

# Online Food Ordering and Review System

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**Abstract**— Our proposed system is an online food ordering system that enables ease for the customers. It overcomes the disadvantages of the traditional queuing system. Our proposed system is a medium to order online food hassle free from restaurants as well as mess service. This system improves the method of taking the order from customer. The online food ordering system sets up a food menu online and customers can easily place the order as per their wish. Also with a food menu, customers can easily track the orders. This system also provides a feedback system in which user can rate the food items. Also, the proposed system can recommend hotels, food, based on the ratings given by the user, the hotel staff will be informed for the improvements along with the quality. The payment can be made online or pay-on-delivery system. For more secured ordering separate accounts are maintained for each user by providing them an ID and a password.

**Keywords:** Online food, Food delivery, Mobile application Swiggy, Zomato, Uber eats, Restaurant, E-Commerce, Customer Perception

## I. INTRODUCTION

An online food menu is set up by the proposed food ordering system and as per their will customers can easily place the order. Also, customers can easily track the orders with the food menu. The management improve food delivery service and preserves customers database. Motivation to develop the system is from the restaurant management system. To get the services efficiently the users of the system provides various facilities. Restaurants as well as Mess facility is considered by our system for the customers. Mostly mess users are person who are shifted to new cities and this can be considered as a motivation to our system. Another motivation can be considered as the increasing use of smart phones by the customers, so that any users of this system get all service of the system. The system will be designed to avoid users doing fatal errors where users can change their own profile also where users can track their food items through GPS and where users can provide feedback and recommendations to Restaurants / Mess service providers.

There's a need for the system due to lack of a full fledged application that can fulfill the customer requirements by providing him food from restaurants/mess service. For the students studying in different cities, our system will be very helpful.

The flexibility to the Customers/Users to order from either Restaurants or Mess is provided by our system. Recommendations to the customers is also provided from the restaurants/mess owners which are updated daily. There will be no limitation on the amount of order the customer wants by ordering food from our system. As a Startup Business for the developers the same system application can be used. Real time customers feedback and ratings are

provided by our system with the comments to the restaurants/mess owner. It gives appropriate feedbacks to users, so if there is any error happened, then there will be a feedback dialog toward users.

To avoid users doing fatal errors and inappropriate action our system application is designed. Input will be taken by the user from the graphical user interface. The major attributes such as name, address, email-Id, mobile no, other personal related values will give input to the dataset. The User/Customer's Order, Bill, Feedback and Recommendation will provide the output. For the initial implementation of the system we have considered 2 restaurants and 2 mess services in 5 areas.

## II. PROBLEM STATEMENT

The online food ordering system sets up a food menu online and customers can easily place the order as per they like. Also, the online customers can easily track their orders. The management maintains customer's database, and improve food delivery service. This system also provides a feedback system in which user can rate the food items. Also, the proposed system can recommend hotels, food, based on the ratings given by the user, the hotel staff will be informed for the improvements along with the quality. The payment can be made online or cash or pay-on-delivery system. For more secured ordering separate accounts are maintained for each user by providing them an ID and a password.

## III. LITERATURE

In [2] Customer using a Smartphone is considered as a basic assumption for the system. When the customer approach to the restaurant, the saved order can be confirmed by touching the Smartphone. The list of selected preordered items shall be shown on the kitchen screen, and when confirmed, order slip shall be printed for further order processing. The solution provides easy and convenient way to select pre-order transaction form customers. In [3] there was an attempt to design and implementation of digital dining in restaurants using android technology. This system was a basic dynamic database utility system which fetches all information from a centralized database. Efficiency and accuracy of restaurants as well as human errors were improved by this user-friendly application. Earlier drawbacks of automated food ordering systems were overcome by this system and it requires a onetime investment for gadgets.

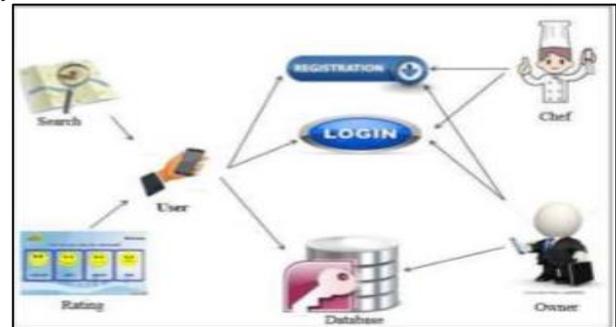
In [4] an application of integration of hotel management systems by web services technology is presented. Ordering System Kitchen Order Ticket (KOT), Billing System, Customer Relationship Management system (CRM) are held together by the Digital Hotel Management. Add or expand of hotel software system in any size of hotel chains environment was possible with this solution. In [5]

research work aims to design and develop a wireless food ordering system in the restaurant. Technical operations of Wireless Ordering System (WOS) including systems architecture, function, limitations and recommendations were presented in this system. It was believed that with the increasing use of handheld device such as PDAs in restaurants, pervasive application will become an important tool for restaurants to improve the management aspect by minimizing human errors and by providing higher quality customer service. In [6] along with customer feedback for a restaurant a design and execution of wireless food ordering system was carried out. It enables restaurant owners to setup the system in wireless environment and update menu presentations easily. Smart phone has been integrated in the customizable wireless food ordering system with real-time customer feedback implementation to facilitate real-time communication between restaurant owners and customers. In Paper [7], the purpose of this study was to investigate the factors that influence the attitude of internet users towards online food ordering in Turkey among university students. A Technology Acceptance Model (TAM) developed by Davis in 1986 was used to study adoption of Web environment for food ordering. Trust, Innovativeness and External Influences are added to the model as main factors along with TAM. In Paper [8], the research work aims to automate the food ordering process in restaurant and also improve the dining experience of customers. Design implementation of food ordering system for restaurants were discuss in this paper. This system, implements wireless data access to servers. The android application on user's mobile will have all the menu details. Kitchen and cashier receives the order details from the customer mobile wirelessly. These order details are updated in the central database. The restaurant owner can manage the menu modifications easily. In Paper [9], this research works on efforts taken by restaurants owners also to adopt information and communication technologies such as PDA, wireless LAN, costly multi-touch screens etc. to enhance dining experience. This paper highlights some of the limitations of the conventional paper based and PDA-based food ordering system and proposed the low-cost touch screen based Restaurant Management System using an android Smartphone or tablet as a solution.

#### IV. PROPOSED SYSTEM

To overcome the limitations of above system, an Online Food Ordering System based on Internet of Things is proposed. It is a wireless food ordering system using android devices. Android devices have gained immense popularity and have revolutionized the use of mobile technology in the automation of routine task in wireless environment. Android is a Linux based operating system for mobile devices such as smartphones and tablets. To develop a reliable, convenient and accurate Food Ordering System is considered as a general Objective of the study. To develop a system that will surely satisfied the customer service will be considered as an objective. One of the Objective is to design a system that is able to accommodate huge amount of orders at a time and automatically compute the bill. To evaluate its performance and acceptability in terms of security, user-friendliness, accuracy and reliability is an important

objective. To improve the communication between the client and customers is one of the objective. The figure.1 represents the simple system architecture of the proposed system:



The architectural design consists of 3 main users: Service Consumer, Owner of Mess/Restaurant, and Employee of mess. When a person shifted to new city he has to find source for hygienic and quality food, so he/she will search and select restaurant or home-based food service based on his category and as well as service that is veg or non-veg. Here the main function is, in what pattern user will search the service so for that purpose a part of Geo-Hashing Algorithm is used, and GPS system should be on. Person can have the facility to search service by location that is home location of the person is detected with GPS and according to selected option location of nearby service get searched. Another way for searching is by cost. Here user must give input in terms of rupees that in what range he/she need service per plate if there are any service provider within that area than the list will display. User can also search by rating. The service that has rating is checked by user given rating and if matched it will give the list of service. Search can be done by accepting distance from user in which user need to search and displaying service provider within that distance. User can communicate to service provider with the help of message box and get notification from provider end if any. On the other end provider has facility to add or reject request from person who want to join the service.

#### V. CONCLUSION

Therefore, conclusion of the proposed system is based on user's need and is user centered. The system is developed in considering all issues related to all user which are included in this system. Wide range of people can use this if they know how to operate android smart phone. Various issues related to Mess/Tiffin Service will be solved by providing them a fullfledged system. Thus, implementation of Online Food Ordering system is done to help and solve one of the important problems of people. Based on the result of this research, it can be concluded: It helps customer in making order easily; It gives information needed in making order to customer. The Food website application made for restaurant and mess can help restaurant and mess in receiving orders and modifying its data and it is also made for admin so that it helps admin in controlling all the Food system. With online food ordering system, a restaurant and mess menu online can be set up and the customers can easily place order. Also with a food menu online, tracking the orders is

done easily, it maintain customer's database and improve the food delivery service. The restaurants and mess can even customize online restaurant menu and upload images easily. Having a restaurant menu on internet, potential customers can easily access it and place order at their convenience. Thus, an automated food ordering system is presented with features of feedback and wireless communication. The proposed system would attract customers and adds to the efficiency of maintaining the restaurant and mess ordering and billing sections. Scope of the proposed system is justifiable because in large amount peoples are shifting to different cities so wide range of people can make a use of proposed system.

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