

AN APPROACH TO DEVELOP AN ANDROID APPLICATION FOR HOTEL MENU BOOKING

Megha Mungale¹, Shivani Charde², Radha Nigade³, Rahi Wadaskar⁴, Manoj Chaudhari⁵

Department of Computer Science And Engineering, RTM Nagpur University

¹megha_mungale2@rediffmail.com, ²chardeshivani@gmail.com, ³radhanigade@gmail.com,
⁴rahiwadaskar@rediffmail.com, ⁵manojchaudhary2@gmail.com

Abstract— The Unrestrained growth of wireless technology and mobile devices in this era has influenced our lives greatly. Implementing our idea for ordering menu gives a cost-efficient opportunity to offer customers a personalized service experience where they are in control of choosing what they want, when they want it from dining to ordering to payment. This application provides service facility to restaurant and also to the customer. The services that are provided in this application is food ordering and reservation table management by the customer through the system, customer information management, menu information management and billing system. The Main objective to build the system is to provide ordering and reservation service to the customer. With this system, ordering and reservation management will become easier and systematic to replace traditional system. This research work aims to automate the food ordering process in restaurant and also improve the dining experience of customers. so, the proposed research is set to find a more convenient, well organized, faster, reliable and accurate means of processing the current manual system of the hotel for both near and far customer.

Keywords— Android, Menu Booking, ordering, Reservation, eZee eMenu.

I. INTRODUCTION

Hotel/Restaurants are one of the favorite premises. With no regard to the actual reasons for visiting restaurants, customer will make orders and wait for the ordered meals. However, it is common if customers complain for not feeling satisfied about the services offered[5].

There are many reasons leading to the feeling of dissatisfaction including being entertained late in terms of order taking by the waiter and meals serving. The issue of being late entertained could be solved with help of the advancement in the technologies of communication. In accordance, this study initiates an integrated and networked system, with the focus is on its ability to solve the above described limitations in order taking. This study names the system as Using Android platform. In definition, is an integrated system, developed to assist hotel/restaurant management groups by enabling customers to make orders on their own

application with specific date and time. This will minimize the number of minutes to wait for the meal serving. It is known globally that, in today's market, it is extremely difficult to start a new small-scale business and live-through the competition from the well-established and settled owners. In fast paced time of today, when everyone is squeezed for time, the majority of people are finicky when it comes to placing a food order. The customers of today are not only attracted because placing an order online is very convenient but also because they have visibility into the items offered, price and extremely simplified navigation for the order[2].

Online ordering system that we are proposing here, greatly simplifies the ordering process for both the customer and the restaurant. System presents an interactive and up-to-date menu with all available options in an easy to use manner. Customer can choose one or more items to place an order which will land in the Cart. Customer can view all the order details in the cart before checking out. At the end, customer gets order confirmation details. Once the order is placed it is entered in the database and retrieved in pretty much real time. This allows Hotel/Restaurant employees to quickly go through the orders as they are received and process all orders efficiently and effectively with minimal delays and confusion[2].

The concept of this Application, since it is android application, I will keep everything as simple as possible. The project consists in an Android application that can be used by employees in a hotel/restaurant to handle the clients, their orders and can help them easily find free tables or place orders. The restaurant menu is organized by categories (appetizers, soups, salads, entrees, sides and drinks) of menu items. Each menu item has a name (e.g., fried rice), and associated price. It also enables the customer to enter quantity of the food

item ordered, time slot at which the customer is expected to arrive and number of customers for which the table is to be booked.

II. LITERATURE SURVEY

Existing Food Ordering Process

A. FULL SERVICE RESTAURANT :

The traditional food ordering used in full service restaurants require the waiter to entertain the customers with paper based menu card[6].

The waiter needs to assist the customers with the menu card and wait till the customer places the order. The waiter pens down placed order. There is always a possibility of losing the paper.

The drawback of this conventional process is that it requires a lot of human efforts. The menu card used is not at all dynamic even a small change in the menu card requires reprint.

B. SELF SERVICE RESTAURANT :

This process required the guests to place order at the service counter in the restaurant. The guests shall have decision in advance, before presented at the counter, of which menu items to order. Menu catalog is mostly presented as posters placing behind the order counter[6].

C. AUTOMATED FOOD ORDERING SYSTEM :

In order to reduce service cost and enhance customer experiences, few restaurants have invested in the service automation system. The automation system is provided with a screen presenting the menu and accept user's input for order placing, First waiter takes the order from customer.

After taking the order, waiter should enter that order in system where PC was set up. At the kitchen information was displayed on screen. The kitchen staff would then prepare the dishes according to order and after completion of order they would inform to waiter, who collected and delivered the dishes to the respective tables[6].

The system was also informing the waiter about the availability of a dish. If a certain dish was not available then waiter was able to ask for changes or even cancel a customer's order.

After serving the order, bill was generated at the cash counter as per customer order. The

management had full authority to access all details of the customer which are fed into the system.

III. RELATED WORK

The Hospitality industry especially the restaurant sectors are gaining a rising importance worldwide as they have been supporting the economy for decades. The usual procedure used for food ordering in restaurants is a manual process. It involves the waiters noting down the menu from customers, transferring the orders to the kitchen, serving the menu, and finally preparing bills. This process even though looks simple, is prone to human errors while note making & delays involved. So the customers end-up with an unsatisfactory experience[3].

A. EZEE EMENU:

It is Digital Restaurant Menu. eZee eMenu offers easy to use customization option which allows you to make changes to the overall theme to your requirement and evoke your restaurant's brand. Restaurateur will be able to make dynamic customizations whenever a requirement arises without spoiling the experience of the customers[4].

B. ZOMATO - FOOD & RESTAURANT FINDER:

Zomato is the best way to search for and discover great places to eat at or order in from. It's a beautifully designed, easy-to-use social restaurant finder app that lets you explore all the dining options in your city. The user interface consist only textual information. UI has become unattractive and uninformative due to lack of images[7]. Browse through restaurant menus, pictures, and user reviews to decide where you want to eat, and use the map feature to guide you there[4].

C. FOODITTER:

Fooditter is India's most advance restaurant ordering system that makes the food ordering process smooth and effortless. It is an integrated restaurant billing software which allow customers to view the upgraded Digital Restaurant Menu as well as enables the restaurant owners to manage restaurant's orders, inventory, sales, revenue etc.

Through Kitchen fly App, chef is able to keep track of the orders. Restaurant billing software helps the manager to monitor customer's order and track their staffs. Back end system is the heart of the solution which has amazing features like updating the Tablet Restaurant Menu, processing the payment, keeping track of all the application and sending promotional offers to the customers[4].

IV. AIM AND OBJECTIVES

This system is aimed to provide customer the facility to book food order at anytime from anywhere. The main objective of our system is to manage every little activity of hotel including the details of Sales, Orders, Items, Product, etc.

The purpose of the idea is to build an application program to reduce the manual work for ordering and managing the placed orders.

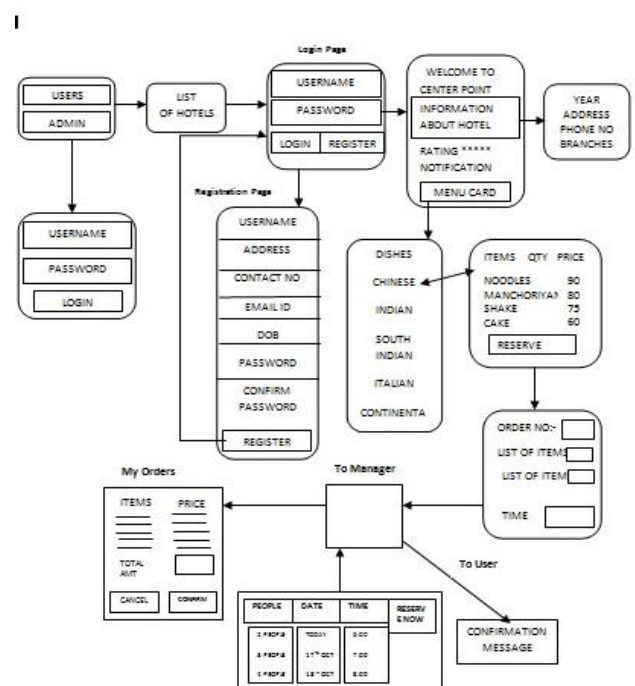
With the help of this application user can easily order there food from any hotel which they like to prefer without visiting the hotel. It totally reduces the time spent waiting for the order to get server which was the main lacuna of the conventional method. This would help the hotel staff to regulate the rush during the peak hours, which would incur a lot of labour work with the traditional process. The system will be less probable to make mistake, due to administrator module.

V. PROPOSED SYSTEM

This is an android based application that enables the hotel goers to book their orders prior. Conventionally, ordering requires the customers to visit the hotel then place the order and keep waiting for the order to get prepared. Today's world don't enjoy compromising with time. This conventional method of ordering takes an ample amount of time typically at peak working hours.

Our application facilitates the customers to priority place their orders along with specified time slot of arrival. This eliminates unnecessary waiting for the orders to get ready. At the specified time slot the customers will arrive at the hotel and enjoy their order.

VI. SYSTEM ARCHITECTURE



VII. MODULES

The Modules are as follows:

1. Admin module
2. User login module
3. Hotel module
4. Menu module
5. Order module
6. Payment module

A. ADMIN MODULE:

This module allows only admin to login using his statistically generated id and password. Using this module the admin can add and remove hotels

B. USER LOGIN MODULE:

Here, the user is asked to enter his registered id to proceed with the app. Else if the user haven't registered yet, can register using the register button. It also gives list of hotels and different id's are associated with each hotel. In this module user can select hotel of his choice and can register for that respective hotel.

C HOTEL MODULE

The user when logs in with the specific hotel its information is displayed such as address, what

facilities does the hotel offers, what type of food does the menu include. This module shows details like payment options and opening hours.

D. MENU MODULE:

This module provides categorized menu of the hotel specified along with the associated price. The food items can be selected using the checkboxes provided.

E. ORDER MODULE:

Here, in this module the customer is provided with the final order along with the entire bill. The customer is required to specify the number of customers in a group along with the expected time slot of visiting the hotel.

F. PAYMENT MODULE:

The process of payment is done by online transaction.

VIII. CONCLUSION

In this proposed system, the traditional way of ordering has been replaced by fully automated system. Customers have flexibility of scanning the entire menu card and make order according to their choice. The application provides customer with

time to time updates regarding the offers which would attract hotel goers greatly and thus helps hotel to make business. Since it eliminates the task of staff entangled in taking the orders, this staff can be engaged in enhancing the dining experience of the customers which delights them. At backend, this application itself manages very crucial sections from ordering to billing which directly leads to the smooth functioning of the management.

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