



TOUCH BASED DIGITAL ORDERING SYSTEM ON ANDROID USING GSM AND BLUETOOTH FOR RESTAURANTS

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ABSTRACT:

Technology has entered almost every field in our life, but still its effect is not yet that evident in the food industry, especially the food serving outlets including restaurants, hotels. Even today, most of the restaurants in India follow the traditional pen and paper method to take orders from customers, which wastes a lot of time of both, the customer and the restaurant. This work aims to substitute the traditional pen and paper method by automating the food-ordering process in restaurant and thus improving the dining experience of the customer. This paper proposes an automated system that uses wireless communication, a centralized database, and an android application to place the order without even waiting for a waiter. The android application installed in the touch screen device, fitted at the table, contains all the menu details with pictures of each item. The ordered details are wirelessly sent to the chef and the cashier. The manager has his own android application that is used to update the menu that updates the central database, view and manage table wise customers' orders, and receive feedbacks from the customer.

Keywords: *GSM, Bluetooth, WSN, menu details, application.*

INTRODUCTION

The “Smart Android App for food and Tiffin Ordering” is designed to

override the problems prevailing in the practicing manual system. This software is supported to Eliminate and in some



cases it reduces the hardship faced by this existing system. The smart android app for food and Tiffin ordering is the Android Application for customized Tiffin and food ordering. User will be able to get delivery on his current location by GPS features. Delivery tracking, food making process indication, share remaining food, rewards and many more features are there in smart android application. No formal knowledge is needed for the user to use this system. Thus, by this application it will become more user-friendly. Online food and Tiffin ordering application, as described above, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Food ordering is the application for ordering food from a local restaurant through internet. A customer will search for favorite restaurant, usually filtered via type of cuisine and choose from available items, and choose delivery and pick up. This food Ordering system intends different types of forms with different food varieties provides to user to buy online. Online Food Ordering System Users can

give order from any place and pay cash on delivery. The System deals with ordering, processing and delivering food products. Ordering is done by a valid customer with appropriate identity. The aim is to automate its existing manual system by the help of computerized equipment's and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same.

EXISTING SYSTEM

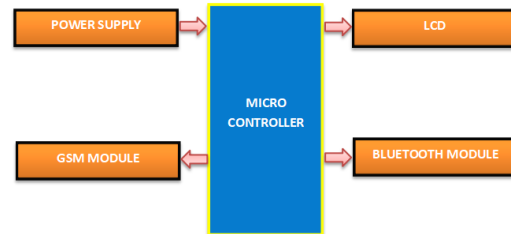
In existing system for giving any orders user should visit Hotels or Restaurants to know about food items and then give orders and pay advance or you need to select menu and place order on call. In this method time and manual work is required. Maintaining critical information in the files and manuals is full of risk and tedious process. In most of the current applications tracking of delivery is not available. By using current application, we can't give the mass orders to particular restaurant. Customization of Order, Current status of an order is not available to the customer. In the current application they

do not specify and mention the famous dishes of a particular restaurant. In a party or a big function like marriage the quantity of the leftover food is so more that it gets wasted so rather than throwing it they can contact the nearby NGO's through the new application and the food can be gives to the needy ones. Some systems contain outdated database that is Restaurant is closed, yet it shows on the application.[4]

PROBLEM STATEMENT

This online application enables the end users to register online, select the food from the e-menu card, read the E-menu card and order food online. By just selecting the food that the user wants to have. The results after selecting the food from the E-menu card will directly appear in the screen near the Chef who is going to cook the food for you. This application also allows customers to customize food orders. By using this application the work of the Waiter is reduced and we can also say that the work is nullified. The benefit of this is that if there is rush in the Restaurant then there will be chances that the waiters will be unavailable and the users can directly order the food to

the chef online by using this application. The user will be given a username and a password to login.[3]



WORKING METHODOLOGY

Now that the customer's food order is available, both the chef who will prepare the customer's food and the administrator who will manage the restaurant system may see it. All of the customers' food orders will be reviewed by administration, who may manage the associated bills. Customers can add orders after placing their first orders, and administrators can check all the details of their customers' food orders. As a result, it will be present on the management screen and aid in billing. The administration of the system will benefit from RFID. will be utilised to electronically gather all of the data about the customer. As a result, the client information may be saved there. Data can be sent by analogue and digital waves using a node-mcu microcontroller in an automated restaurant management system. There are 9 pins on these microcontrollers. Only four of these nine pins will be used for data transmission, reception, and control. A

microcontroller can make data sending and receiving simple.

1) It occasionally happens that consumers are ready to place their food order at a table but the servers or waiters are not present. The customer is upset and frustrated by this. The most fun aspect would be placing an order at the table, which enables individuals who are in a hurry and can't wait for their waiter to arrive to serve them. Due to the fact that this method enables consumers to purchase larger quantities from the menu, eateries find it to be quite beneficial. Even when they are busy, servers still benefit from taking orders.

2) Improvements in restaurant operations lead to significant advancements in restaurant working. It used to have a menu board at the customer table where people could order their favourite foods and beverages. The absence of a menu is required here. They can give their order to the servers when the specific restaurant application is made available to them, or they can continue to have options for tableside services. This company's main goal is to give people more options and faster services.

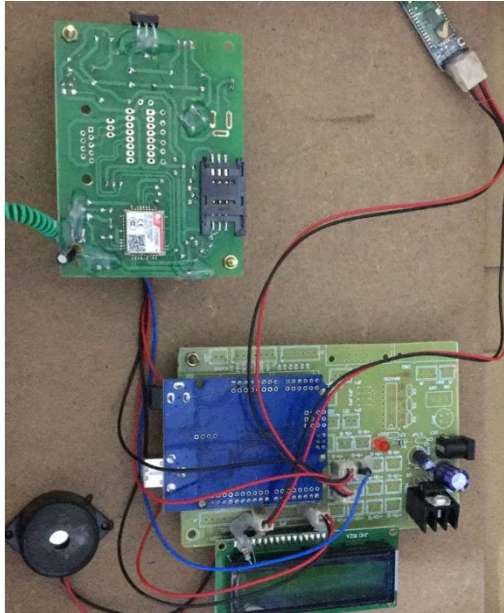
3) Customers can place an order sooner with quick take-away ordering through tablet, making it simple to pick up

your package. There are applications that genuinely change things, and that's where I come in. It encourages customers to order food from companies where they could earn extra money while promoting mobile ordering.

4) A clever menu There is a surge of people in the restaurant on weekends and holidays. When every server is occupied serving customers, the likelihood of serving everyone at once is very small. Long wait times for confused customers would result in a loss of business. It helps restaurants quickly satisfy customer demand, eliminating the need for servers, thanks to the use of Dmenu or eMenus.

5) Small kitchens with restaurant applications rely heavily on customer reviews or feedback for business information. Receiving notifications from users saying things like "It's fantastic that I'm feeling awesome." Keeping cooks and their cooking skills consistent is one of this survey's key objectives. The application server looks for a delivery that hasn't yet been provided and is associated with the plate in line 1, and if it can't, it rejects the distribution. If the delivery receipt is found, though, an attempt is made to locate and confirm that the order matches both the table and the delivery in line 3; if it doesn't, it is refused. In actuality, only a single query

with the order will suffice to complete this lookup.



CONCLUSION

In this application, we have planned for the automated food ordering system for the restaurant. The system is compared to earlier food ordering traditional methods such as traditional pen and paper methods etc. We have deliberated advantages of the proposed system over those earlier methods. We are going to create application in focus of future food ordering systems, this application will be helpful to many people. Also, we will implement some modules for user feedback, we also provide post query if user receives the wrong order, if the order is being delayed and if the quality of food is not proper. The future ability to order meals for delivery from local restaurants would

make a wider range of choices available to customer.

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