Canteen Food Ordering and Managing System

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ABSTRACT: The ‘Canteen Food Ordering and Managing System’ digitize the operations inside a canteen. Initially the user must create an account, and then he can make use of the services. A menu will be provided from which the customer can choose the desired item then he can make payment online. In the proposed system the paper works will be less. The users can also make use of the virtual queue technique by which they can avoid long queues. The digitalization of the canteen system will help the management to provide a best-in-class service to the customers and which will also contribute in better time management. At last, the customers can also share their feedback through the website according to which the management can improve their services. Thus the online system will be helpful for both customers and the canteen.

KEYWORDS: Canteen, food ordering web application, full stack web application, online food ordering, otp-authentication

INTRODUCTION

People today may not have a lot of time to waste at the canteen. Even if they find the time to wait, there is no guarantee that the desired order will be delivered. The second problem is extremely contagious infections like corona. The project ‘Canteen food ordering and managing system’ is a platform where we can eliminate these problems. This project helps the customers to choose from a wide range of food items within just a few minutes. The customers will be having a username as well as a password using which they’ll login to their account and can place an order. As soon as the order is placed, the canteen can start preparing the order and can notify the user once the order is ready to serve. Nowadays the canteen includes a manual system that involves the paper works which has to be manually maintained. Within the proposed system the payment is online and all the transactions will be kept in track automatically. This project will demonstrate the path from material adaption to an e-environment development. Thus, the projects become a platform that brings in all necessities which benefits both the customer and the canteen management.

LITRATURE SURVAY

Joseph George, Sreenath P, Siddharth K G, et al.[1] proposed an exploration paper “Food Ordering Application for Canteen”. The proposed system mainly deals with ordering food from canteen online. The most feature of this application is that any user can order food online, make the payment online, and also generate QR code after successful payment. Monik Shah, Shalin Shah, Mohd Danish Shaikh, et al.[2] has proposed "Canteen Automation System”. The most goal of this application is to create operations of a canteen online. The most features of this Canteen automation system is that user can choose the food online and can also make the payment also online using an android phone and also the customer can order special combo boxes which contains different food items. A Gowthami,E Vadivukkarasi,T Banupriya [3] has proposed “Mobile Application For Canteen Automation System Using Android”. The proposed system allow the customer to register online, choose and order the food items from the E-menu card. The output after selecting the food items from the E-menu card will directly display on the screen near to the chef. The gadgets used in the android application is responsive. Kowshik reddy, Sumanth, Ashik Teja, et al.[4] has proposed “Online Canteen System”. within the suggested system the payments are online and also provides e-menu for the users. The users have the freedom to choose the username, the password by the means of which they can book the order. The user may also give feedback after ordering the food. M. Ambika, Sandhya S Nair, Saravana Kumar R, et al.[5] proposed research paper on “Cashless Canteen Management System”. The main aim is to automate the prevailing traditional system which is manual, by the use of computerized equipment and applications. The System allows different search facilities which includes Orders, Products, and Quantities. It generates the sales report of the products and manages it in a specific order. Shourya Pradhan, Shubham Jain, Shubhanshu Pratap Singh, et al.[6] has
proposed “Canteen Management App”. The suggested system allows users to register online, read and pick food from an e-menu card, and order meals online by just selecting the item they want to own using an Android application. After choosing a dish from the E-menu card, the results will show on the screen beside the Chef who will prepare your meal. The system is still a Web Application using Android. Shaina Carl, Tanmay Parulekar, Aishwarya Sedamkar, et al.[7] had proposed “Cross Platform Application for Canteen Food Ordering System”. The proposed application are often used by staff/students to put orders from anywhere no matter the platform on their devices. It allows the customer to register online, View and pick food products from the accessible menu, then place an order by simply selecting the meal that the customer wants to own. After picking the desired meal from the menu card, the canteen database is updated, and it is presented directly on the canteen screen. The user will be given a username and password with which to enter into the system. Payments for orders placed will be done online through the appliance. Fayaz Karedia, Pranit Hule, Shariq Memon, et al.[8] has explained “Canteen Automation System Using Android”. The suggested system allows the clients to register through online, select the meals from menu and order food items online by just choosing the items that the customer need to possess by an android application. After choosing a dish from the E-menu card, the results will show on the screen beside the Chef who will prepare your meal. The application is that the mixture of Android further a Web Application. Basically the project describes a way to manage permanently performance and better services for the clients. TruthiB, J B Akshaya, Rakshitha Raj R, et al.[9] has proposed “Online Food Ordering System”. The suggested system would display a program and refresh the menu with all accessible options, making customer work easier. Customers may create orders with multiple items and view order information before logging off. The consumer receives the order confirmation. The order is added to the queue, updated in the database, and delivered in real time. This approach enables the personnel to go over orders in real time and process them quickly and efficiently with minimum mistakes. Tanish, Shivam Chaudhary, Simran Choudhary [10] has proposed “Canteen Automation System”. End users may use this program to register online, read and pick food from an e-menu card, and order food online by simply selecting the food they wish to eat using an Android application. A Special Combo Box, which comprises various food items, is also available to the user. All goods in the order, together with their accompanying choices, pricing, quantities, and delivery details, are shown in this application in a brief, correct, and easy-to-read manner. Shreya Mhalgi, Prajakta Marne, Mahesh Kulkarni, et al.[11] has explained “Cloud based Android App for college Canteen Management System”. In this proposed system, the students can register on the app and will be allowed to access the app after admin approval, after successful login menu card will be displayed. User can now search through the menu for required food items. The application also helps the user to search the required food item. The order gets completed after successful payment. The user receives an acceptance message for the placed order. The user has the honor to cancel the placed order in a specified time limit like within 5 minutes of order. Ann Janeth, Jave Agron, Garcia Danielle and Wansu Lim [12] has proposed "Android Application in Food Ordering System”. In this paper, The proposed system is divided into two complementary android applications. The device A is developed to display the menu card to the customer. Device B use the customer’s phone camera to scan the barcode for the application. The scanned barcode would have information about order made on device A. Harsh Bhanushali, Keval Bhatt, Prashant Avhad, et al.[13] has proposed research paper on “Canteen Automation System with Payment Gateway”. The proposed system will control and process orders of clients in a very fast way. The client will sign into the web site and select the order and conform it after payment, the payment is done completely online. Mohamed Anees S, M Mukesh Krishnan, Avudaiappan S, et al.[14] has proposed “Canteen Food Ordering System and Management”. In the proposed application the user have to register online, select the food from menu and order food online by just selecting the food user want. The food that are selected by the customer will be displayed on the screen near chef. The system also provide features like voice ordering and report generation for admin. Akash Katkar, Kalpesh Juvekar, Nitin Rohira, et al.[15] has proposed "Canteen management system using the E-wallet". During this proposed system, there is two way to place an order, through online or through the canteen manually. The online ordering feature will be only available to customers who register online and have balance in ewallet. The counter ordering facility will be accessible only to the administrator by administrator login. There are two ways of payment online and Cash. Online orders will be paid only through online. The online payment will also available in manual mode also in addition to cash payment. The selected food items will be displayed on the kitchen for the chef to prepare the order. When the order is fulfilled its status gets modified. Messages regarding the order is sent to client through online.
METHODOLOGY

This is a dynamic website for customers to order food by saving their time and make a contactless payment to ensure their safety.

In this project we have both user interface and admin interface.

Admin:

- **Login:** Admin have to login with their credentials to access system. If the email id or password is wrong, a notification showing “invalid email id or password” will be displayed.
- **Dashboard:** The admin can view the total number of users, total profit, total food items available in the canteen, total food items delivered and also, he can view the statistics of order status in bar graph and payment methods of the orders in pie graph.
- **Add Food Items:** Admin can add food into the system and various details related to that food item.
- **Edit / Delete Items:** Admin can edit the details of food items and also can delete any food item from the list.
- **View Orders:** Admin could directly track any particular order and also, admin can send an order ready SMS notification after the order is ready and he can also send a delivery confirmation message after the order is complete.
- **View Transactions:** Admin can view the details of all the transactions done by any user along with the details of the food item that user ordered.
- **View Users:** The admin can view the details like name, email id, and status of any users. The status will show the list of all the active and inactive users.
- **Add Category:** Where admin can add a new category to the system with category name and image.
- **Edit or Delete Category:** The admin can edit the details of the existing food items and also can delete any category.
- **Manage User:** Where admin can Block or Unblock any user and also the admin can completely delete the details of the existing users. When the admin block any particular user, that user can not login to his account.
- **Order Report:** The admin can view the history of all orders from a particular period and he can also download this report as csv, pdf or excel files.

User:

- **Register:** The user has to register to the system with all the necessary details like name, email id, password. If any other account has used this same email id then the user will be asked to change the email address.
- **Login:** User have to login with their credentials to access his account. If the email id or password is wrong, a notification showing “invalid email id or password” will be displayed.
- **Login with otp:** It also provides login authentication with phone number where OTP verification will be sent as phone call or text SMS.
- **Profile Settings:** The user can update his details in the account and also the user can change his account password.
- **Menu List:** It shows various available food in the canteen with respect to different category.
- **Item Details:** The user can view the details of the food item that are available and can view the reviews about that particular food item that are written by the users who have already ordered it.
- **View Cart:** In the cart the user can see the selected food items and can increase or decrease the quantity of the food and also the user can remove any food item from the cart.
- **Payment:** User can complete the transaction by doing the payment either by cash on delivery or online transaction.
- **Order History:** The user can view the details of all his previous orders.
- **View Orders and Status:** The user gets notification regarding the order he has placed and the user can cancel the order before he gets the order ready message.
- **Review:** The user can write review about any food item if he has already ordered that particular food item.

RESULTS AND DISCUSSION

Customer can directly order food from canteen using this web-based application.

The customer needs to login either with his email and password or he can also choose the login with otp option.
The user can choose food from the menu which shows all the available food and their respective prices.

When the customer selects a food item, it will be automatically added to the cart from where you can increase or decrease the quantity of the food.

After this, customer can complete the order by entering the necessary details. Then he needs to select the payment method.

After the order is placed successfully, the customer will get a notification regarding his order.

The customer can write review about the food he have ordered.

SNAPSHOTS

Login page

Home Page
CONCLUSION
The Canteen Food Ordering and Managing System is developed where the shoppers can use this website for buying the food from canteen. The user can register online and select and order food which is displayed in the menu. Once the order is placed the chef will be notified about the order and begin preparing the order. the applying notifies the customer when the order gets ready. This application reduces the workload of the waiter. The benefit is that in an exceedingly crowded canteen there will be long queues for placing the order and again must wait until the order is ready this can be completely avoided.

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