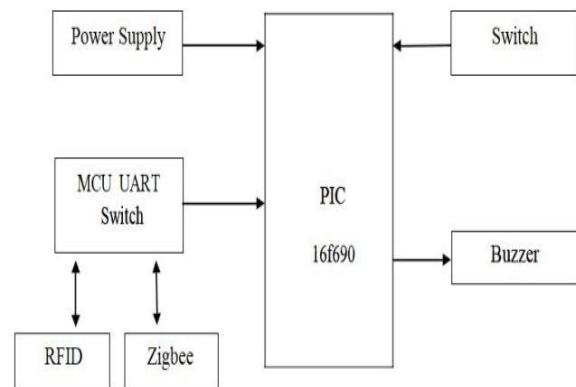


Fig 3: Block Diagram of Counter Unit

Firstly the person at the reception is empowered to allot the suitable of tables to the customers, via a keypad. Then as soon as the table is allotted; the customer is directed to his/her table with a steward waiting for them to take his order. The customer sees the categorized menu card in the digital form on the keypad. The waiter or waitress inputs the orders into the LCD. The orders are sent to the kitchen via Wi-Fi. The kitchen staff sends a notification whether the food is available or not. The kitchen side can also send the progress report of the food to the waiter's LCD. When the kitchen staff sends a notification that the food has been prepared, the waiter in the kitchen serves the food at the respective table. If there is a need for modification in the food menu, the manager modifies the menu. The menu gets changed in the database. The changed menu then gets updated on the waiter's as well as on the customer's LCD display.

IV ADVANTAGES

- Wastage of paper is avoided as our implementation is working just on tablet and does not need any paper work.
- A customer going into restaurant does not have to wait for the waiters to take the order. As soon as he occupies a seat, he would order whatever he needs.
- As soon as the order is ready, it would be notified to the customer. So, there would not be any issue of late delivery in spite of the food being ready.
- No extra work space is required as with other pointing devices.
- No need of a person to take order from the table.
- Usage of Android touch screen smart phone in performing the task.

V APPLICATIONS

- Hotels
- Restaurants
- Cinema Halls

CONCLUSIONS

By implementing this system, it will minimize the number of employees at the back of the counter. Also the system will help to reduce the cost of labour. As there is lot of orders at the restaurants, there is possibility of human errors during calculations or taking orders. By using this system, such type of errors can be eliminated and controlled up to some level. But by using this system it will be less probable to make such mistakes.

In this paper, a high performance-cost ratio wireless handheld ordering terminal is proposed, which is based on the hardware platform of PIC Microcontroller, and zigbee

wireless communication technology. The ordering terminal has the advantages of simple structure, stable operation, low power consumption and friendly interface, thus it has bright market prospect. The wireless ordering system has egresses progressively and revolutionized the restaurant business industry and other fields. This system is convenient, easy and effective thereby improving the restaurant staff's works performance besides providing quality of service and customer satisfaction. This system has addressed many hindrances in food ordering process and management of restaurants by lessening the time of customer and management for ordering of food and cost for the pen and papers. This system provides pleasure to customers for making orders and management can meliorate their management.

VI FUTURE SCOPE

In future this technology can be extended to the LAN connections by which the order information and calculation of bills can be send to the distance places to the owners of the hotels. The billing system can also be improved by using an ATM Swapping machine along with this paper. The programming should be done in such manner that order can only be transfer to the chef if and only if the bill has been given.

Similarly, the system can also be implemented with Graphical LCD for displaying the menu as we have used android phone. However the system becomes more bulky and delicate to handle because each table is going to consist of such module for ordering.

REFERENCES

- [1] International Journal of Computer Trends and Technology (IJCTT) – volume 11 number 5 – May 2014 ISSN: 2231-5381 <http://www.ijcttjournal.org> page 206, Zigbee-Based Smart Ordering System (S.O.S).
- [2] Anderson, R.G. (1978), "Data processing and Management Information Systems" McDonald and Evans Ltd.
- [3] Electronic menu card for restaurants ijret: International journal of research in engineering and technology eISSN: 2319-1163 | pISSN: 2321-7308.
- [4] Digital ordering system for restaurant using zigbee Ashutosh Bhargave, Niranjana Jadhav, Apurva Joshi, Prachi Oke, Prof. Mr. S. R. Lahane Department of Computer Engineering, GES's RHSCOE, International journal of scientific and research publications, volume 3, issue 4, April 2013.
- [5] Application of wireless food ordering system, Khairunnisa K., Ayob J., Mohd. Helmy A. Wahab, M. Erdi Ayob, M. Izwan Ayob, M. Afif Ayob, MASAUM Journal of Computing, Volume 1 Issue 2, September 2009.

- [6] International Journal of Applied Information Systems (IJ AIS) – ISSN: 2249-0868 Foundation of Computer Science FCS, New York, USA Volume 6– No. 7, January 2014.
- [7] Cormac O'Connell, Restaurant Assignment. International Journal of Scientific and Research Publications, Volume 3, Issue 4, April 2013 2 ISSN 2250-3153.
- [8] International Journal of Application or Innovation in Engineering & Management (IJAIEM) Web Site: www.ijaiem.org Email: editor@ijaiem.org, editorijaiem@gmail.com Volume 1, Issue 2, October 2012.
- [9] Purname, J., & Wibowo, A.Y. (2007). Wireless Application for Ordering Management System in a Restaurant.
- [10] Veerasingam, S.; Karodi, S.; Shukla, S.; Yeleti, M.C., "Design of Wireless Sensor Network Node on ZigBee for Temperature Monitoring," Advances in Computing, Control, & Telecommunication Technologies, 2009. ACT '09'. International Conference on, vol., no.,pp.20,23, 28-29 Dec. 2009.
- [11] Sun Guiling; Qingqing Song, "Design of the Restaurant Self-Service Ordering System Based on ZigBee Technology,"Wireless Communications Networking and Mobile Computing (WiCOM), 2010 6th International Conference on, vol., no., pp.1,4, 23-25 Sept. 2010.
- [12] Hashim,Nik Mohd Zarifie and Ali,Nur Alisa and Jaafar, Abd Shukurand Mohammad, Najmiah Radiah and Shaahuddin, Lizawatiand Ishak, Noor Asryran (2013) Smart Ordering System via Bluetooth. International Journal of Computer Trends and Technology (IJCTT), 4 (7). pp. 2253-2256.
- [13] Iovine, J. (2000), "PIC Microcontroller Project Book." Washington, C.D: McGraw-Hill.