

# “Online Table Booking and Food Ordering System”

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**Abstract**— The wide growth of wireless technology and Mobile devices in this era is creating great impact on our lives. Some early efforts have been made to combine and utilize both of these technologies in advancement of industry. This research work aims to automate online table booking and food ordering process in restaurants. This system successfully over comes the drawbacks in earlier PDA based food ordering system and is less expensive and more effective than the multi-touchable restaurant management systems. This system allows the user to select the food items from the displayed menu. The user orders the food items. The payment can be made online or pay-on-delivery system. The restaurant owner manages the menu modifications easily. The mobile application on mobile devices provide a means of convenience, improving efficiency and correctness for restaurants by saving time, reducing human efforts and positive customer feedback. The advancement in information and communication technology has greatly influenced business transactions.

**Key words:** Food Ordering System

## I. INTRODUCTION

The online food ordering system provides convenience for the customers. It overcomes the disadvantages of the traditional queuing system. The advancement in information and communication technology (ITC) has greatly influenced the business transactions. The adoption of wireless technology & emergence of mobile devices has led to automation in the hospitality industry.

## II. LITERATURE SURVEY/RELATED WORK

- Automated Table Booking and Food Ordering System With Real Time Customer Feedback”
- In this project you can book a table and order food online from e-menu card.
- Kitchen staff prepares the food accordingly.
- So food is ready by the time customer reaches the hotel but there is no guarantee whether the table is vacant or not.

### A. Other Related Project:

- “Online Food Ordering System With Short Message Service Notification”
- SMS channel is linked with app which sends the confirmation message.
- As DND mode is on , SMS channels won't work on most user's as they would not receive the message of confirmation of their order.

### B. Our Project:

- The user can book a table and order the food.
- Mail will be sent through restaurant's official mail id which will be linked to the app.
- Unlike SMS which has no guarantee of delivery to customer an email is used to remove this disadvantage.

## III. EXISTING SYSTEM

In existing system for giving any orders users should visit hotels or restaurants to know about food items and them give order and pay 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.

## IV. PROPOSED SYSTEM

This online application enables the end users to register online for table booking, select the food from the e-menu card, read the E-menu card and order food online. The results after selecting the food from the E-menu card will directly appear in the screen near the Chef who is going to cook the food for you. By using this application the work of Waiter is reduced and we can also say that the work is nullified. The benefit of this is that if there is rush in Restaurant then you can book a table before checking into the restaurant and sometimes there are will be chances that the waiters will be unavailable and the users can directly order food to the chef online by using this application. The user will be given a username and password to login into their account.

### A. Modules:

- Administrator module
- Customer Module
- Manager Module
- Meal deliver module

### B. Administrator module

This module is used to create usernames and passwords by admin. Admin can view all the information about the user or delete or edit the all details about the manager and customer.

### C. Customer Module

This Functionalities provided:

- View product's list
- Register
- Place orders

### D. Manager Module

This Functionalities provided:

- Create product categories and functionalities,
- Edit/delete product categories and descriptions,
- View and manage orders and sales report,

### E. Meal Deliver Module

Functionalities provided:

- View pending orders and delivery details
- Confirm order delivery

## V. IMPLEMENTATION

Our project (ONLINE TABLE BOOKING AND FOOD ORDERING SYSTEM) is based on platform “Android”. This online application enables the end users to register

online for table booking, select the food from the e-menu card, read the E-menu card and order food online. This project is basically divided into four modules namely administrator module, customer module, manager module, meal deliver module.

The coding of the project is based on a platform provided by Google called as ‘Firebase’. This was launched in April 2012. **Firestore** is a mobile and web application platform with tools and infrastructure designed to help developers build high-quality apps. Firestore is made up of complementary features that developers can mix-and-match to fit their needs. Firestore also provides fast accessing of data. It’s very simple tool and easy to use.

The process works as that we have first linked/import our project into firestore as it has a separate environment to work. There are some various services provided by firestore. These are:

- Firestore Analytics
- Firestore Cloud Messaging
- Firestore Authentication
- Real time Database
- Firestore Hosting
- Firestore Crash Reporting
- Firestore Storage
- Firestore Notifications
- Firestore Dynamic Links
- Firestore Remote Configuration

The firestore platform was easy to implement everywhere in the project. It provided us a lot of convenience while design of UI and other development models. The project basically maintains two applications i.e.

- 1) User Application
- 2) Admin Application

The **USER APPLICATION** is basically designed for users and will be available across all platforms of mobile i.e. Android and iOS. It helps the user to book table and order food online. Here, the user a wide variety of restaurants with ample varieties of table with very reasonable rates. After successful booking, the user gets a confirmation of booking and the user has to pay at-least 40% of the payment initially. If the user is not able to come they will be send a notification 15 minutes before their scheduled time via Email/SMS. All the details of the user will be noted electronically.

The **ADMIN APPLICATION** is basically provided to hotel staff to currently update the status of the restaurant. It includes the number of vacant tables with their categories i.e. single one, family one, etc. how many employees are still occupied and how many seats are available. This application gets automatically updated and in turn redirects to the user application for the users to book table online.

In **USER APPLICATION**, after user has booked a table online, they will also see an option for ordering food online. This will be shown by E-menu card which will be displayed after successful booking of table. If the user wants to book food online they can order starters like snacks and tea and many more.

The **ADMIN APPLICATION** also keeps track of the tables that are going to be vacant soon which will be showed to the user at the time of booking that the table which they want is not vacant now but soon will get vacant in some time so the user gets the table of their choice and

will be happy. This process goes on continuously and stops 1 hour before closing the restaurant.

- Using firestore tool, we came across several advantages like cloud messaging and notifications to the users.
- All our data was stored in the firestore cloud.
- Due to remote configuration of firestore, user need not to update app, it automatically gets updated and fixes the bugs.
- Hosting was very simple in firestore.
- Real time database is possible so that data gets instantly updated.
- It allows the users authentication via Facebook, Google+, and many other social networking platforms.
- Using dynamic links, it provides better experience across platforms.

The below diagram shows the flow diagram of the project:

#### A. Flowchart of Project

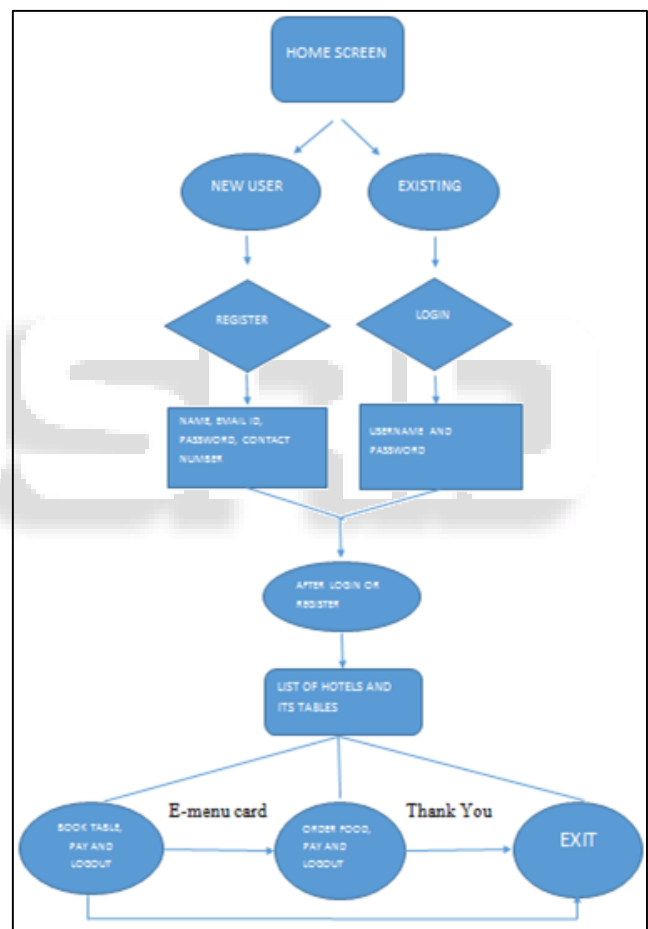


Fig. 1: Flowchart

#### VI. APPLICATIONS

- A client will always benefit from being able to make a table reservation at the restaurant he wishes to go. Nowadays, the majority of people prefer to go out knowing that they have a reservation.
- A clear benefit of making table reservation for clients is the security that they will experience when going out to a restaurant. Making a reservation will guarantee the client that he will receive his table at the time and place he has planned.

- It will be an advantage for the customer to know in advance that he will not have to go through the trouble of waiting until table is available, or being put on a waiting list, or in the worst case, needing to find another place to eat.
- Another important benefit of making a reservation in the desired restaurant is the better quality of service one will receive.

#### VII. CONCLUSION

Thus Online Table Booking helps our customer to increase their ease of convenience greatly. With this users can save a lot of time. It is the best initiative for booking a table. It is an important model towards technology era.

#### VIII. FUTURE SCOPE

The current design of online table booking and food ordering system can be further expanded to support its communication and bond with customers in other cities also. In later time, the people will be able to communicate through social buzz and they would be able to contact and know live status of the table in the restaurant.

#### REFERENCES

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