Restaurant Booking and Ordering System

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Abstract—The concept of restaurant table order management system is that consists in an Android application that can be used by customer to place the desired timing and table number. The web-portal is being managed by the owner to check the booking and make the availability for the customer. This system wake to provide service facility to restaurant and also to the customer. The services that are provided is food ordering and reservation table management by the customer through the system, customer information management and waiter information management, menu information management and report. Main objective is to provide ordering and reservation service to the customer.

Keywords – Restaurant System, Customer and Management Perspective, Advantage, Booking

I. INTRODUCTION

We propose to build a software project that can efficiently handle and manage various activities of a restaurant and all these activities will be happening under the supervision of the administrator. The businesses in restaurants are now growing constantly. At the same time, the need for managing its operations and tasks arises. The best way to optimize these activities is growing the business online as well. Today’s generation encourages high-tech services especially over the Internet. Hence the project is developed proficiently to help restaurant owners automate their business operations. This project serves the best way of maintaining customer’s information and caters their needs.

Some people consider it a pain to go the restaurant because of sheer amount of time required to find a good one. Also it’s difficult to get a booking and equally time consuming to browse through the menu and order the dishes. In some restaurants it’s a given that customer will wait for half an hour after ordering to actually get the food.

Our system aims to redefine this structure by bringing everything to customer. It is convenient self-service table booking system that can be embedded on any website. With the restaurant reservation system, you can create a customized booking process, let people book a table through your android app, manage restaurant availability and reservations. Our PHP restaurant script provides all must-have features to improve your website conversion rate and optimize the restaurant table booking process.

The system has a graphical view of tables that user can select or deselect from the available slot in the system. This booking can be seen by admin from his account and he may approve or disapprove the request.

A. Aim:
The purpose of the project is to create a system of mobile application and a web portal to access by the customer to book the table of a particular restaurant with specific details. So that there will be no wastage of time in the restaurant.

B. Scope of the project
The proposed system is a software solution for users to easily add and take orders. When the new orders come in, some general information about the new order will be inputted such as item from
menu, the price of each item, table number, time and date. Restaurant order will be a good solution for faster communication between the client and the server. The system is free from risk of possible file loss and will have backup files so that the important data’s were safe. The system is also free from risk of being intercepted by unauthorized person because before gaining access in the system, it is required to log onto the system by entering username, and alphanumeric password.

II. REVIEW OF THE LITERATURE

The most common blunder is waiters making mistakes with customer’s orders. At times, a waiter can forget to add a specific item, make a changes because a customer is allergic to certain substance, or forget to give the order to the kitchen.

Customers have to wait for a waiter to take their order. They must rely on the waiter to remember their order and specific details. Their food may take longer to be prepared and served if the waiter has multiple tables. They may also get wrong bills since they cannot see their bill amount until their meal is complete.

Impatient customers also call over the waiter/waitress frequently to find out the status of their order several times during their visit, wasting the waiter’s service time. Waiters need to constantly check with the chefs to determine when food is ready. Conversely, chef needs to make sure waiters know that food is ready. This can cause the food to get cold over time and lead to potential food-poisoning. It may also lead to wrong orders and an unsatisfied customer. Keeping track of empty, clean and reserved tables within a restaurant.

Busboys must always be alert as to which tables need clearing. This means that they must be always checking for tables. Waiters need to usually alert them. This takes extra time from other staff. Managers have to analyze hundreds of paper receipt s to determine best-selling items, popular hours and customer satisfaction. They also require re-printing of menus when food is not available or a price needs to be changed. This can be costly and time-consuming to a restaurant.

A. PROBLEM DEFINITION

Customers will have to make long queues before placing their orders especially during peak hours and then the ordering staff will record customer orders. Having placed the order, the customer then have to wait near the counter until their order is ready to collect. The other problem in the food service industry is that restaurants are not realizing the efficiencies that would result from better application of technology in their daily operations.

III. PROPOSED SYSTEM

To overcome the limitations of above systems, we propose this integration of touch technology in restaurants based on android technology. It is a wireless food ordering system using android devices. Android devices, in the past few years, have reached the pinnacle of popularity and have revolutionized the use of mobile technology in the automation of routine task in wireless environment. Android is an open-source, Linux based operating system for mobile devices such as smart-phones and tablets. The promising future of Android market makes the concept of writing applications for android beneficial and worthwhile. As a remedy for the above mentioned systems, we propose a restaurant with a touch technology system. Our system aims at providing the following features:

- Combining of Wireless technology and Android OS to automate food ordering process.
- Increasing customer happiness. This also reduces waste as when the wrong item is ordered, the food must be discarded.
- Allow the restaurant to operate faster.
- To minimize the flaws in conventional system by atomizing the working of a restaurant.
- To provide a mechanism for obtaining feed-back from the customers and provide the restaurant a means of review of their service.
A. Advantages of Proposed system
   i. No wastage of time.
   ii. Convenience for customer
   iii. No shortage of tables.
   iv. Speed and efficiency of service is much better.
   v. User friendly

IV. METHODOLOGY

The customer has to become a member first then he can access the later part of the site. The option of becoming member was only an attempt to avoid (to some extent) placing the fake bookings. During login the user as to enter his User ID, password and desired time of order delivery. After successful login the customer can access the menu page with the items listed according to the desired time. Later within the available items he can search for a menu according to his choice i.e. according to price range and category of food and later he can order a meal. If the customer later wants to cancel the order, he is permitted to do this only within a specific time period. The customer is also given with the facility to view the status of the order and if the order is ready then he can go and get it.

Figure 1
From Management’s Perspective

At Management side, initially the staff member has to login, and according to his designation the privileges are set. If the staff member is a cook, then he is allowed to edit only the order items status, indicating which menu items he has prepared. If suppose the member is an administrator then, he is allowed to reassign the cook according to his priority, he can edit the menu information such as its price, items available currently, etc. He can also change the status of the order.

**Figure 2**
Figure 3

Figure 4
V. CONCLUSION

Restaurant table ordering system project will be benefit by both the customer and owner since it can be access by everyone through the android application which will save time for the customer. The owner can deal with more number of customer as it take no longer time since the food will be served as soon as the customer arrives.

The proposed system has the potential to attract customer and add efficiency of maintaining the restaurant’s ordering and billing section.

VI. ACKNOWLEDGEMENT

This work was supported in part by a grant from the National Science Foundation. The project synopsis, "Restaurant Booking and Ordering System” was successfully represented with the help of our project guide Prof. Vaishali Bodade and project coordinator Prof. Rahul Patil. We would like to thank him for providing us appropriate guidance whenever necessary and are also heartily thankful for allotting his precious time for our report. We express our gratitude to our Head of Department Dr. D. R. Ingle for providing timely assistant to our query and guidance that he gave owing to his experience in the field for past many years. We express our gratitude to Principal Dr. M. Z. Shaikh for his coordination and obliging us with his great knowledge.

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