CANTEEN MANAGEMENT SYSTEM

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Abstract: Nowadays people don't have much time to spend in canteen by just there and waiting for the waiter to take their order. Many customer visits the canteen in their lunch break and recess so they have limited time to eat and return to their respective office and colleges. So this software helps them to save time and order food whenever they want without calling the waiter again and again.

Manual system involves paper work in the form of maintaining various files and manuals. Maintaining critical information in the files and manuals is full of risk and a tedious process. Including a framework showing how to apply Internet technology progressively as skills and confidence grow, the project demonstrates the route from adapting materials to developing an online environment.

This Canteen Automation System enables the end users to register online, read and select the food from e- menu card , order food online and payment for the order by just selecting the food that the user want to have using web application. The results after selecting the food from the E-menu card will directly appear in the screen of operator in the Canteen.

*Key Words***:** E-menu, Online payment, Web application, Automation system.

1. INTRODUCTION

Computers have become part of the life for accessing almost any kind of information. Life in the 21st century is full of technological advancement and in this technological age it is very difficult for any organization to survive without utilizing technology. The World Wide Web contributes greatly to the creation of an ever-increasing global information database. It could also be used as a mechanism to share information within an enterprise. In today's age of fast food and take-out, many canteen have chosen to focus on quick preparation and speedy delivery of orders rather than offering a rich dining experience. Until very recently, all of these delivery orders were placed to the waiters or over the phone, but there are many disadvantages to this system, including the inconvenience of the customer needing to have a physical copy of the menu, lack of a visual confirmation that the order was placed correctly, and the necessity for the canteen to have an employee answering the phone and taking orders. What, we propose is a Canteen Automation System, which is a technique of ordering foods online applicable in any food delivery industry. By removing the need to manually take food orders over phone, Canteen Management System saves time at the canteen. The canteen's cost effectiveness and productivity improve while requiring less workers by automating the ordering process. It also puts you ahead of your rivals who don't offer online

service. It enables canteen administration to easily change the menu, pricing, and other information while still keeping in touch with customers. People nowadays are so preoccupied with their jobs that having the organizational Canteen Automation System available online saves customers time without a doubt. Allowing people to buy food online using a platform for flexible ordering and serving them on time is the goal. Customers can choose meals from online menu items on the canteen application and place orders based on their preferences. In fact, customers can order food while staying within their financial constraints by adding or eliminating food items based on price changes. This Canteen Automation System is beneficial to both the traditional canteens and the customers because it saves time for both the canteen personnel and the customers, as well as manpower

2 .LITERATURE REVIEW

[1 Most of the Indian restaurants are following this traditional method. Manually one has two write the order on the paper, prepare the bill etc. This system uses Wi-Fi for communication amongst various component within a system. It is a wireless canteen management system with feature take order, send order, billing and other using android devices. Android devices, in the past few years, have reached the pinnacle of popularity and have revolutionized the use of mobile technology in the automation of routine task in wireless environment. Android is an open-source, Linux based operating system for mobile devices such as smart-phones and tablets. Android has been the best-selling OS worldwide on smartphones. Android has a growing selection of t-party applications, which can be acquired by users by downloading and installing the application's APK (Android application package) file, or by downloading them using an application store program that allows users to install, update, and remove applications from their devices. The disadvantage of this system is there is no online food ordering services and the different types of payment methods were not available

[2] An application of integration of hotel management systems by web services technology is presented. Digital Hotel Management integrates lots of systems of hotel industry such as Ordering System Kitchen Order Ticket (KOT), Billing System, Customer Relationship Management system (CRM) together. This integration solution can add or expand hotel software system in any size of hotel chains environment. This system increases quality and speed of service. This study names the system as Digital Ordering System for Restaurant Using Android (DOSRUA)

. [3 While this system offers multiple advantages, it also has potential disadvantages. It requires users to have access to the internet and smartphones, which could be limiting for some individuals. Implementing and maintaining such a system may also require financial investments and staff training. Privacy and security concerns related to cashless payments and data storage need to be addressed for user trust and data protection. Furthermore, the transition from a manual system to an automated one may face resistance and require time for adjustment

[4] This research work aims to design and develop a wireless food ordering system in the restaurant. The project presents in-depth on the technical operation of the Wireless Ordering System (WOS) including systems architecture, function, limitations and recommendations. It is believed that with the increasing use of handheld device e.g PDAs in restaurants, pervasive application will become an important tool for restaurants to improve the management aspect by utilizing PDAs to coordinate food ordering could increase efficiency for restaurants and caterers by saving time, reducing human errors and by providing higher quality customer service. With the combination of simple design and readily available emerging communications technologies, it can be concluded that this system is an attractive solution for the hospitality industry.

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[6] This is a commercial system in hotel industry that fully integrates the hotel Front Office system, Property Management System, Customer Relationship Management System, Quality Management system, Back Office system and Central Reservations System distributed in different locations. This system greatly improves both the hotel customer and hotel officer's experiences in the hotel business work flow. Because current technologies are quite mature, it seems non difficulty to integrate the existing system and the new coming systems (for example, web-based applications or mobile applications).

[7] The purpose of this project is to develop a computerized and mobilized food ordering system that can be used to revolutionize the traditional ordering system which is currently carried out in majority of the food and beverage industries. The accustomed system that is being used by most of the food and beverage industries is the manual ordering system which means all work and procedures are recorded manually and it also includes huge amount of paper work that is not effective and efficient.

[8 Android is an open-source, Linux based operating system for mobile devices such as smart-phones and tablets. Android has been the best-selling OS worldwide on smartphones. Android has a growing selection of t-party applications, which can be acquired by users by downloading and installing the application's APK (Android application package) file, or by downloading them using an application store program that allows users to install, update, and remove applications from their devices. The disadvantage of this system is there is no online food ordering services and the different types of payment methods were not available

However, currently in hotel industry there are few truly integrated systems used because there are so many heterogeneous systems already exist and scalability, maintenance, price, security issues then become huge to be overcome. From the study on Group Hotel Integration Reservation System (GHIRS), GHIRS: Integration of Hotel Management Systems by Web Services 1003 there are still challenges to integrate Enterprise Information System (EIS), Enterprise Information Portal system (EIP), Customer Relationship Management system (CRM) and Supply Chain Management system (SCM) together because of standardization, security and scalability problems, although GHIRS is one of few integration solutions to add or expand hotel software system in any size of hotel chains environment.

3. PROBLEM STATEMENT

In the existing system, there will be queues and consists of a manual work load that involves the paperwork of the billing system and maintaining the files too. In the proposed system there is no need for paperwork. The data can be stored in the database, the payment is online and the e-menu will be available for the user. The users will have to use the college email id through which they can book. This project will help in demonstrating the route from adapting materials to developing an online environment. This brings all necessities in one place that benefits both the user and the canteen owner smartly

4. PROPOSED SYSTEM

This Canteen Automation System enables the end users to register online, read and select the food from e-menu card and order food online by just selecting the food that the user want to have using android application. 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.

This paper presents a detailed overview of Canteen management system outlining its six key modules. They are given below:

1. Authentication

By using this module, User and Canteen manager can login to the application, Users can change their password and will get the credentials on time of

2.Payment

By using the modules, users can pay for the ordered item during the time of Order. User will get the reimburse in case of cancellation or any escalation of the order items

3.Order Process

By using this module, User can newly order, cancel the existing order, view order status and view cancel status. Canteen manger can approve/reject the ordersand cancel orders

4.Registration

By using this module, Users can register them self with their data. Canteen manger have to approve the registration or can delete the registration. Users will get the details of login credential through mail after the approval of Canteen manager

5.Feedback

By using this module, User can proved feedback   about the canteen and the food items. Canteen manager can view/delete the Feed backs from the users.

6.Review

By using this module users can provide review for the   Food items that included in their order. Other can view the ratings. Canteen manager can view/delete the Review provided by the users

5. RESULTS AND DISCUSSION

The Project "College Canteen Prebooking" has been developed as per the requirement specification. It has been developed using Java/j2ee and MYSql server compact. The complete system is thoroughly tested with availability of data. Design procedure and outputs are presented in the project report. This design is easy to understand that any new modules can be incorporated very easily
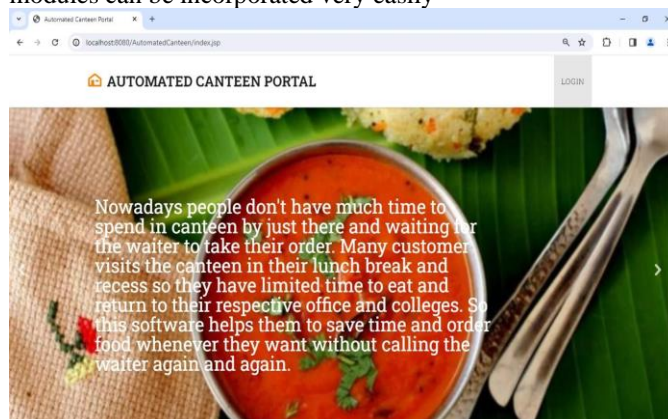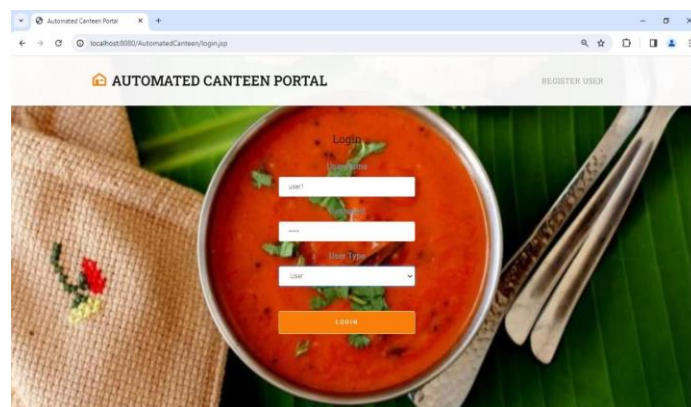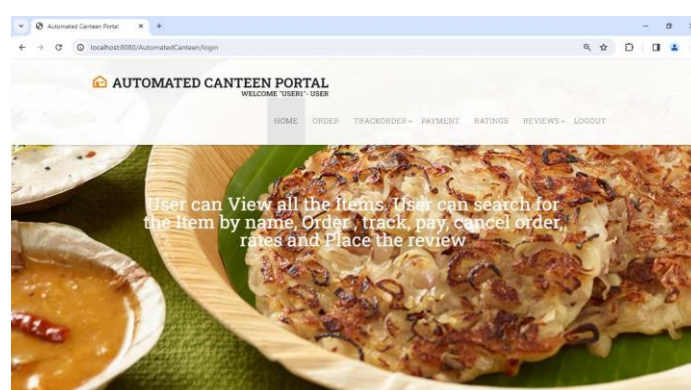
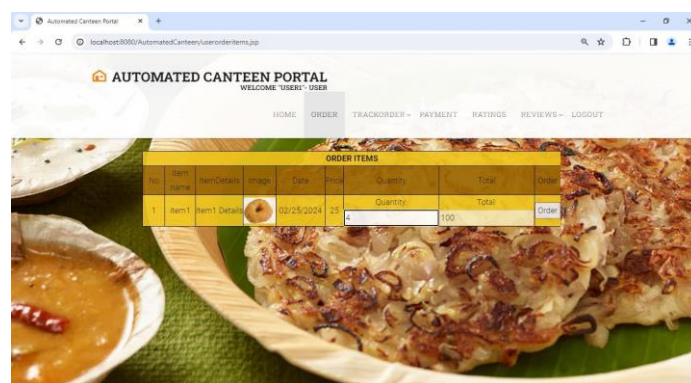

Fig1.Dashboard
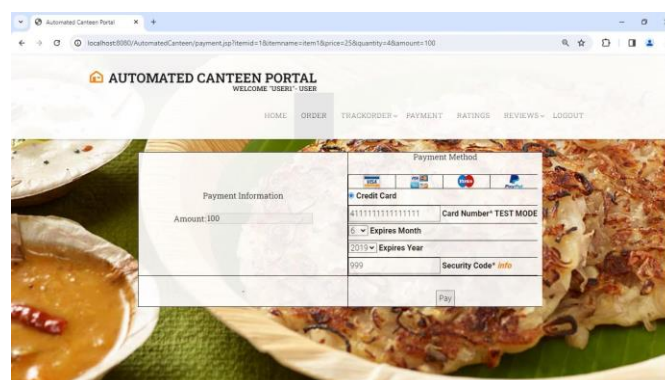

Fig 2.Signup Page

Fig 3.Home page

Fig 4.Order page

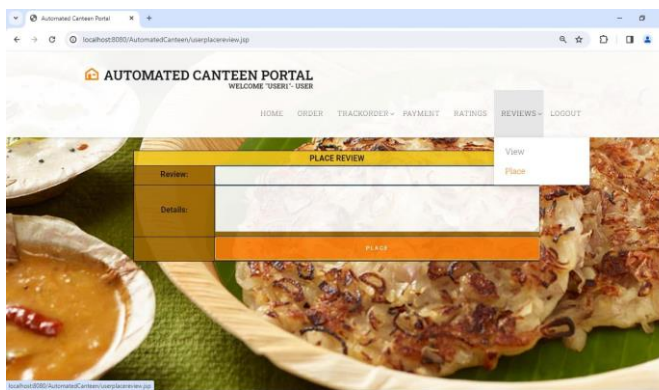Fig 5. Payment

Fig 6. Order details

Fig 7. Review Page

6. CONCLUSION

This system empowers users with control over their encryption keys and ensures end-to-end encryption for all communications, which makes it different from the traditional system of information sharing. The proposed system ensures that individuals and organizations can adopt secure communication practices without extensive technical expertise, thereby promoting widespread adoption of the platform. The platform's objectives of enhanced security, customizability, end-to-end encryption, and user-friendliness .

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