Wi-Fi Based Menu Card System For Restaurant And Hotels

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Abstract- *Restaurants and hotels use high human resources to manage daily tasks. Nowadays the number of restaurants and hotels are increased so they require high human resources and also require fast processing for ordering and serving dishes to the customers. We visit local restaurants to discuss with them. According to their problem and our idea, we implement this project to reduce human efforts. In this project, there is no need for a customer to take orders from the table. The menu will be displayed on the web page screen so customers select the dishes from the menu.*

I. INTRODUCTION

Restaurants and hotels are the most profitable business. Nowadays it growing fast. Therefore the accuracy and efficiency are important in this field. This research aims to not only improve the business of restaurants but also to reduce human resources, reduce time, and more efficient. Wi- Fi is a popular user interface. Our idea is to create one network in which users will connect to the restaurant's Wi-Fi by their device. After connecting, the customer can select any item from categories and order their food. Then the restaurant will complete the customer's order based on their requirements. The requirements will contain customer name, mobile number, order number, and order time.

II. LITERATURE REVIEW

Traditional food order process used in most full-service restaurants started when a waiter brought the guests the paper-based menu and then waited for the guests to choose items from the menu and inform the waiter the order items. This system may lead to wastage of money, time and paper. Paper-based systems do not provide any form of dynamics.

Even a small change requires the re-print of the entire menu- card. Also a large amount of human effort is required. This system does not work properly because it has some errors and from a customer's point of view it is time consuming. This traditional method has so many inconvenient in terms of effectiveness and price. System is much rely on paper which is not appropriate material for environments where foods are prepared and served. There are lots of chances for occurring human mistakes because the communication happens between the waiter and customer. There are two or more people present in this communication chain which makes it really likely to occur miscommunication. It is very general for restaurants to update price lists or making various modifications on menu cards on day to day basis. But even for minor edits whole menu cards need to be updated which results in paper waste and money.[1]

This system provides following features to the Admin or restaurant manager :

- Add/update/delete food category to/from the menu.
- Add/update/delete food item to/from the menu.
- Update price for a given food item.
- Update additional information (description, photo, etc.) for a given food item.[2]

Some restaurants and hotels use self-service systems. This process required the guest to place an order at the service counter in the restaurant. The guests will have a decision in advance, before presented at the counter, of which menu items to order. Menu catalog is mostly presented as posters placed behind the order counter.

In today's era many restaurants and hotels are trying to build automation in order to reduce service cost and enhance customer experiences. The automation system used to capture the food order from guests ranged in many forms but mostly consisted of an electronic device with a screen presenting the menu and accepting the user's input for order placing First waiter takes the order from the customer. After taking the order, the waiter should enter that order in the system where the PC was set up. At the kitchen information was displayed on screen. The kitchen staff would then prepare the food according to the respective order and after finishing preparation they would inform the waiter, who collected and delivered the dishes to the respective customers tables. The system was also one display for informing the waiter about the

availability of a dish. If a certain dish was not available, then the waiter was able to ask for changes or even cancel a customer's order. After serving the order, a bill was generated at the cash counter as per customer order. The management had full power to access all details of the customer which are already available in the system. With the improvement in computer and communication technology, various systems were launched in the market for the purpose of computerization of the food ordering system.

III. OBJECTIVES

- Reduces Human Resources.
- Reduce human errors during communication with the customer.
- Paperless Management System.
- Freedom to change the Menu card according to the need.
- Useful to promote local businesses.

IV. METHODOLOGY

Basically, our idea is to create our one network. The menu page website will be present on this network. This web page will be opened according to restaurant time. This web page created by using technologies like HTML, CSS, and JavaScript. We decided to create a dynamic Web page to fulfill all the requirements of the restaurant such as add or remove the specific dishes from the menu. When a user connected to the network of the restaurant, they will reach the main web page. The first web page will show the restaurant name, logo, and relevant information. On the same page, it will show the "Enter table number" option. So users will choose the table according to their comfort level and order their dish on that particular table. When the user will select "continue", it goes next page. It will show all the categories of the dishes. The web page will be divided into three parts. The first part shows categories breakfast, lunch, dinner. The second part is about the advertisement section. It will help other local businesses to promote their brands and expand their business. The third part shows dishes according to cuisine type. Each of the above-mentioned categories contains its specific type of dishes. Each dish container has a checkbox in it. So the user can select multiple dishes at a time and order them. After confirmation, the order of each user will be reflected in the database. The relevant information about orders like dish name, quantity, and time will be first displayed to the database administrator. After the confirmation from the database administrator, the information

will go to the cook and waiter. So they will complete the order according to user requirements. This system is dynamic so the restaurant owner has the freedom to change the menu and prices.
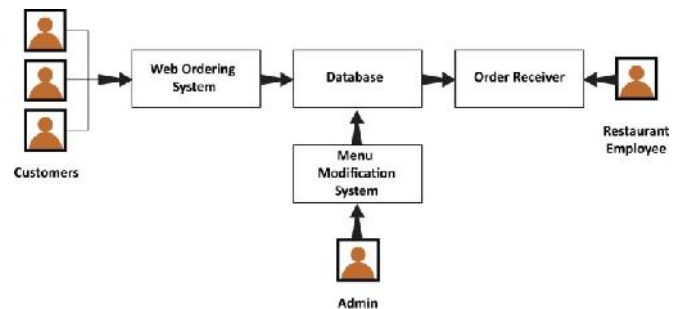
System Model :

Fig. 1 System Model [2]

V. CONCLUSION

In this study, we have proposed our design and implementation of WiFi Based Menu-card System with different approach unlike systems in use in the market and proposed designs in literature. We have discussed advantages of our system as it attracts customers with WiFi connection and let them view menu list, submit their order and message to restaurant staff with provided UI option on their mobile device. We aimed to have less man power need of restaurant staffs as we give more authority to customers into their ordering process.

The proposed system would attract customers and also adds efficiency to restaurant management as well as the customers.

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