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A Exploration of Development of Advance Foodie Application

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Abstract: This system will enable customers to book the tables in the hotel by phone. In this pandemic time restaurants are ordered to open with covid guidelines with minimum staff and proper distance and sanitization. When reserving the tables online, users would only have to call the Epicure Hut to find whether a table is vacant or not. After knowing that table is vacant, customers will book their table. If they don't reach there then hotel will cancel the table after 10 minutes of time. The system is implemented in Java 18 with MySQL database system.

Keywords— *Covid safety, Quick Bill Process, contact less service, user friendly,*

I. Introduction

Reserving table well ahead of time during a pandemic [1] is one of the factors which leads to safety and convenience to the customer. Going to the hotel to make a reservation may not be feasible in pandemic time and also there is no guarantee that the tables are available. Reserving tables can be done at the comfort and safety of the customer without having to manually go to the hotel and avoid direct interaction to confirm the reservation. The main objective of this project was to design a reservation and billing system for customers facing this fatal pandemic by adding a new application to the already existing manual booking system. This would not only expand the safety for the customers, but also decouple staff from the restaurants towards maintaining covid protocol guidelines [2]. Since customers will be able to book the table at their convenience it would benefit both the organization and the customer. This project is Automated Digital Reservation System. In the Automated Digital Reservation System, the customer would be able to enquiry about vacant table and reserve a table on phone with little or no human interaction [3]. When the admin is making a reservation, first they need to log in to the Smart Epicure Hut by entering the id and the password, then they will be prompted to enter the table number. Then based on the customer's input, the system would then select dishes as per the requirement.

After completing lunch/dinner automatically bill amount will be displayed and then ask for table number and customer name and address and after paying amount payment will get success. If someone wants prefigured history then they can get bill invoice by entering their name. Customer would have to call to the hotel staff to continue with the booking process [4].

II. Related Work

Existing application do not provide many convenient services like instant vacant seat enquiry, cash on delivery, make mistakes in billing amount and fake menu review and also do not provide customized service. Here in this application, we provide cash on delivery option, no mistakes related to bill and food items, customized menu items, customers can also do booking on call, also will not charge any hidden charges.

III. System Architecture

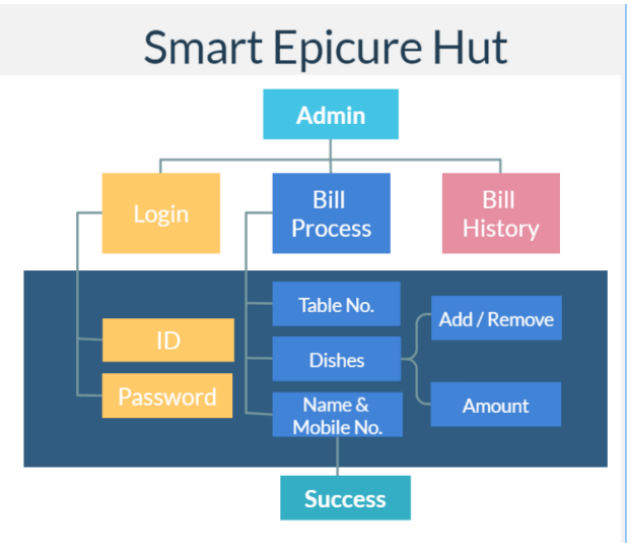

Fig. 1: System Architecture

IV. System Module

There are many online reservation systems available. This project focuses on presenting the availability of the table on call in order to provide an option for the customer to select the table as per their preference to full fill all COVID care guidelines [5] and also reducing much precious time by pre knowledge of vacant seat. The Smart Epicure Hut System is implemented into the following module:

- Login
- Table Number
- Menu
- Bill Payment

Login page

Before starting the booking process, the admin can log into their account, using their credentials, by clicking on the "Login" hyperlink.

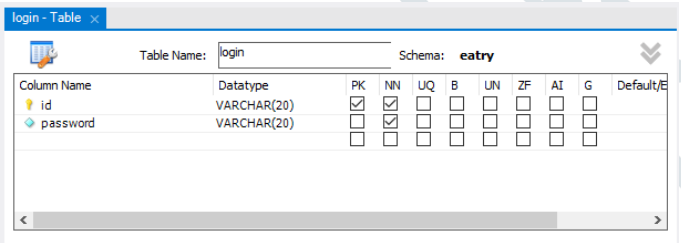

Fig 2: DB Login Page

Table Number

The Table Number Page allows the admin to enter the Table number on the basis of availability and customer preferences

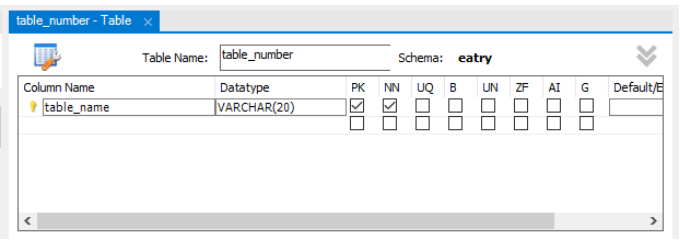

Fig 3: Table Number

Menu

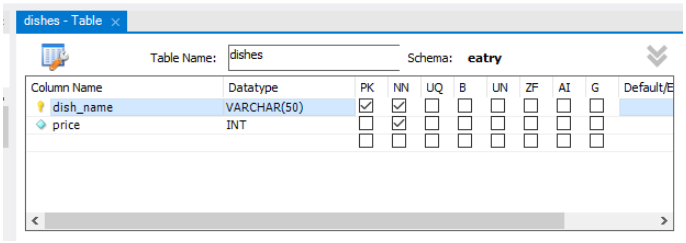

Fig 4: Menu

After the admin enters the dishes button all the dishes of the hotel will be displayed. Using this, the admin would be able to select the dishes asking the customer. The hotel will be waterless. This would aid the customer to stay fully safe in restaurant. As per the customer's liking, they can select the dishes that matches their preference. The dishes are displayed with different values indicating their prices. After selecting the desired dishes, the amount of order will be displayed automatically, then customer will have to pay the amount and give their name and mobile number. and after clicking the bill pay button order will be successful. And customer will have to wait for some times while food is being prepared. And they have to fetch their food from counter itself.

Bill payment

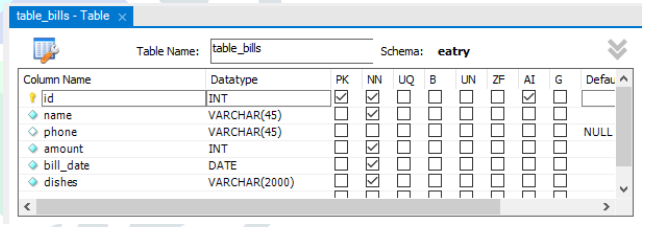

Fig. 5: Bill Payment

Error handling has been taken care to make sure fields like zip code, phone number can accept only numbers. The payment accepted through credit/debit cards, cash at venue as mode of payment. In case of credit card, the customer needs to enter the 16-digit credit card number, 3-digit security code along with the expiration date of the card.

V. System Implementation

Login

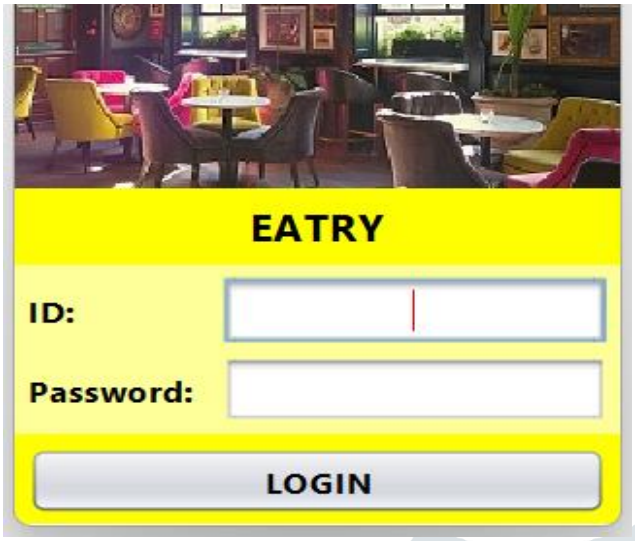

Fig. 6: System Login

Bill Process

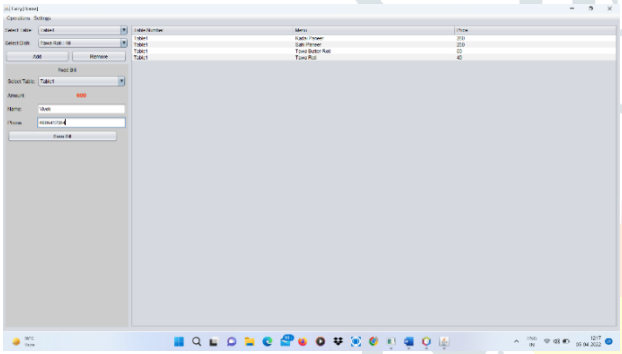

Fig. 7: Bill Process

Bill Success:

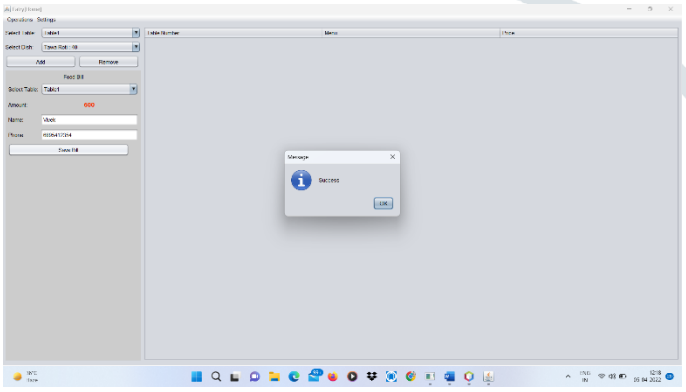

Fig. 8: System Bill Success

Bill History

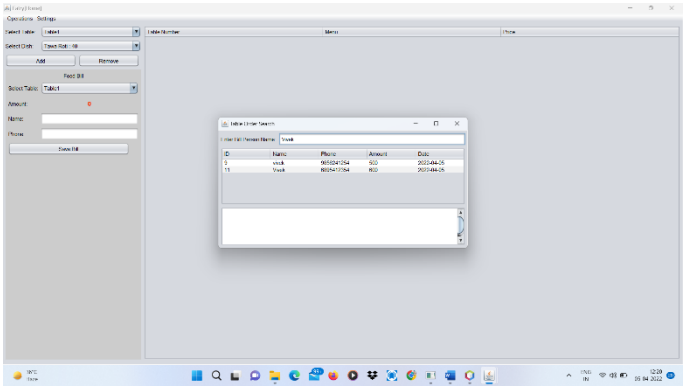

Fig. 9: Bill History

VI. Conclusion and Future Scope

Future Work

This application can be further enhanced by sending reminders, through phone and email, to users about the reservation when they are close to the check in date. This would help them not to miss the reservation. Virtual tours of the restaurant could also be added. This would give the users the idea about the size of the table, sanitization, confidentiality and availability about restaurant before making the reservation.

Conclusion

To summarize, this application can be used to reserve tables for the desired dates by selecting the table online through an automated reservation system. This would be beneficial for both the owner of the hotel and also the users concerning COVID Pandemic which is tremendously fatal. This project helped me in understanding on how to select a particular product that is suitable for my project - research the different and realistic ideas, find out the advantages disadvantages to each of them, select the one that is most appropriate for my work, etc. I also learnt the process of integrating an application – the steps involved, how to debug and go about each of the issues faced during the integration. It also gave me a chance to gain depth experience to learn different technologies like java, MySQL. This paper presents a unique, easy-to-implement and cost-effective, sensible table booking system "Smart Epicure Hut" that assists to facilitate easiness to the customer. This will also reduce stress and panic of people in such critical situation the country has. Therefore, the projected system is ready to supply a semipermanent answer for table booking issues.

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[6] From official https://www.oracle.com/in/java Used Java Graphical Component (Swing)

[7] From Official https://www.mysql.com used JDBC Connector

[8] Used WAMP server for database creation.

[9] https://www.wikipedia.com/