

CANTEEN MANAGEMENT ANDROID APPLICATION USING E-WALLET

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Abstract - During breaks, there is a huge crowd in the college canteen. Starting from the queue at the coupon counter to the serving counter a lot of time is spent waiting due to which the students and faculty get late for their lectures. Both students and faculty, often wish to have a way to considerably reduce or get rid of this waiting time. One solution to this problem is to have a system by which once the order gets placed it is directly displayed on a monitor in the kitchen. This would avoid the time wasted at the serving counter when a server takes time to deliver previous orders before taking a new coupon and placing it in the kitchen. Also one can have a facility for placing orders in advance so that his/her order is kept ready just for the particular time he/she chooses. The time spent over tendering change can also be reduced by facilitating payments via e-wallet. And also he/she can pay with cash on delivery.

Key words: E-wallet, Canteen management system, JSP, Javascript, HTML, Bootstrap, Ajax, E-wallet security, ElGamal.

1. INTRODUCTION

Traditional canteens are based on pen-paper records, cash, manual calculations and manual record keeping of credits which in today's time in an inefficient way to operate a business. We aim to accomplish this task by creating a web application for managing the canteen menu and orders. The proposed application is mainly beneficial for reducing the time wasted waiting in the queue by sending the orders directly to the kitchen, placing orders in advance & by providing a prepaid wallet facility which saves time spent in tendering change. We offer quality solutions to students in the form of Canteen Management software, which can be used in many large- or small-scale canteens.

2. EXISTING SYSTEM

The current system of the canteen management is not computerized.

Because of this existed system there are many problems faced by students and canteen management team.

The problems are stated as follows:

1. In college canteen, lot of time is wasted in queues for ordering food.
2. After placing order also wait for delivery of food.
3. Some time it is not possible for the canteen management team to deliver some orders on time because of the crowd, as a result of this recess time gets over and students may miss the particular lecture or practical or they will be late for their lectures or practicals. Also there are some problems regarding to payment system such as no change available.

3. PROPOSED SYSTEM

To overcome the problems faced by existing system, we proposed a complete computerized canteen management system to order food online through android application so that the preparation of food may begin before the students reach to the canteen. The online ordering feature shall be available to users who are registered and logs in only and have a valid balance in their E-wallet. There are two modes of payment, E-wallet, and Cash on delivery. Online orders can be paid only through E-wallet. Since the E-wallet is prepaid it needs to be recharged at the counter by paying cash to be able to use. Recharge function is available in administrator login.

The items of a placed order shall be displayed on the screen in the kitchen which indicate the cooks to prepare the items and the message "ORDER PLACED SUCCESSFULLY" shall be displayed on the user screen.

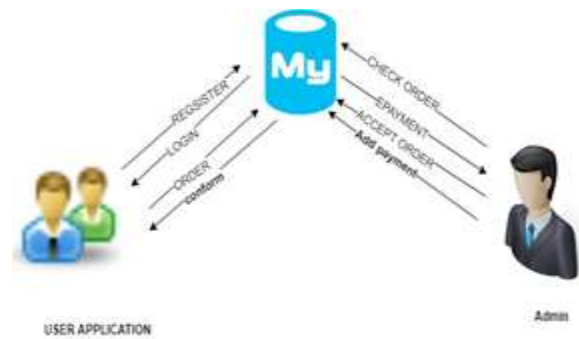
When the order is delivered its status is updated. When the status of the order is updated to "COMPLETE" it goes off the screen.

3.1. FEATURES OF PROPOSED SYSTEM

Customer does not have to wait in long queue.

1. This proposed system reduces the paper work.
2. Simple recharge of e-wallet.
3. Customer does not have to worry about food item.
4. It is easy to handle student/staff record for future.
5. This system saves the time.
6. Also very useful for students in exam period.
7. Information of the user stores permently.
8. Reduces human error in accounting.
9. Services are provided quickly.
10. Does not contain online TAX, GST, etc.

4. BASIC



The main aim of this project Canteen management system is to provide fast services to their college students, Staffs etc. Usually People have to go to canteen and order the foods and they have to wait in queue for a long time to get the orders. But with the help of this you just have to follow a very simple process to order your stuffs. And you need not to wait in the long queue. This website will provide the list of different menu list with different categories. User can select any item from canteen and can order for it by using debit card payment or wallet Payment. Wallet Recharging available with debit card details or admin can add amount in user's wallet. Users must register with valid details which will get login with canteen. Users also get recommendation for food items, Trending food items. Canteen Management system manages the all details of food items which contains name, description, image, price etc. Admin can view the confirm order and update the status of the order accordingly. Customer can check their balance, order history and able to delete the order according to order status.

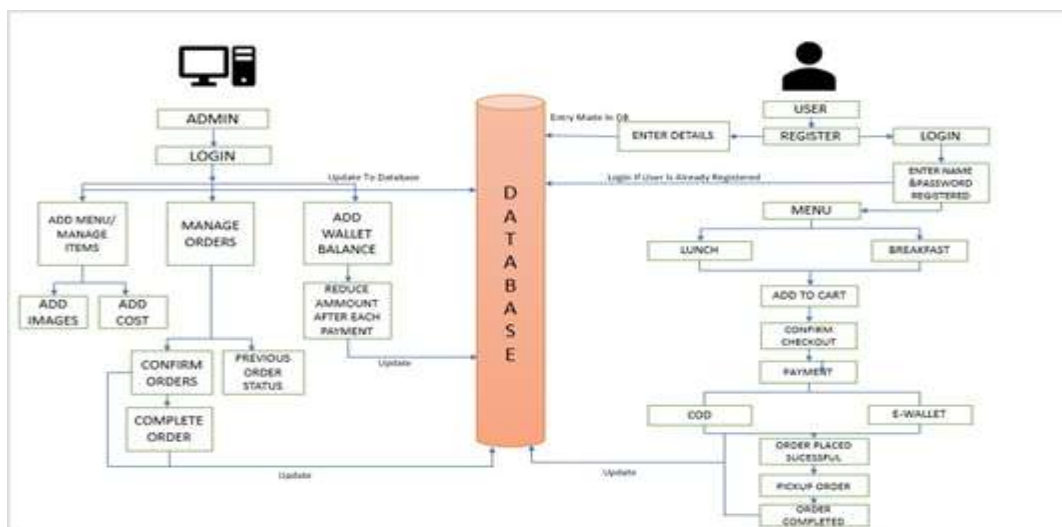


FIG.II ARCHITECTURE OF THE CANTEEN MANAGEMENT

5. SYSTEM ARCHITECTURE

5.1. Admin-

Login- Canteen person need to login using valid login credentials in order to access the Application.

Add / Manage Items- Can add new food items with details such as name, image, cost, description, etc. and also can manage added details.

Add Wallet Balance- Canteen person can add balance in student's wallet.

View / Update Orders- Can view all the canteen orders received from the student.

5.2. User-

Register- Student need to register first with basic registration details and need to create a valid login id and password.

Login- Student need to login using their valid login credentials in order to access the web application.

View Items- All the food items will be displayed to the student at once with description and cost.

Add to Cart- Single or multiple food item can be added to cart by selecting quantity.

Order and Pay- Order can be placed of selected food items by using option cash on delivery or E-wallet.

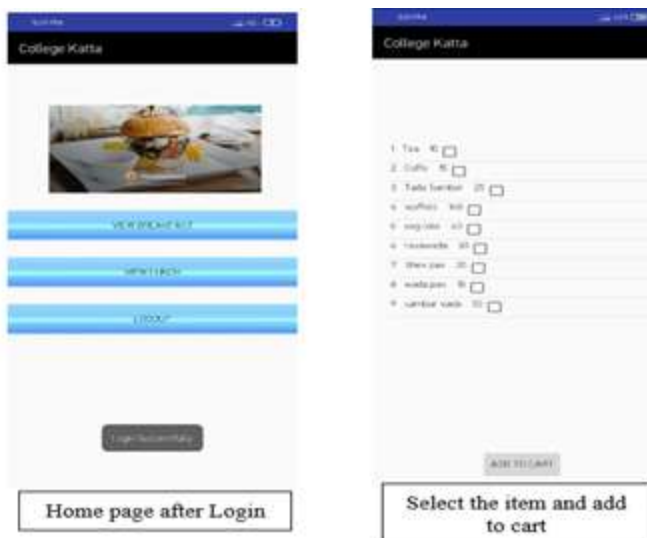
Refill Wallet- Student can refill their own wallet anytime.

Order History- All the past and recent order will be displayed.

6. IMPLEMENTATIONS

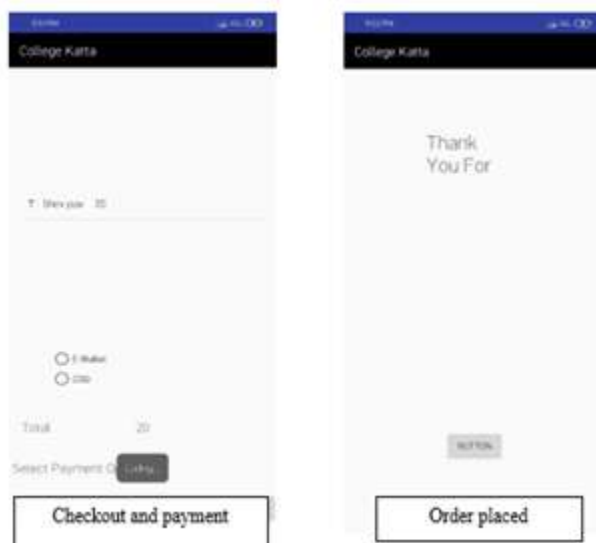
6.1. Android application-





7. DATABASE

The Database has been created in XAMPP my admin, in SQL format. The Database plays an important role in this project as it is responsible for registering customers details i.e. assigning the usernames and password i.e. their personal information. The Database is also responsible for sending OTP to the customers after placing the order.



8. CONCLUSION

This paper discusses the crowded canteen issue and finally proposes a working solution for the same. It further discusses the importance of the payment using E-Wallet.

9. FUTURE WORKS

The project has a very vast scope in future. The project can be implemented on intranet in future. Project can be updated in near future as and when requirement for the same arises, as it is very flexible in terms of expansion. With the proposed software of database space manager ready and fully functional the client is now able to manage and hence run the entire work in a much better, accurate and error free manner. The developer can also use biometrics for customers and admin to log-in the application like this will be very helpful for future generation.

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11. REFERENCES

- [1] Computational Resources for mobile E-wallet System with observers, Eligijus Sa;alausas', Jonas Muleravicius', Inga Timofejeva Kaunas University of Technology, Department of Applied Mathematics, Studentu St. 50, LT-51368, Kaunas 978-1-5386-0394-9/17/\$31.00 ©2017 IEE
- [2] Canteen Food Ordering Android System, Abhishek Singh, Amit Tanwar, Aditya Sawant, Chaitanya Parulekar, Kunal Yadav, IT Department, MUMBAI University, International Journal on Recent and Innovation Trends in Computing and Communication, ISSN: 2321-8169
- [3] Shweta Shashikant Tanpure, Priyanka R. Shidankar, Madhura M. Joshi, "Automated Food Ordering System With Real Time Customer Feedback", International Journal of Advanced Research in Computer Science and Software Engineering, Vol. 3 Issue 2, Feb 2013, Pune.
- [4] Ashutosh Bhargave, Niranjana Jadhav, Apurva Joshi, Prachi Oke Prof. Mr. S.R. Lathe, "Digital Ordering System for Restaurant Using Android", International Journal of Scientific and Research Publications Issue 4, April 2013.
- [5] Eng Wei Seng, "Canteen and Catering Management System", Project report submitted to the school of arts and science, Campbell University, U.S.A