

A Research Paper On Open Table Pocket(OTP)

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Abstract-

Open Table Pocket is a local restaurant and food cooperative application for customers to provide more interactive menu so that the ordering process could be easier. This application is designed for its more flexibility and performance, some other application or websites are make sure that the system has enough navigation function through the picture information to guide customer to finish the ordering food process, apart from that it has been constructed to dealing with large number of orders simultaneously to prevent the food overload and work load on the restaurant staff.

Open Table Pocket (OTP) is a system which provide convenience for the customer. This application overcomes the disadvantage of the traditional queuing system. This application increases the takeaway of food than customers and enhances the speed and standardization of taking the order from the customer. It provides a better communication platform.

Open Table Pocket application set up menu and the customer easily make choice and place order with a simple way. Also with this application you can easily waiting time, maintain customer's database. This application allows the user to select the desired food item from menu. The user order the food item which directly received by system with detail of table number and food. This application also allows pre-table booking option which save your time. The payment can be made by cash, Paytm or UPI. The user details are maintained confidential. An id password is provided for each user.

1.Introduction

Open Table Pocket application help to manage and maintain the restaurant. In this application, we give the customer to order food using app which help us to have less numbers of staff members and help the restaurants to better its food serving faster Customers can also make payment through Paytm and UPI. It's make easy way to choice food items fast and save time.

Pre-table booking option is also there by which we can book table according to you time which save time or provide good service. Through you choice you order some items so restaurant serve you which your reach but it required pre-payment.

2.Objective

The Main Objective of our project is to manage the information of food items, staff, restaurants, orders, customer's etc. It manages the information about staff members in the restaurants, pre-order table information, payments, customer feedback etc. The purpose of the project is to build an android application which help to reduce the manpower and make the existing process more technology able that everyone can easily access.

3.Functionality

In our project, we make some changes in the existing project that are already present in the market by have many different functionalities.

Our system will have these main functionality:

- Allow the Customer to access the e-menu and can place order by simply selecting the food items
- Customer can cancel/edit the order.
- Customer can give feedback of service provided by restaurant
- Customer can request for bill.
- Customer can ask for any help through application.
- Can show food order status and queue of chef.
- Allow admin to access the database and can make any changes if needed.
- Allow head chef to mark if order is completed.
- Hall Manager can mark the bill as paid.
- Hall manager can see and edit the status of tables reserved or available.

4.Existing Approach

In existing system for giving any order user needs to visit hotel or restaurant window to know about the food items and then give order and pay in advance. In this method time and manual work is required. Maintaining critical information in the files and manuals is full of risk and a tedious process. Restaurants are having standalone applications so at one time, they have the facility of many screens or many operations which is happening at one time. They store the data which is overlooked by the Manager. The existing software which restaurants are using is very costly and their maintainance cost is overpriced.

Drawbacks

- This software is used only for reservation of tables. So if we want to order some food or give any feedbacks no such feature is available in the application because the restaurant manage their own data.
- Restaurants are able to store only one kind of information. There is no security feature also.
- If any order cancellation is done at the last moment, it will make a variation in the already created records and will lead to the wastage of food.
- Details of the system are not maintained for long.
- This will creates lot of mistakes like misspellings, calculation problems, duplicate entries etc.
- It is tedious task for Managers to supervise all the sides of restaurants like kitchen, floor, and counter simultaneously.
- There is no feature to get the updated details of the orders from every branch.

5.Proposed System

This application is designed in such a way that the customer can directly place an order by using its own device. Whenever any customer reaches the restaurant he/she can simply scan the QR code that is placed on every individual tables. When they scan it an e-menus directly opens and all the food items get displayed .Customer can select the food item that they want and placed the order .That order then goes to head chef for

approval .if he/she approves then the chef start cooking the food. By using this application we can maintain the work load on the waiters as it is the main drawback of the existing projects. The work load not only maintain but can be nullified. Sometimes due to some reasons waiter can't reach to every table so the customer can easily ask for any type of help using this application.

Pre-table booking option is also there by which one can book table according to ones preferred time which provide good service to the customer. Customer can also pre book the meals which will be served on the time of arrival this feature requires pre-payment by the customer.

Modules/Interface

- **CUSTOMER**

They are the main who uses this application but they don't have any access to the database. They can only place a food order using this application by simply selecting different food items that are displayed on their devices. They also can give the feedback and can pay bill.

- **STAFF/HEAD CHEF**

The work of head chef is to take the order from customer and checks if there is not any problem. Once they checked, he order the chef to complete the order and mark the status as pending until the customer receive it. Other staff includes the waiters how's work is to keep in touch with the hall manager every time.

CHEF

Chef basically works under the head chef. When the head chef approves any order he/she start preparing the food. When the food is cooked, it update to the system. They are not directly contact with the application.

HALL MANAGER

The work of hall manager is to have an eye on the empty tables. They have to update the status of the table either empty or occupied so that the customer can see in the application and pre book the table. It also have a duty of checking that every customer have received their order on time and when they paid it should be updated to him as well.

- **ADMIN**

It works is to take care of the details of the staff. It should also maintain the database and the inventory. It also provide the login id and password to the users.

6.Working

1. Customer Interface

The customer interface will contain three screens. All three screen will have a consistent layout.

Place Order

In this screen, system shows a list of cards (UI Elements) of dishes. Each dish will have an image, its price per serving.

Timer and Edit/Cancel Order

After confirming the order, the user will be shown a timer screen. In this screen customer will be shown “Edit Order” and “Cancel Order” buttons and a timer which shows the completion time of the order. There will also be a button to request for bill.

Feedback

In feedback screen, at the top right corner a button for “Request Bill” will be shown. Beneath this button we will display a form which will have different multiple-choice questions and a submit feedback button.

2. Staff Interface

Head Chef Interface

In head chef interface, system will show all the current orders in detail i.e. all the dishes of a particular order. In each order, there is a button which will be used to mark that dish cooked. Moreover, when customer wants to remove a dish from his order, system will show head chef a notification to approve the removal of the dish.

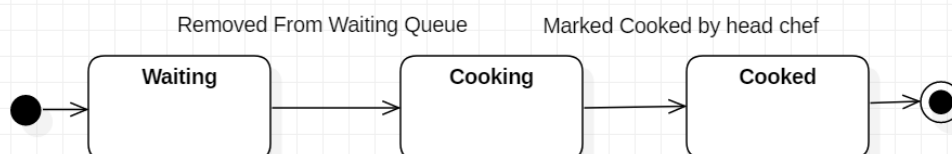
Hall Manager Interface

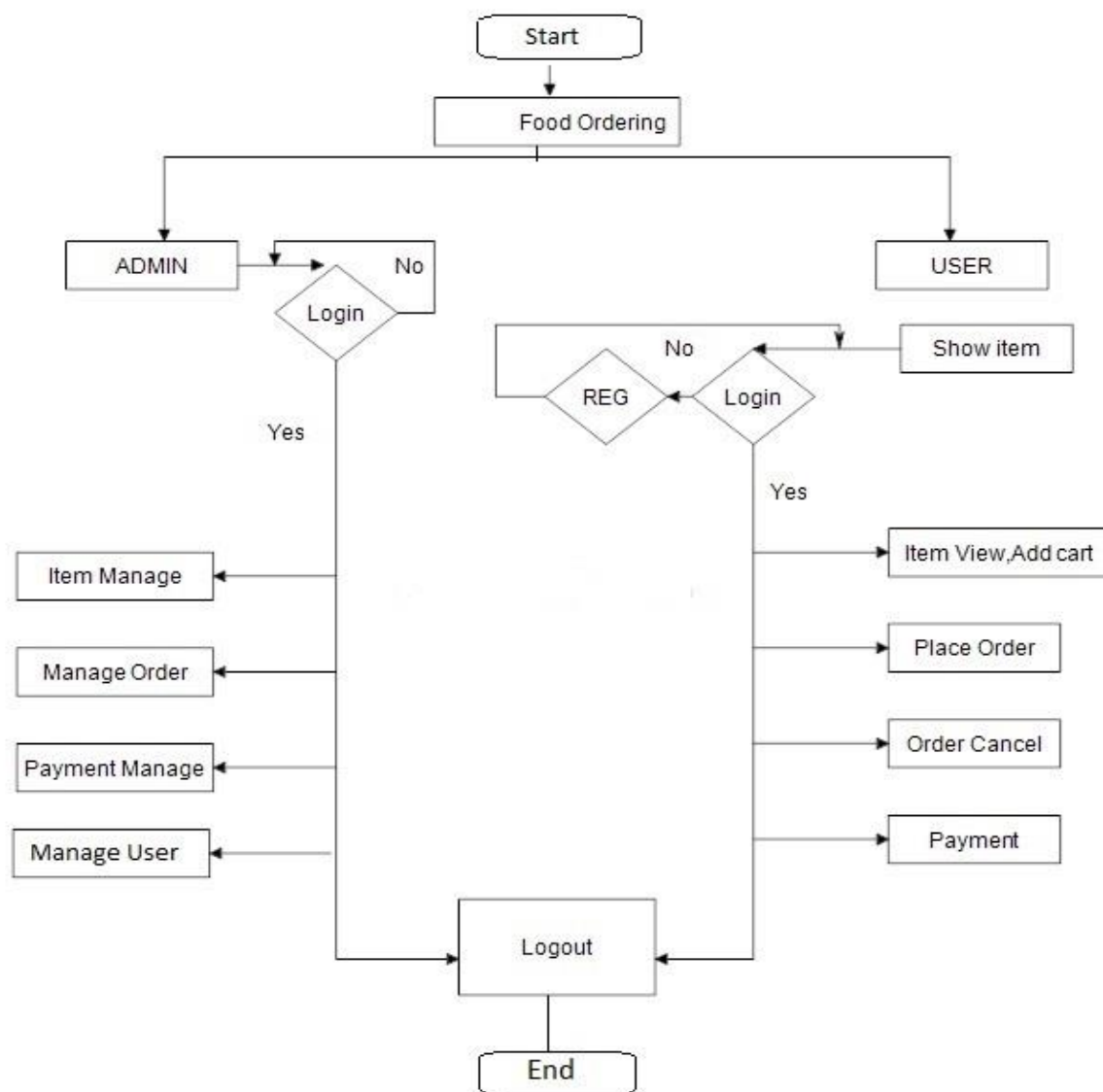
Hall manager will have a screen where he will get notification whenever an order is completed. System will notify the hall manager about the order number and table number. Hall Manager also has a screen where all orders are listed, and status button to mark the order as paid. Moreover, he also has an interface screen to see and the status of tables in the restaurant as free/available.

3. Admin Interface

As Admin is authorized to perform **CRUD** operation on the staff members, Managers, food items and Inventory. He’ll be having three different screens for staff members, Managers, food items and Inventory.

Dish State Diagram





7. Conclusion

Our project is only a humble venture to satisfy the needs to manage their project work. Firstly, we search the other application similar our project and then we try to find out what are their drawbacks and check if we can implement them on our project. In our Project we try to solve the real-time problem that every customer face either when they try to place order and then have to wait for certain period of time to get their order or they face that waiter or staff member does not approach to them. Our project will help all the restaurant to make a powerful system. It also help the manager to maintain reasonable estimates made within a limited time frame and also help the manager to maintain staff detailed in a better ways.

8. References

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