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STUDY AND REVIEW AUTOMATED FOOD ORDERING SYSYTEM

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ABSTRACT

The evolution of modern technology has been taking place since the dawn of human history. Our personal life is highly dependent on technology that people has developed in prior days, food industry has lacked behind as compared to other ones in adopting new technology. However, today technology has played a huge role in advancement of hospitality industry. This research work aims to highlight the future possibility of automating our food ordering system.

INTRODUCTION

With the increase in number of restaurants and the population of restaurant-goers there is a need in enhancement of services provided to the customers. Conventionally, under the Food Ordering Criteria manual processes are being used till date,where the customer has to wait for the table after reaching the restaurant, then he has to wait for the waiter to jot down the orders,using conventional pen and paper method which is highly time consuming and dissatisfactory. The orders are further taken to the kitchen, then the customer's food is brought and the billing is done. This whole process requires a large manpower, wastage of paper and is also prone to human errors. Taking in view of this system we have proposed our system with more advanced features which would be specially designed for android devices.

LITERATURE SURVEY
Existing food ordering process-
The ancestral method-

- Habitually all the restaurants, hotels and other food outlets have the old pen and paper based ordering systems. The traditional menu card in restaurants are paper based. Also in this system all the records are stored on paper such as waiters take the order form customers on paper, paper bills are provided to customers, etc which contributes to a very serious threat to resources.
- There is a lot of wastage of money, time and paper and it requires a large man power. The most common blunder is waiters making mistakes with customer's orders. They often forget to add orders or may confuse up orders of different tables.
- Paper-based systems do not provide any form of dynamicity. The paper gets easily lost and damaged by food stains, etc.
- Even for a small change or price hikes from time to time in menu cards needs the card to be printed again and again leading to wastage of paper.
- From the customer's point of view, this system is time consuming. One has to first wait for the table then has to wait for the waiter to take the orders which is irritating and impatient. Also they have to rely on waiters for any kind of service.
- Managers have to analyze all the paper receipts and feedback forms to determine best-selling items, popular hours and customer satisfaction, food quality, hygiene and behavior of waiters which can be time consuming and costly for restaurants.

Another existing method commonly used in restaurants is **SELF SERVICE RESTAURANTS**. Here the customers place their orders at the service counters in restaurants. Menu cards are mostly presented as posters placing behind the order counter. One has to decide while standing and looking at the poster and has to fix their options prior before presented at the counter. This method except being time consuming, is also irritating, one has

to constantly check upon the numbers displayed to ensure whether their order has arrived or not, also for each order they have to go on the counter again and again to pick them. This also reduces customer experience.

Introduction of technology in hospitality industry-
Whenever we visit a restaurant or hotel or outlets, a waiter comes with a note and pen and takes the order. In this traditional way there are chances of misinterpretation of order as we discussed above so there is need of an automated food ordering system which manages all orders of customers and enhance customer experience. Today's new approaching, developed technology is greatly influencing the automation of the food ordering system. This system covers the drawbacks of existing systems and is also much more efficient, appealing and with greater future scope.

PROPOSED SOLUTION
To overcome the limitations in the already present system,we have proposed a study on Automated Food Ordering System. It is a wireless technology which focuses on ordering food on android devices. Taking in view the usage of smart phones and tablets among youth,it is to make the food ordering system more revolutionized.
The goals of our proposed system are-
* To coalesce Android and wireless technology for automate food ordering system.
* To reduce inadequacy in the manual process by fragmenting the work in restaurant.
* To obtain feedbacks and reviews of customers to enhance the ambience, services, hospitality of the restaurant.

FOOD ORDERING SYSTEM
A. SYSTEM ARHITECTURE
This consists of three important areas- the serving area,the cashier counter and the kitchen. This system is focusing on 4 major points-
* Each table will have a tablet on which the appliation will be installed.
* There will be an application on restaurant owner's tablet too,to keep trak of all the customers.
* There will be a main and central database for storing updated menu list and order details.

There will be a virtual connectivity among the three major areas of the restaurant.
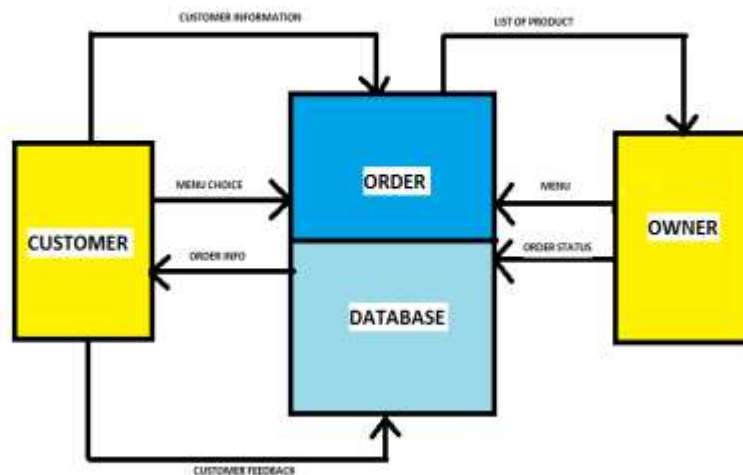
B. Modules
This system consists of three 3 major modules-
CUSTOMER TABLET (module 1)
* This tablet is for the ustomer coming in the restaurant.
* These tablets will consist of the entire menu of the restaurant,and he customer will not be able to edit this menu.

- This system will only be enabled with Wi-Fi connection.
- The design should be simple so,that any type of people are able to operate the tablets provided to them.

OWNER'S / CASHIER'S TABLET (module 2)
- These desktops/tablets are only for the use of the restaurant manager.
- The manager should be able to control the functioning of whole restaurant from a single desktop/tablet.
- He can update the menu accordingly and can access any tablet any time in case of any problem.
- He can hange the prices accordingly and update if a certain food item will not be available.

KITCHEN DISPLAY (module 3)
- These tablets will be present in front of hef to see what a ustomer has ordered.
- All the ordered items will be displayed on the screen along with the table no.respectively.
- They should be placed at a certain distane and with a big font so that the chef an see clearly.
- Chef should be able to inform when a particular ordered item is ready to be served.

CONCLUSION
The crucial objective of our research paper is to satisfy the customer's needs, hence we came up researched and studied a system – AUTOMATED FOOD ORDERING SYSTEM. This system is convenient, effective and easy to use, adopting this system would be a great change in the era of food ordering. By the help of this system we can save our time, money and efforts.Our system will attract customers and also enhance the efficiency of restaurants and billing sections.

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