

Electronic Menu Card with Food Bidding

**Mrs. Hemlata Ohal¹, Yashodhan Dhananjay Jawalekar², Shubham Dattatray Dhumale³,
Ketan Govind Parmar⁴, Siddharth Ramkumar Suwarnakar⁵**

HOD, Dept. of Information Technology, MIT Polytechnic, Pune, India¹

Student, Dept. of Information Technology, MIT Polytechnic, Pune, India^{2,3,4,5}

Abstract: This app is especially made to ease out waiter's job in a restaurant. Customers would get in a restaurant, get a table, and then download and open the application, log in/sign up and unlock the menu. The customers will have an option to order any dish of any quantity they want from the menu on their mobile and Bid for it. A special notes section would be in the app for special requirements of the customer. Hence, leaving only one job for waiters that is to only serve food.

Keywords: Menu Card, Digitalization, Food Bidding, Cloud Database

I. INTRODUCTION

This project is emphasized to bridge technology and the food and beverage industry as it takes over the food ordering process. The existing food ordering process, which consists of first, waiter giving a menu card to the customer, second, he waits until the customer decides what to order and then the customer will tell the waiter what they want and the waiter will jot down all the ordered dishes and then he will take that list to the kitchen and pass on the list to the kitchen and pass on the list of dishes the customer ordered to the chefs. The method is time consuming and old it is also error prone during peak hours when the restaurant staff has to handle a large no of customers to minimize this process introduction of an android application is done where he user has to login/ register to the application and he get access to the restaurant menu and then he can select the items from the menu and a new concept to the menu and a new concept to introduced is food bidding in this application which allows the user to enter the user to the respective price he wants to and the application or the system decide whether to accept it or not Now, when the customer enters the restaurant he will have to down load the application from the play store and he has to register/login to get the access to the menu card of the restaurant and then he can add the items to the cart and then he has to bid or enter the price for the respective items in the cart, and then the system decides whether to accept the deal offered by the user or not.

II. LITERATURE SURVEY

There are very few bidding apps in the market & one of them is "The Bid Capital".

In our literature survey, we found that there are some pros and cons in their system. First when we entered the restaurant and the waiter asked us to install the application & register our account using our phone no or using Facebook or google account. After we signup/create account, we have to enter the table no, the layout of the application was, on the upper right corner was a call waiter button & in the centre were two option one was named as food and other as drinks, we opted out for food & had access to the menu card and we added a few items to the cart & then we selected "continue", on the next page, our items were listed & the total price was shown & there was a text box which was to enter our price:- If accepted the waiter would come to the table to confirm the order. If rejected the system would give us three chances. After getting rejected for all of chances given by the system the order or the cart would get discarded and we have to add the items again and repeat the respective process. The pros & cons observed in this were:-

Pros:-

- 1) Bidding on food & drinks.
- 2) Application does not hang or has less bugs.
- 3) It is more secured with GPS.

Cons:-

- 1) When pressed the call waiter, the waiter's response was not on time.
- 2) Bidding is possible only on total bill, not on an individual item.

III. PROPOSED SYSTEM

In this application, the user has to login, if he already has an account or register the account to unlock the menu card. Once the user has logged in, he has access to the menu card, the list of items is displayed, he has to enter the no of quantity for the particular item and select the “add to cart” option. On the bottom there is an next option which allows the user to go to the bid page. In the bidding page there is a list of items, the user has added to cart and he/she can enter the price and quantity he/she wants and select next option on the bottom of the screen and wait, the system return with a message “your order is accepted and place”, if no, the system returns with a message “your order is rejected”. In the bidding page and the menu page, on the top right corner there is a button named “My Orders”, on selecting that option the user is able to view his/her history of orders. Next to “my Orders” button there is a logout button which logs you out

IV. SYSTEM ARCHITECTURE

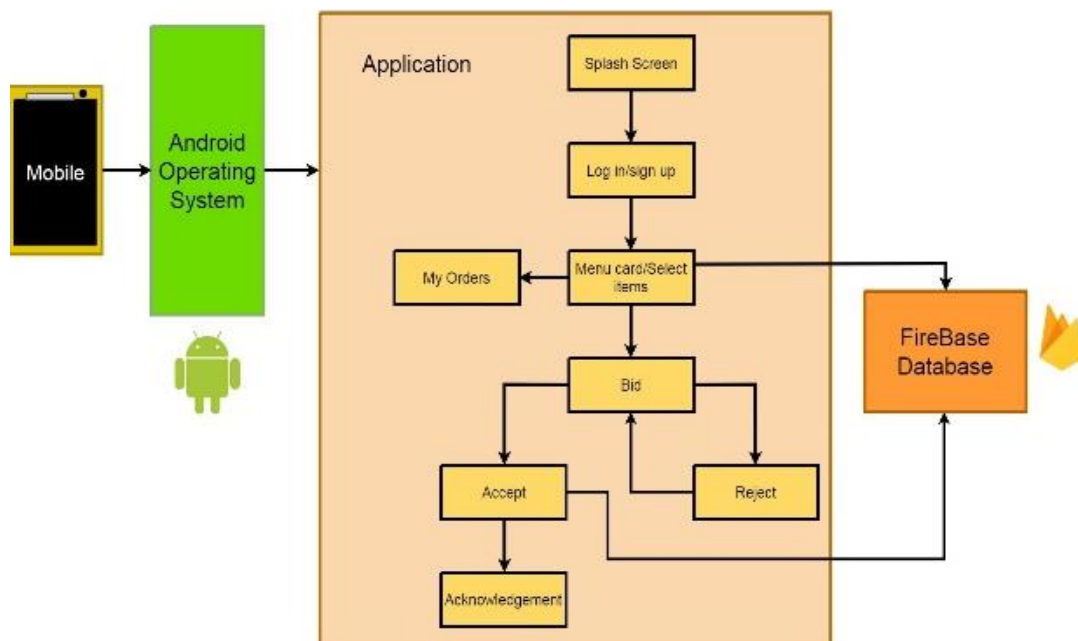


Fig.1 the System Architecture

Android OS:-

This application would be running on Android OS which is used by leading mobile phone manufacturers and has a huge customer base (if compared with other OS). Examples are Samsung, OnePlus and Huawei.

Android Studio:-

It is a software which is developed by Google and JetBrains using C++, Java and Kotlin for app developers who develop the application for mobile devices which use Android OS. We have also developed the application using this Integrated Development Environment (IDE).

Firestore:-

Firestore is used as the back-end of the software. It will store the user credentials. Firestore will be also storing the data which will be displayed when the fragment of the menu card will be called by the application and will be keeping track of all the orders placed by the user.

Kotlin:-

Kotlin is a cross-platform, statically typed, general-purpose programming language. Kotlin is designed in such a way that it becomes a language which is faster to write in comparison with Java. It is also designed to interoperate fully with Java, as the JVM version of its standard library depends on the Java Class Library. However, we have used both Kotlin and Java while developing this software.

V. RESULT

Table I Result

Sr. No.	Dish Name	Original Price	Bid Price	Status
1	Rice	100	90	Accepted
2	Dal Fry	150	105	Rejected
3	Milk Shake	100	50	Rejected
4	Butter Roti	50	41	Accepted

The above table shows the working of the developed software which will be either accepting/rejecting the bid price. The concept of food ordering applications is also found in hotels like Green Roof (Sinhgad road, Pune). They have an application for food ordering but the drawback is that the customers are not entitled to use the application and the waiters had to be present for taking order as the application was custom-built and was operated on the devices which were being operated by waiters themselves.

Similar concept is found in the hotel IDOS (Kothrud, Pune). But they have the same system/ application for food ordering just like Hotel Green Roof. Hence they lacked the concept of food ordering by customers themselves

A different concept was found at The Bid Capital where in order to order food, the customers had to download the application from the Play Store (Android) or App Store (iOS), Sign up/Login and order food of their choice.

So our literature Survey was done at the restaurant (The Bid Capital, Deccan). All the team members of our group visited that restaurant. The reason we chose bid capital was that it had already introduced the system of food bidding and we could view and checkout the working of the application of the food bidding system which they are using. And discussed the concept of our project with them and understood their problems faced by them during ordering, etc.

So, to resolve their problems in some extent we are developing a project on electronic menu card with food bidding. Which reduce their efforts in some extent

CONCLUSION

This project tells us for the possible ways of ordering your food rather than the old process and we aim to introduce bidding to this software and give it a fresh look for restaurants and a unique experience to the customers. Nowadays people bargain on every individual item they buy, then why not food? This project fair out the deal between customer as well as the owner & both are financially at positive ends. It has lots of possibilities in future. We shall overcome to this as "Everything has advantages and disadvantages, it is we who chose which side to look at

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