

## CATERING MANAGEMENT

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**Abstract:** Catering management is a based on database utility system which fetches all information from a centralized database. The customer uses web application which contains the menu details. The customer application and admin application connects directly with each other through same database. This application is user-friendly, improves efficiency for caterers by saving time, reduces human errors and provides customer feedback. This system is made for user so that he can book the things for catering that he requires, very easily. When people gather together for several hours, they will definitely require food and beverages. Celebratory occasions such as weddings, christenings, birthday parties and anniversaries call for special food and drink to complete the festivities. These are all prime occasions for catering. Catering is usually done by pre-arranged contract-food provided at a certain cost to specific number of people. The menu in a catering event is usually more limited than a restaurant menu and is chosen in advance by the client. The way the food is prepared is different. Although both restaurant and catering chefs prepare the food ahead of time to a certain extent, catering chefs prepare their food so that it only needs brief final cooking, reheating, or assembly prior to service. This system/software overcomes the drawbacks in earlier automated food ordering systems and is less expensive as it requires a one-time investment for gadgets.

**Key Words:** Menu, Multiple Categories, Manage orders, Offline Payment, Email & SMS Notification.

### 1. INTRODUCTION

Nowadays, most of the caterer's around the world using the manual ordering system. This system needs a person to take an order from the customers. This system relies on large numbers of manpower to handle customer reservation, inquiry, ordering food, placing order, reminding dishes. This typical method is kind of wasting of time and energy when there are a lot of customers at that time. Moreover, it may be cause a misunderstanding between the customer and the person taking the order. However, if there are too many waiters to be hired, it may be waste of resource during non-peak hour. It also will give an extra-work to the cashier to record all the transaction. There are some early efforts have been made to replace this manual ordering process. However, this system is only replacing paper and pen used by the waiter to take an order. This system requires the customer to make an order through their web based application. Therefore, the research has been done to develop a system which will give a lot more benefit to both catering owner and customers. The software will improve all

the lack from the previous systems. Customer can directly place an order from the system and misunderstanding between customers and waiters can be reduced to minimum. Moreover, it also will improve the data collection since order make by the customer is directly sent to the database. It will reduce time waiting by the customer and catering owner can reduce the expenses on manpower.

### 2. LITERATURE SURVEY

The uniqueness of our system is that the user can order minimum three days in advance. The user will have to pay the cheque when the order is delivered to the user/customer i.e. (COD). As MR. Bill Gates once said "Your most unhappy customers are your greatest source of learning." we have a feedback page where the user can give their reviews on our service or the food. The can also give us suggestions to improve our service.

This is about The Development of Self-service Restaurant Ordering System (SROS). The manual/old type of restaurant ordering system relies on a lot of manpower to handle all the process from taking order from customers, placing order, tidy up the table and cleaning the dishes. Therefore, this system/ software is developed to reduce the number of manpower in ordering task and at the same time reduce the monthly cost for the restaurant. Customer/user can place their order through the system and directly stored to the database. The system/software is designed using Microsoft Visual Studio 2008 and Microsoft Office Access 2007 to give a better solution for the manual/old system. [1]

This presents an automatic checkout and healthy diet catering system based on IoT (Internet of things) technique. By utilizing a new type dishware which embedded RFID tag, the system can mark the diet with ISO14443A air protocol and bind it to the consumer. The automatic checkout feature, it can save labor costs for the catering company and cut down the customers/users' waiting time to improve the service quality. And to the customer/user, by the utilization of simulated annealing algorithm, the system can provide consumer with healthy dietary guidance and the explicit dinner records for customers to manage daily diet. [2]

In this the idea and the implementation of E-Restaurant is discussed. The E-Restaurant consists of robotic staff i.e. waiters serving the customers will be robots. The customer places the order through a device set on table which contains the restaurant web pages created on the local server. The kitchen staff prepares the stuff (food items), places the food

items on the robot's tray and sets the robot to move and serve the food. The robotic waiter stops at each table detecting the light through LDR, the corresponding tray associated to each table comes out, the user takes the food, after a specific time the trays is closed and the robot moves ahead to serve the next table. It has ETrolley along with the Robotic Waiter which contains knives, spoons, folks, napkins etc [3]

### 3. PROPOSED METHODOLOGY AND DISCUSSION

#### 3.1 System Overview

Database: It will contain all the details of registered users, all the categories of food items, items details like:-Item Id, Item Name, Item Price, Item Quantity. Then order details that has been placed by the user will be displayed to Admin. The admin will able to view the session ID, registered user id, date of order, time of order, item name, item price, item quantity, whether the order is according to per plate or per kg, item image and order status i.e. whether the order is delivered or in the queue to be delivered. The Cart Details will also be stored in the database once the user click on Add to Cart



Fig-1 System Architecture

Catering Management in a modern idea to serve maximum users within minimum amount of time along with minimum efforts. Providing complete meals in environments such as Birthdays, Anniversaries, Weddings, or for any occasion.

If user want catering services for any occasion, he will search for our website; User will be redirected to our home page. If user has already register to our website, he can directly order the items by logging in the system.; if not he will be redirected to register page where he can register himself.

In our website we also have guest mode in which the customer can view the website but can't order.

User Login Page: By entering the registered Email-id and Password user can SignIn. After logging the user will be able

to see the menu. In which the menu will contain different categories of food. In which he can select different food items according to his requirement.

Menu page will contain different categories that includes Veg, Non-Veg, Jain, Deserts etc.

If user want to view veg items he can select the veg category in which he can view all the veg items that are included in the veg category. Similarly, for Non-veg and Jain.

When user click on the item he want, to order he will be able to see two options i.e. Per Plate OR Per Kg (Price of both will be specified along with the option). The user can also increase or decrease the item's quantity and the price will change dynamically according to the quantity. After selecting the quantity, the user will click on add to cart.

When user want to checkout he can click the view cart option where he will be redirected to the Cart Page. In the Cart he can confirm his order by checking the order details and can also update the cart by removing the items he doesn't want. After checking all the details, he can proceed to checkout where his order will be confirmed and SMS will be send to the registered mobile number along with email on the registered email-id. The payment will be Cash On Delivery Once user will logout he will be redirected to Home page and will be in Guest Mode

Admin Module: If the admin has already register he can SignIn directly by entering his registered email id and password; if not then he will be redirected to the register page from where he can register himself and view all the order details. Once the admin has login in to the system he can view various options like Add item, View item, Update Item, Confirm Order, View Order Status, etc.

When the user enters in the Add Item page he can add items by entering the item type i.e. whether it veg, non veg, etc. and item's name and price. Then in the view item page the admin can see all the item list along with their details i.e. price, name, where he can update the price of the items or delete or add new items in the list. And in the View Order Page he can view all the orders that has been placed by the customer, in this page the admin will be able to see the order details like at what time the order was placed, and when is the delivery date, along with that the admin can view the order status in which he can make a glance of which orders are pending to be delivered. When the admin has finished by checking all the orders or updating items he can logout out of the system by clicking on logout button. We have also made About us page where the guest can read about the Company's policy or details like address, phone number, email-id, etc. There is a Contact us page (feedback page) where the user can complaint, give feedbacks, or ask about any query by mailing us on the given Mail-id.

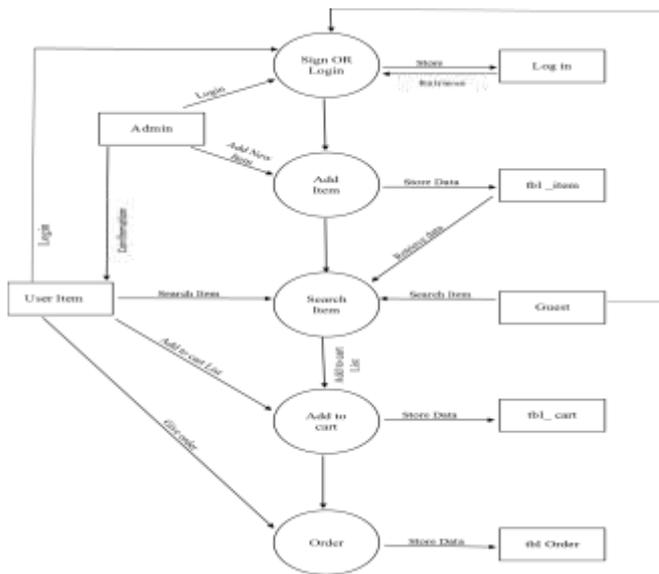


Fig 2: System working flow

In Fig 2, admin can login or sign up. The details about the admin will be stored in the database (if registering) and will be retrieved from the database (if already account exists). The admin can add new item and store the data in the table i.e. tbl.item. Guest user can search item but can't buy any products. If the guest wants to buy he can login into the system. User can search item and can add the item into the cart. The data or the items that user add to cart will be stored into the cart table i.e. tblcart. When user gives the order the details about the order will be stored in order table i.e. tbl.order into database. After the order is placed admin will send confirmation mail to the user on registered email address.

**4. CONCLUSION**

The system that has been presented is mainly used in large-scale catering enterprise, such as schools' and wedding parties. The system is committed to provide consumers with a healthy and dietary nutrition. As for catering enterprises, it provides an automatic ordering food and checkout to cut down costs of labor, and still can provide a transparent management, sold-out meal statistics. So the system can reduce the unsalable food to improve the catering enterprises profit.

**5. REFERENCES**

[1] M. Z. H. Noor, A. A. A. Rahman, M. F. Saaid, M. S. A. M. Ali, M. Zolkapli [2012]

[2] Lei Zhoui , Aichuan Wang, Yongxiang Zhang, Suodong Sun [2015]

[3] Karan Kaushal, Khushboo Yadav, Vidhu Vaibhav, Chakshu Sharma, Love Gupta, Tanu Tripathy [2016]

[4] V. Swapna, M. Firdouse Ali Khan, "Design and Implementation of Ordering System for Restaurants", in International Journal of Engineering Research & Technology (IJERT), Vol. 1, Issue 10, December- 2012.

[5] Tan, Tan-Hsu, Ching-Su Chang, and Yung-Fu Chen, "Developing an Intelligent e-Restaurant With a Menu Recommender for Customer Centric Service," Systems, Man, and Cybernetics, Part C: Applications and Reviews, IEEE Transactions on 42.5 (2012): pp. 775-787.

[6] Y. C. Tan, et al., "Automated Food Ordering System with Interactive User Interface Approach" Faculty of Engineering and Science, University Tunku Abdul Rahman, Malaysia, 2010

[7] N. A. Samsudin, et al., "A Customizable Wireless Food Ordering System with Real time Customer Feedback" IEEE Symposium on Wireless Technology and Application (ISWTA), 2011.

[8] Ashutosh Bhargave, Niranjana Jadhav, Apurva Joshi, Prachi Oke, Prof. Mr. S. R Lahane, "Digital Ordering System for Restaurant using Android", in International Journal of Scientific and Research Publications, Volume 3, Issue 4, April 2013.

[9] <https://www.phpjammers.com/catering-system/>

[10] <https://www.foodwine.com/food/cookbook/2008/catering/introduction.html>