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Online Restaurant Management and Advertising System

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ABSTRACT:- In any restaurant menu card is important because it tells the client which food and beverage unit is located within the restaurant area. The menu card is given to the client's waiter or manager. What if there is no need for the waiter or manager to give the menu card to the client, instead the client will have access to the menu card online. This project works the same way. The system is forced to reduce manual labor and increase the accuracy of staff in the restaurant. This method controls and maintains the client's record and online order. This website was created with user-friendly interface. The aim of the project was to create a responsive website of restaurants that help customers to order food online. In conjunction with this, the application should respond because the website will be available on devices with completely different screen sizes. One of the biggest problems with online ordering is trust. To address this trend, an in-depth analysis has been conducted on the immediate tasks of implementing food order processes. So that customers will install and remove food items easily. The menu card for various restaurants contains the different types of food available within the restaurant. By using the location order menu, the client will simply click and order food. The electrical communication module tells the provider to produce the food itself. In addition the chase module tracks order. The inquiry process adjusts the bill in line with the food delivered. This method completely reduces the remaining time. Each order is related to the toilet seat in the table, and the local order of the unit has one client at a time, similar to paper, but with greater accuracy. Items can also only be shared by complete, affected or modified table, and visualized and value will be calculated in real time. This can also help small local businesses to advertise on the website.

KEYWORDS - Restaurant Management, Recommendation, Tablet, Menu, website.

I. INTRODUCTION

Over the years, technology has revolutionized the food industry. Most newcomers have always had a working environment (POS). There is a remarkable voice connection that says "People eat with their eyes". The e-Menu provides more information about menu items and drinks than the standard paper menu. The convenience and easy access to the local menu unit are the many things that make you order food during the restaurant. The service is moving very fast. In addition the project allows advertising on the website while the client views the menu. Therefore, restaurants will build their e reputation and a simple customer community. With the advent of digital tablets and small screen technology menus they will move to a whole new place. With this electronic menu, orders are usually taken correctly for the first time but allow for the advertising of any dishes / restaurants / hotels approaching. server. Each order is related to the person's seat at the table, and place orders for the unit form one client at a time, similar to paper, but with greater accuracy. items can also simply be shared by a complete table, touched or modified, and noted {therefore the value and additions are often calculated in real time and payments are often made to the exploitation of this application. algorithmic counseling law raises the bar for enthusiasts who support previous orders. It makes it easy

for the client to place their order and in addition read the most common common dishes. In addition, many size filters are often used in accordance with individual preferences e.g. Price, taste, quantity, payment, etc. Our program aims to provide a solution to witchcraft for all or any of these problems. It will greatly reduce human efforts. Customers will be ready to place their orders electronically with the help of the order system. that physical communication between the server and the client is reduced by creating the exploitation of the web payment app. Thereby reducing the chances of infection and providing the client with the best possible service. This will also help many local businesses. There are many local small businesses that offer good products and services but people don't know about it. Such businesses cannot advertise on paper or on television because they are too expensive for them. These businesses can advertise on these websites at a low cost. This will help local businesses to thrive and also help maintain website.

II. LITERATURE SURVEY

- 1) Soon nyeancheong ;wei wing chiew ; wen jiun yap" design and development of multi-touchable e-restaurant management system " numerous efforts have been taken by restaurants to adopt information and communication technologies such as touch screen, pda, wireless lan etc. To enhance dining experience. This paper highlights some of the limitations of the pda-based food ordering system and proposed the multi-touchable e-restaurant management system as a solution. The system consists of the multi-touchable interactive dining menu that allows customers to make orders conveniently on the developed multi-touchable dining table during the busy hours using their fingers. Orders made by the customers will be updated instantly to a centralized database and subsequently reach the cashier and the kitchen module respectively. Management staff could use the system to manage the restaurant operations digitally, starting from the creation of food items for the multi-touchable interactive dining menu to deleting it or to manage orders from customers all the way to billing it. The system was built using adobe flash actionscript 3, php scripting and mysql database on top of zend framework.
- 2) Tan-hsu tan, ching-suchang, yung-fu chen"developing an intelligent e-restaurant with a menu recommender for customer-centric service"traditional" restaurant service is typically passive: waiters must interact with customers directly before processing their orders. However, a high-quality service system should be customer centered; it should immediately recognize customer identities, favorite menus, and expenditure records to provide customer-centric services. To achieve this goal, this study integrates radio frequency identification (rfid), wireless local area network, database technologies, and a menu recommender to develop an intelligent e-restaurant for customer-centric service. This system enables waiters to immediately identify customers via rfid-based membership cards and then actively recommend the most appropriate menus through menu recommender for customers. Experimental results that are obtained from a case study conducted in two taipei restaurants indicate that the proposed system has practical potential in providing customer-centric service.
- 3) Takeshi shimmura, takeshitakenaka, motoyukiakamatsu "real-time process management system in a restaurant by sharing food order information" in a full-service restaurant, it is crucial to share order information among staff in the dining room and kitchen. This paper introduces a real-time process management system for restaurants using an advanced point-of-sale (pos) system by which staff can share order information in real time. In this system, kitchen staff can check all customer orders by the dish that was ordered and the elapsed time of each order. Moreover, dining hall workers can grasp their customer situation with a monitor. By introducing this system to a restaurant, we confirmed that it can make preparation processes more efficient and reduce customers' claims.
- 4) Bhaskar kumarmishra, bhawanisinghchoudhary, tanmaybakshi "touch based digital ordering system on android using gsm and bluetooth for restaurants"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 for both the customer and the restaurant. This work aims to substitute the traditional pen and paper method by automating the food-ordering process in restaurants 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 feedback from the customer. This system improves efficiency and accuracy for restaurants by saving time, eliminating human errors, getting customers' feedback.

As the system is automated, it becomes economical even from restaurants point of view, as it reduces manpower and it just requires one time investment in installing the devices at tables.

- 5) K. Kaushal et al., "the e-restaurant," 2016 ninth international conference on contemporary computing (ic3) " in this paper, 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 a 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 with each table comes out, the user takes the food, after a specific time the tray is closed and the robot moves ahead to serve the next table. It has e-trolley along with the robotic waiter which contains knives, spoons, forks, napkins etc". intelligent restaurant is designed to reduce the work load of waiter and to increase the efficiency. In the paper by sakaripieska, juhanajauhainen, markusliuska, anttiano has propose that the customer's application works on an android tablet. This application is connected to the database and download real-time restaurant's menu. The customer can browse the menu and order it. Using the software, customer can call the waiter by pressing a button. The waiter comes to confirm the order and count the bill. This menu can be displayed in the kitchen's display. When this food items are ready then the kitchen staff can mark them as done. And this food items are visible in the cashier and also in waiter application so that they deliver them to customer.
- 6) Tan-hsu tan, ching-suchang, and yung-fu chen has proposed an intelligent restaurant for customer-centric service. This system provides an online menu ordering and reservation-making process, and also personal menu recommendation service. With the help of rfid-based membership cards, waiters can immediately identify customers according to their consumption records. The waiter uses a pda to take orders from the customer and with the use of wlan order is send to the kitchen. Then chefs prepare the menu and waiter can deliver it to customer. When the customer has finished the meal, the cashier uses rfidbasedpda to identify the membership id to calculate the bill.
- 7) Sun guiling, song qingqing has proposed self-service ordering information system based on zigbee wireless technology. This system uses ffd (full function device) and rfd (reduced function device). Ffd is network coordinator that can communicate with other device; rfd is used in star topology network, which can communicate with the ffd.

III. EXISTING SYSTEM

The current system is primarily paper-based. Paper used in restaurants to display standard menu cards, to record customer orders, to keep customer records. The downside of a paper-based system is that the paper will only be damaged by stains, may be damaged by heat or accidents or may be damaged in general. Therefore, time and money are wasted. Since traditional menu cards are primarily paper-based, any changes that need to be made within the menu can force the re-printing of the full menu card, resulting in spoilage. With small changes, re-printing the full menu card is not possible. Changes within the menu card cannot be made by force. It does not work well to access the selected record from a large number of papers. This method is very up-to-date. The person should call the waiter several times until he or she sees you, and then wait for him or her to reach their desk to take their order. In addition the waiter may misinterpret the customer's order as he writes the order on paper, and a case of improper serving may also be possible. By placing any orders customers should be forced to visit hotels or restaurants to understand about food items and place orders and pay. In this way time and manual labor are required. While placing an order on the phone, the client does not have a visible copy of the menu item, the lack of visual assurance that the order is properly placed. Each restaurant wants employees who can take orders by phone or in person, to offer a rich food experience and consider payment. In today's market, labor levels are rising day by day making it difficult to find workers when needed.

IV. METHODOLOGY

The most important part of building a management system is finding the perfect combination of a clear user diagram and an effective backend system that works smoothly for a better user experience. In our project, we have used HTML and bootstrap to create a responsive and interactive user interface that will help people to use administrative program tasks easily. In the retrieval activities we used the Django framework and the mysql database. The Django framework is used to connect data to our system. All data operations are performed using SQL queries.

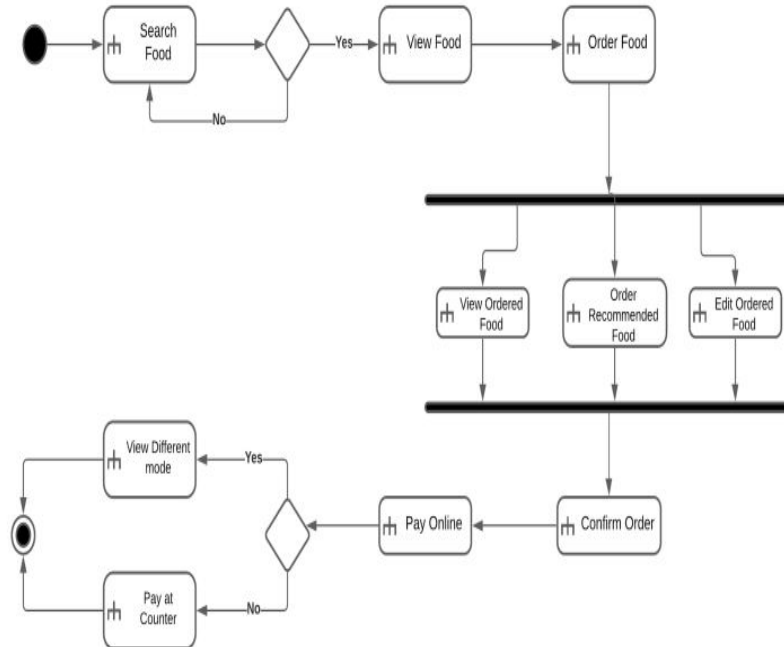


Fig 1 Activity Diagram of the system.

Login: The login module will allow customers and restaurants to enter while they are registered on the website. Every manager / user will have a login id and password to log in to the website.

Registration: This module is shown to visitors when they need to place specific orders, and new restaurant registrations that want to do business with us on our online restaurant management website.

Insert / Update / Remove Menu: This module is designed for administrator. Administrators reserve the right to add, update (modify) and delete data from the database according to its required requirements.

Account Management: There will be an account manager who will handle all online transactions and will be responsible for issuing a printed copy of the customer's payment receipts.

Local order: The work is done by the customer himself whose registration has already been done. Once confirmation has been made through the website, the order is confirmed and delivery will be delivered to the address of the dedicated customer.

Pay Bill: Work done by customer. The customer will have the option to pay off the debt online or pay off the debt in cash.

Exit: The final module states that after placing an order or doing other things on the website the customer will click on the exit profile.



V. EXPERIMENTAL RESULTS

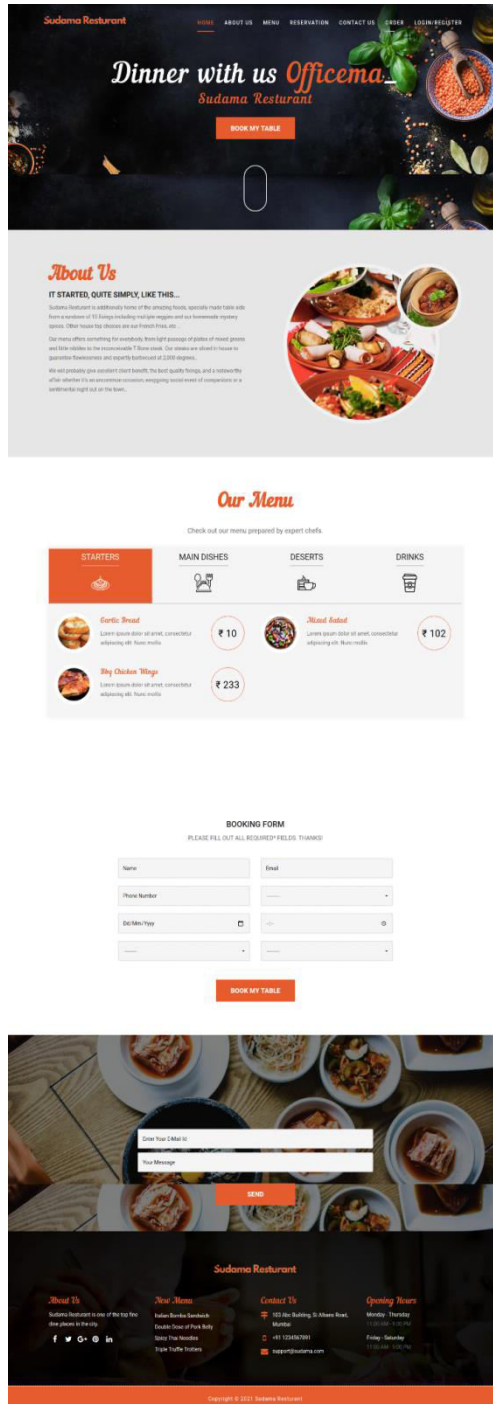


Fig 2. Homepage

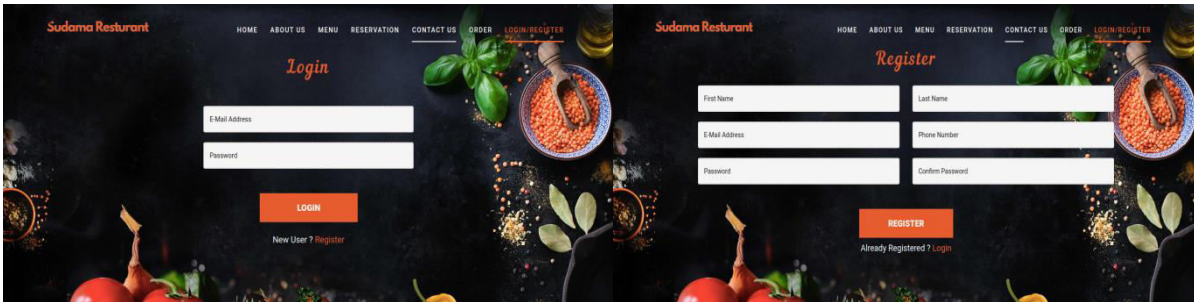


Fig 3. Login page



Fig 4. Register page

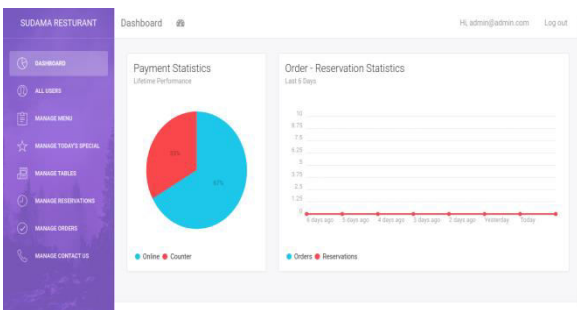


Fig 5. Admin Dashboard Page

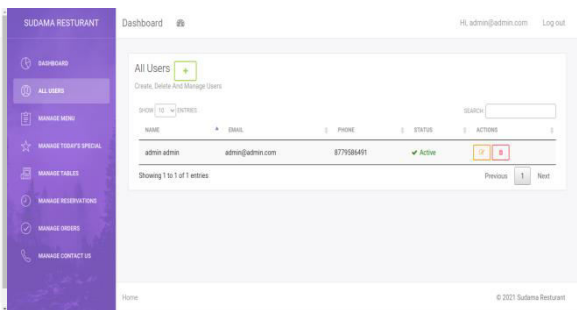


Fig 6. Admin Manage Users Page

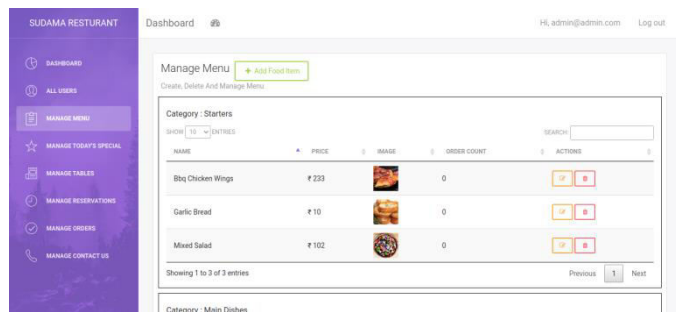


Fig 7. Admin Manage Menu Page

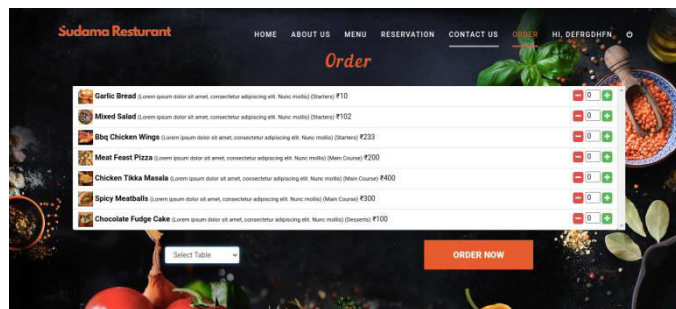


Fig 8. User Order Page



Fig 9. Order Confirmation Page

Fig 10. Order Payment Page

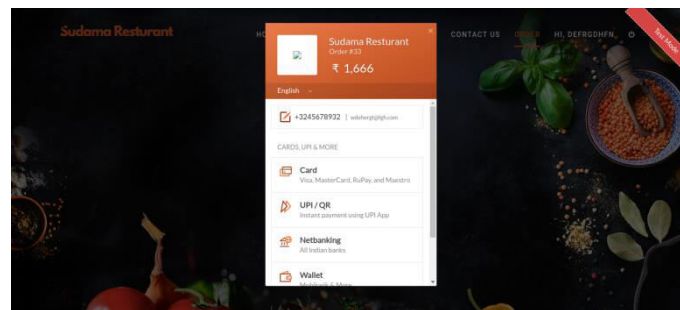


Fig 11. Payment gateway

VI. CONCLUSION

Nowadays most restaurants would like a waiter or manager to transfer the card menu or order. Sometimes the buyer has to wait for the waiter or manager to order and sometimes it can cause a delay for the buyer. This method creates inappropriate communication due to handwriting, inefficient communication between the restaurant and the kitchen. Together they create problems in the sequence of tasks. Even the online diet management system has some problems and weaknesses. Here the need for food ordering and its effects is analyzed over the general food order system of the restaurants studied. The proposed restaurant management system is time-saving and error-free compared to the standard system. This approach attracts customers and collectively adds the efficiency of maintaining a restaurant order and request. Here is the launch of an advanced menu order system using smart android mobile. This method completely reduces the time. All orders are said to sit in a non-public seat on the table, and the unit units design one buyer at a time, as small as paper, but with great accuracy. Items can be shared across the table, emotional or conversational, and noted so value is also calculated in real time. The idea of a high-end e-restaurant can also be expanded with the future GPRS abuse module. The GPRS module also typically monitors and requests a menu order from a local table unit that is sent directly to the pre-defined internet link for how to request purchased items.

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