

REVIEW PAPER ON TOUCH SCREEN BASED ADVANCED MENU DISPLAY AND FOOD ORDERING SYSTEM FOR RESTAURANTS

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ABSTRACT

There is no need for a person to take the order from the customer's table. The menu will be displayed automatically on the table and the customer can directly order the menu with the help of a touchscreen device which is fitted at the table. The web page is created for the food ordering and it contains all the menu details with pictures of each item. The ordered details are wirelessly sent to cashier and then cashier will send order details to the chef. The food name will be displayed in GLCD display. The system has made the owner of the restaurant to get a lot of profit and also a user friendly. Furthermore, the management also becomes more effective and efficient.

Keywords: Touchscreen device, GLCD display.

1. INTRODUCTION

Now a day's menu ordering system includes more human efforts for getting an order from the customer by giving the menu card and also billing is special attention need to pay for every table for the completion of orders. Hence, the menu ordering system interface will get an ultimate response from the users due to the time-saving methodology and a smarter way to communicate. Instead of using more hardware components like zig-bee, Bluetooth, robot technique etc., and a complex circuits with the high cost, a simple software programming like python, Matlab, Arduino etc which can be used with the best cost to order the food from the customer table with the help of touch screen user interface with the help of Graphical Liquid Crystal Display(GLCD). This makes very much helpful for a user to make their work comfortable as well as to reduce human efforts.

2. LITERATURE SURVEY

A literature review covering papers published between 2010 and 2018 was undertaken. The search was conducted using the IEEE explorer, cited literature in the included articles and various journals.

Sun Guiling and Song Qingqing [1] Compared to traditional food management methods, the intellectualized and informational restaurant management is carried out by the wireless self - service ordering management information system and design a self - service ordering node including software and hardware. The touch screen shows the taste and prices of food for customers to place their orders directly by touching. The system automatically receives stores, displays and analyses data. It has many advantages such as great flexibility, portability and so on and has a wide range of potential applications. Designed an intelligent self - service restaurant information system based on ZigBee wireless technology, this system can improve the management level of traditional catering companies and reduce the cost of financial accounting catering companies. It can also improve the use of human resources and dramatically speed up the service

speed and speed up the checkout. This system can receive, store, analyze, display and analyze data for every user in real time. Flexibility and portability have very broad prospects for the application.

Mohamad *et al* [2] presented about the papers for 'Smart Ordering System via Bluetooth'. The conventional method usually used in the restaurant is to take the customer's orders and write them down on a piece of paper. Many ordering systems have been proposed to undertake this issue. The paper proposed with Bluetooth technology as the communication medium and the Peripheral Interface Controller (PIC) as the hardware that implements a faster ordering system. It consists of a keyboard at the customer's table as a remote control and monitor in the kitchen or counter to systematically display the ordering information. The aim of this papers is to build and design both hardware and software for the ordering and delivery system in restaurants using a keyboard, display screen via Bluetooth communication and it also receives information about 100 meters away from a specific location. The result shows that hardware and software are successfully functional and can be used as a smart ordering system.

Raviprakash *et al* [3] In every area of human life, automation has gained importance. However, there are still some areas in which more traditional methods are used. One such area is the restaurant ordering system. In general, the restaurant menu ordering system is available in paper format from which the customer has to select the menu items and then the order is handed over to the waiter who takes the corresponding order, which is a very time - consuming process. The proposed system is fully automated ordering system in which a more user - friendly touchscreen - based menu replaces the conventional paper menu. The system consists of an interface microcontroller with the input and output modules. The input module is the GLCD touchscreen sensor with a graphical image display, which takes the user's input and provides the microcontroller with the same. The output module is an RF module used for communication between the system at the table and the system at the ordering department. Microcontroller also displays GLCD menu items. At the receiving end, the selected items will be displayed on the LCD and the ordering department will record the order received.

Kamruzzaman and Tareq [4] Life will be tough and challenging later on without thinking about technology. Our everyday life becomes smarter and more convenient every day for various robotic applications. Robotic servant is one of the best examples of automation of daily life. Robotic waiter is one of the best examples of the automation of daily life. A mobile robot can order and serve food or drink in any restaurant, hotel, office or household environment with this technology. This paper describes a robotic waiter technique and the design of a robot based on a microcontroller that works efficiently in a restaurant and office environment in a certain area. In this paper, a prototype design of a mobile robotic waiter based on the wheel was shown. The prototype waiter robot was designed and implemented to receive order requests via Android apps, then collect food / drinks (max 600 grams) from the kitchen boy, then travel to the destination (the person sending order requests) and return to the source point, completing the order of the food / drinks requested.

Zhangyuan and Weibing [5] research papers for traditional restaurant service which relies on manpower to handle customer reservation, inquiry, ordering food, placing the order, and reminding dishes. It develops a wireless ordering system, which combines embedded and WIFI wireless communication technology. The wireless ordering system combined with embedded technology and wireless networking technology. It achieves the ordering function very good, due to this it's very easy to install, cost-effective, flexible, etc. The wireless ordering system is welcomed by customers and food industry manages and it is also improved in many large scale industries.

3. CONCLUSION

The present work focuses on reducing time consumption by replacing the traditional services with the wireless self - service ordering management information system. the management also become more effective and efficiency. From the literature survey, we have found that the range decreases by using Zig-bee, Bluetooth, RF Module, Robot so in order to increase the Range we are using the Wi-Fi module. At the end of the result, the structure for the touch screen based advanced menu display and food ordering system for restaurants done successfully. This system has make the owner of the restaurant can get a lot of profit and also user friendly .

4.REFERENCES

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