Hotel Order Management Application

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Abstract: **Hotel Order Management Application is an android app. This is a smart platform which has waiter's, customer's and kitchen's view. This application is built with a motivation to eliminate paper-based ordering system and integrate payroll, waiter and kitchen management. This Application helps waiters inside a restaurant, bar, café or any Food & Beverage establishment can manage orders between Point On Sale terminal, kitchen and dining area. The application enables them to serve customers, send orders to the kitchen and fetch billing details at the same time. This android application helps restaurants to automate tasks, reduce human intervention and thus improve efficiency.**

Keywords: **Hotel, Application.**

1.Introduction

Until today, most hotels are still found using the conventional methods of taking orders of customers by going to tables and writing it down on paper. These kinds of methods are time-consuming and causes consumption of papers, especially in large hotel. Therefore, a method of taking order by employing an application running on the Android platform is proposed. This application, once opened, admins need to enter their user-id & password. Entering all the required information, they can do all the required tasks such as adding or removing certain waiter, check the total amount of bill. Similarly, when waiter logins using user id and password, they can take the orders and check the order status respectively. All the information and the data gets stored into a database server which is set by the main database's module. The data can later be accessed by the chefs to prepare the order and when the order is ready it will notify the waiter.

2.Objective

The main objective was to create a responsive & an easy to use Android based application with an interactive user interface for automation in restaurants. This application saves time as well as helps to reduce the paper usage

3. Literature survey

In [1] research work aims to design and develop a wireless food ordering system in the restaurant. Technical operations of Wireless Ordering System (WOS) including systems architecture, function, limitations and recommendations were presented in this system. By providing higher quality customer service and reducing human errors to improve the management aspect for restaurants, pervasive application will be a valuable tool due to the high demands of handheld devices such as PDAs.

This system using Zigbee can improve the management level of traditional catering enterprises, can reduce the cost of catering enterprises in financial accounting. Keyurkumar J. Patel*, Umesh Patel and Andrew Obersnel [2] describes that mobile devices become smaller, cheaper, better and more connected, they are changing the way people access them. The powerful functionality offered by mobile devices such as PDA's has encouraged many industries to examine the benefits of them. Today's PDA's are being customized for great variety of applications. Use of PDA's for food ordering system can increase efficiency for restaurants and caterers by saving time, reducing human errors and by providing higher quality customer service. The combination of simple design and readily available emerging communication technologies, we implies that this system is an attractive learning and teaching solution for the hospitality industry and educators.

Bhawani Singh Choudary [3] explains that technology and automation is in implementation in each and every domain and in every field for different purposes but it is not implemented in food industry. Even now most of the restaurants and hotels are implementing the traditional system of taking orders using pen and paper which is time consuming process. Later came PDA's to make some improvements which are not beneficiary. So, they proposed a system to overcome the disadvantages using Bluetooth and GSM where they install devices at the tables and it reduces cost in very effective manner and increases profits for owners. It reduces all human errors and they does not provide a private login system so customers cannot make orders individually putting data at risk.

In the food recommendation system using clustered database [4], the data is clustered after getting input. Cluster is a set of similar items. Using clustered database speed of speed of system is increased and a lot of time is saved by reducing the number of comparisons. In this system K-means is used for clustering the items. It is efficient if the amount of data is large. Here ingredients were listed using vectoring.

In an automated food ordering system [5], which will keep track of users order smartly. This food ordering will

allow the user to make order or make custom food by one click. This is an android application. The front end was developed.

Fig.5.4: Database

4.Proposed system

The system on which the hotel members are currently working upon mainly involves a lot of manual work and hence to reduce it the Module-based platform has been proposed which will reduce the work of the hotel members. The module revolves around in a manner of ordering food and checking delivery status of respective tables after which the data gets stored in the database server in an appropriate manner due to which the workload of managers reduces to a large extent and at the same time members will also be able to track their orders on the basis of number of tables they have attended. And the application will provide security for the login system so that privacy of the manager remains safe.

5.Implementation

This paper describes an Android based application for Hotel Order Management. In this system, the Admin, Chef, Waiters Can login through their Id and Password. The admin logs in and can check the order which was ordered and see the total billing amount, whereas the waiters after login can take the order from the specific tables and chef can see what order to be prepared.
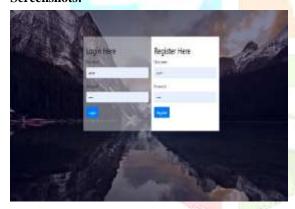
Screenshots:

Fig.5.1: Login and Registration page

Fig.5.2: Admin dashboard

Fig.5.3: Menu page

6.Conclusion

Intelligent suggestions based on customer's past orders and preferences Hotel Order Management Application is a perfect solution for hotels and restaurants to simplify the order taking and transport techniques and offer a totally centralized kitchen order taking and management system.

7.Future Scope

This application may get extended to cope with various processes like menu preparation, seat allotting, order delivery, billing method, order closing and final account evaluation. This application may be modified to simplify and accelerate the complete order taking and transport process.

8.References

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