Food Ordering System Wireless Institute Food Ordering System with Auto Billing

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Abstract: In this new age of technology we are developing new solutions to ease our life by digitizing various processes and wireless technology is the most important factor behind it .The wireless technology has many advantages and has lead to the convenience of users. The Project aims to provide a smart and fast way to order the food within an institute. The menu items will be available to user at his desk from where the food can be ordered. The customer uses a simple input interface to order the food. The ordered food will be seen on the display screen at the canteen. Also, the payment can be done using a smart card. This saves time, quarrels over change and long queue.

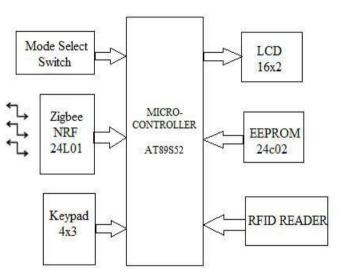
Keyword-Digitizing, wireless technology, smart card, simple interface

INTRODUCTION

In this developed and fast growing world, refreshment is very important to reenergize. Many times in hotel or college canteen, we have to wait for a waiter to give our order for food and this creates problem when there is rush in hotel or canteen. Main intention of our project is to avoid such problems and to give solutions to such problems. This project involves implementation of Smart ordering system using Zigbee (Wireless transmission and reception device).It consist of transmitter side which is hardware section and the receiver part is software.

The project transmitter part includes a keypad for customers to place orders. By inserting the code according to the menu the order will be placed. The transmission of this signal will be through Zigbee technology, and it will be displayed on the software placed in the kitchen of the canteen. This project reduces the time on ordering and paying bills.

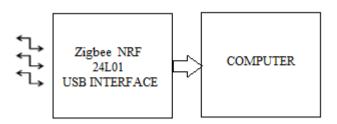
BLOCK DIAGRAM



TRANSMITTER SIDE:

The transmitter side which is user side, it consists of microcontroller unit, keypad unit, Zigbee module and an RFID reader unit. The system uses a keypad size 4x3 for the staff members to place orders. The staff members will make an order by inserting the code according to the menu on the keypad. Microcontroller will accept the data and will display the item names and cost on the LCD. Finally when the order is done, LCD will inform the user for the payment using RFID card. This information is sent via Zigbee module at the receiver side.

RECEIVER SIDE:



The receiver part simply consists of Zigbee receiver unit and a personal computer unit. The codes send by Zigbee transmitter are received at this end and are displayed on monitor. An application is developed using software and the database will display the order for preparation.

ADVANTAGES

- Saves time
- Easy to operate
- Fast ordering system
- Labour work reduction
- Sophisticated security

APPLICATIONS

- Institute Staff room
- Offices
- IT HUBS
- Restaurants

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FUTURE SCOPE

With little bit modification we can use this project in the library. In some libraries, users are not allowed to enter inside the library. In this case if any user needs books then he/she has to give book name to the librarian.

Same concept we can also applied for banking transactions such as transfer, deposit, withdrawal of money.

CONCLUSION

Wireless Technology is very useful as it is faster, easy to access and cost efficient. Zigbee based menu ordering system will definitely help to save time and easy access to food. It will increase the revenue of restaurants.

REFERENCES

- 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.
- [2] 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.
- [3] Hashim, Nik Mohd Zarifie and Ali, Nur Alisa and Ja'afar, Abd Shukur and Mohamad, Najmiah Radiah and Salahuddin, Lizawati and Ishak, Noor Asryran (2013) Smart Ordering System via Bluetooth. International Journal of Computer Trends and Technology (IJCTT), 4(7). pp. 2253-2256.
- [4] Iovine, J. (2000), "PIC Microcontroller Project Book." Washington, C.D: McGraw-Hill.
- [5] (2013) Electronics Lab.com. [Online]. Available :
- [6] http://www.electronicslab.com/blog/?tag=microcontroller?&lan g=en_us&output=json