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Smart Canteen System

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Abstract: The project "SMART CANTEEN SYSTEM" enables to register online and selects the food item from E- menu card so those customers don't have to wait in the queue for a long time. Any customer who wants to order their food they should scanned the QR Code in the Canteen or outside the canteen and after that customer can simply register on the website and select the food items that we want and after selecting the item the token number will be generated. The token number will pop up in your screen when your item is ready and then customer can see and collect their order from the canteen, without waiting in the queue.

Keywords: Automated canteen, Online payment, Food Ordered, QR Code, User information Include at least 5 keywords or phrases

I. INTRODUCTION

This Smart Canteen System enables the users to register their name online by scanning the barcode that generate link of website, select the food from e- menu card and order food online by just selecting the food that the user want to have using website. The results after selecting the food from the E-menu card will directly appear in the screen or in mobile of Chef who is going to cook the food for you. The system is the combination of Android mobile as well as Website. By using this application the work of the waiter is get reduced .The benefit of this is that if there is rush in the Canteen the users can directly order the food to the chef online by using this website. The user will have a username and a password, by using which they can login into to the system. This implies that the customer is the regular visitor of the Canteen. So basically when user visits the canteen in their lunch break so they have limited time to eat and return to their respective office and colleges. So this web server helps the user to save their time and order food whenever they want with use in digital way.

EASE OF USE

A. Methodology

When a client enters the canteen they will scan the barcode printed on table. Then the website page is displayed, where customer has to enter their names and rest of details and table number also. As soon as table number is entered on a website registration page a particular pass key is generated and stored in database. By using categorized dish item in database, they can add any item to his/her order list by adding it to their cart which displays the number of item added, which is stored in the database of the server. When clicked on an item name another page containing the image of the dish with price quantity field will be displayed. Customer can view their cart by clicking on the cart option and modify the quantity before ordering. As they orders, amount gets updated and total amount is displayed in ordered list. Once they places the order he/she is free to access at the same time the cook inside the kitchen comes to know about the ordered dish via interface display placed in the kitchen. The main objective of our project is to reduce the problem of waiting in the queue for ordering food in canteen. Our application provides facility to students and faculties for ordering food from classes and cabin it without being in a queue waiting for order to be placed.

B. Sequence Diagram

In the sequence diagrams, we see how the object intersects with the other object is shown. There are sequences of events that are represented by a sequence diagram.

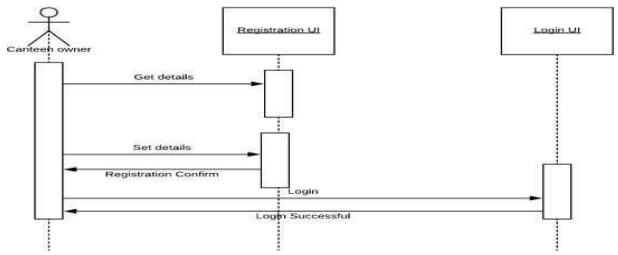

Fig. 1 ER Diagram related to design website

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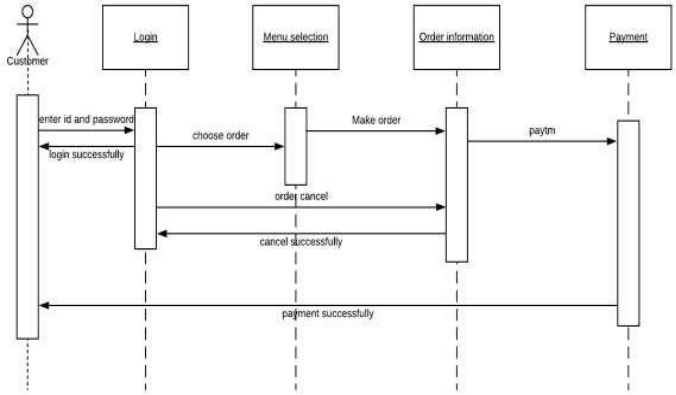

Fig. 1 ER Diagram related to design website

C. Class Diagram

Class diagrams in UML are used to capture the static view of the system. The class diagram represents how to put various objects together. The class diagram gives an overview of the system, in which various classes and relationship among these classes are represented.

D. Conclusion

1) It will overcome the issues related to Smart Canteen and provide scalable and reliable.

2) It provides frequent ordering list for fast ordering

3) To implement this design, a computer program was then written and tested in visual studio environment.

4) It is hoping that effective implementation of this software program product would remove any troubles determined during device investigation.

5) Keeping in mind the vision to minimize the food wastage and a systematic food distribution with the help of the biometrics, the canteen management system has always been a preferred tool and a reliable method it not just aligns the food management but also sends relief to the management in handling the meal management formalities for all the employees.

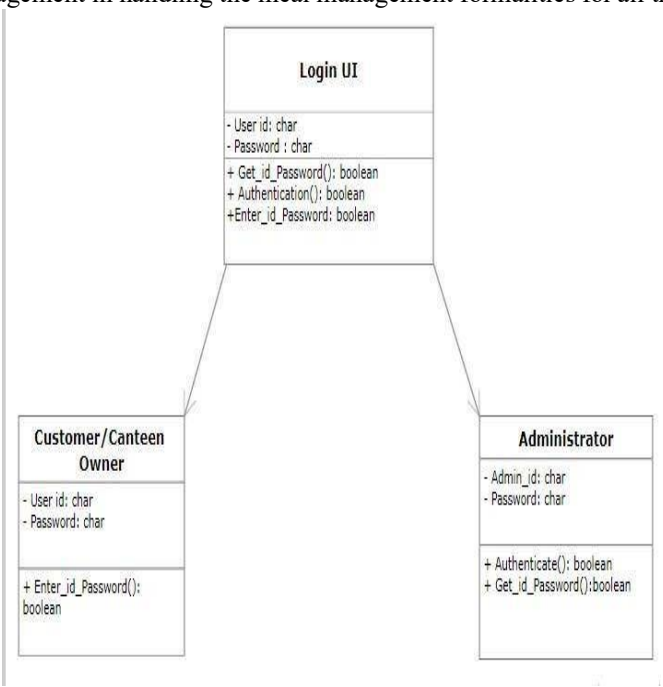

Fig. 3 Class Diagram related to design website

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II. PROPOSED APPROACH

A. Modules

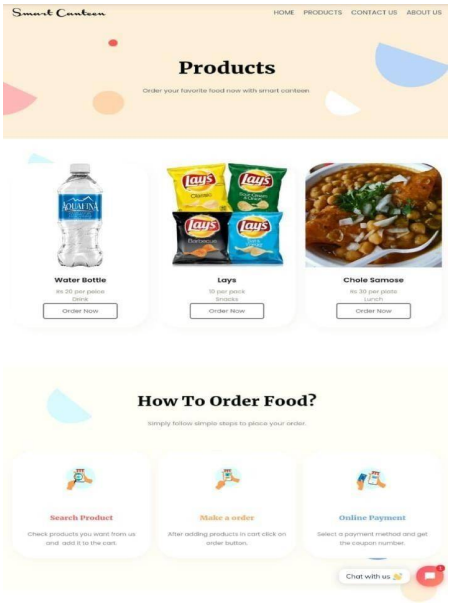
1) Home Page: As the project website whenever user opens the website they see the home page of website. That homepage includes some major options for user reference.

a) Search Food
b) Products
c) Contacts
d) About Us
e) Chat bot

2) Product

How to Order

a) Select the item
b) Order Now
c) Add to Cart
d) Apply code/Coupon for Discount
e) Proceed to Checkout/Payment



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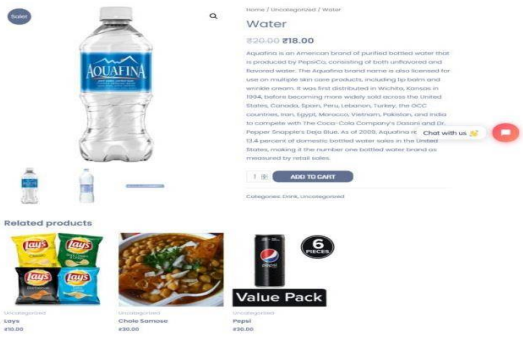
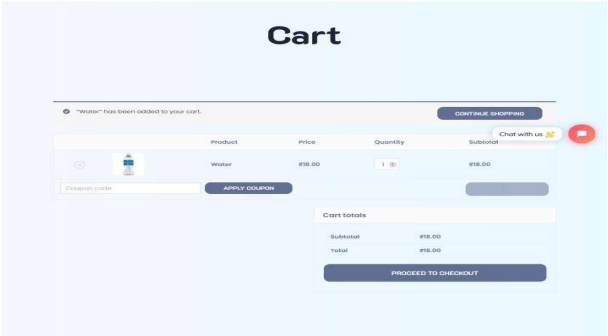




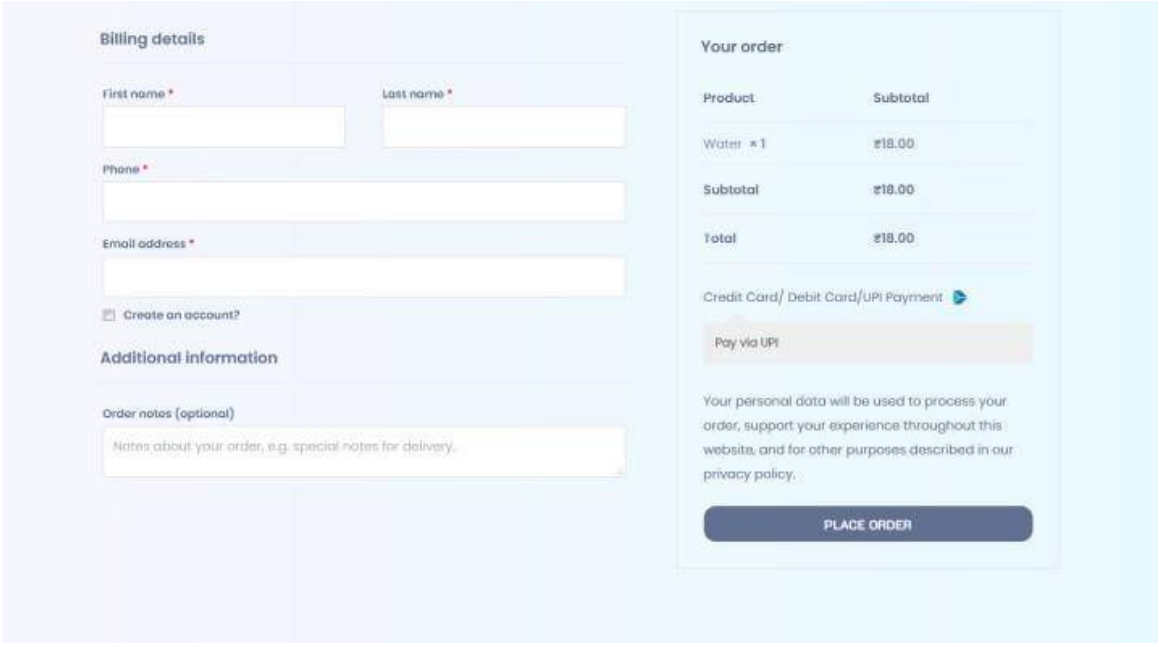
3) Billing Details

That billing page includes some major options for user reference before ordering something

a) Name of User

b) Phone Number

c) Email Address



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4) Paying Method

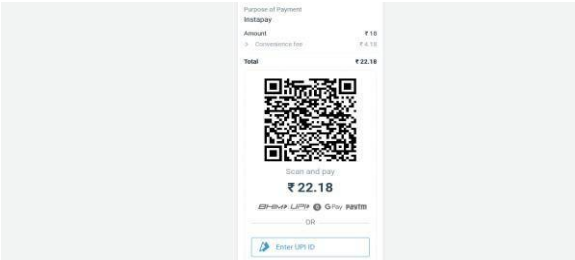
User can pay for item from various methods

a) Credit Card

b) Debit Card

c) UPI

d) Net Banking



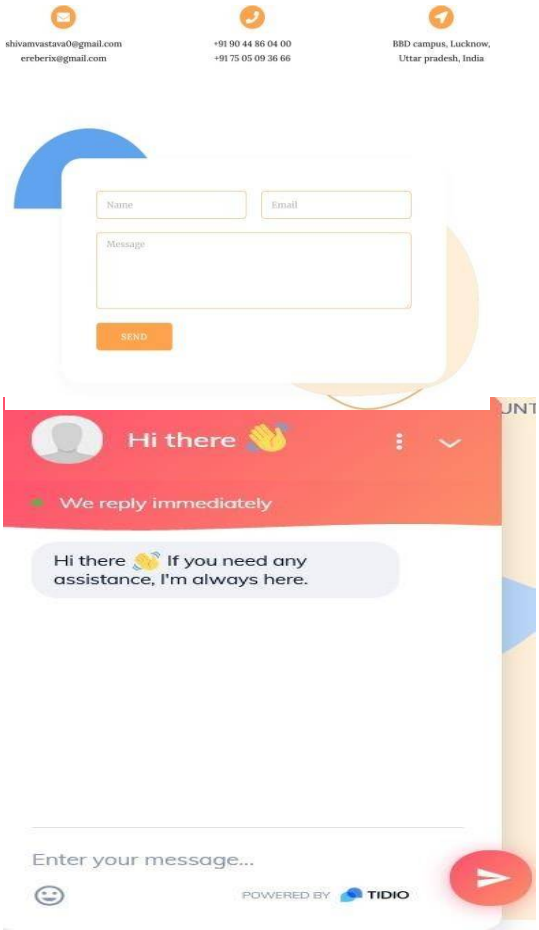
5) Contact Us

User can contact to canteen from various methods

a) Gmail

b) Phone Number

c) Address



User can also interact with canteen from using Chabot

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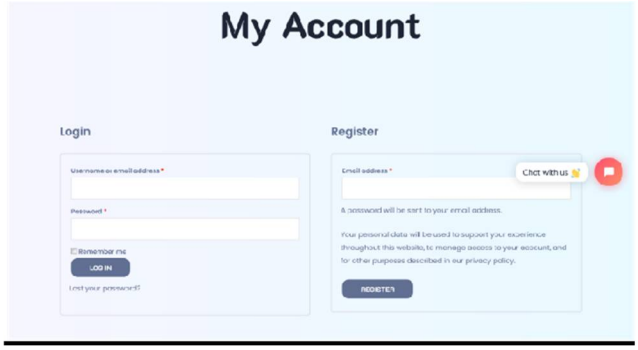
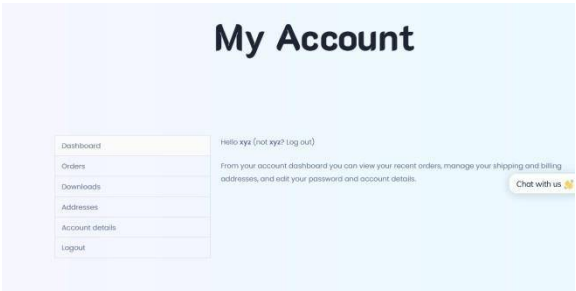
6) My Account

For ordering the food from this canteen website the first thing user has to do is have an Account on this website.



a) For already registered user they have to go on Login button.
b) If they are new User then they go on Register option and Create their account
c) For Creating an account website require their email id for creating account
d) When user created their account these options shows to them.



- *Dashboard*- For viewing orders, shipping, billing.
- *Orders*- Orders Yet
- *Download*- Downloads Yet
- *Address*- User's Permanent address
- *Account Details*- Name, Display Name, Email id, Password

B. Advantages

1) Minimizes Food Wastage: Probably the biggest advantage of a Smart Canteen System is that it helps to decrease food wastage.
2) Prevents Misuse of Canteen Website: The software verifies the identities of the employees by verifying their details. An order is placed only after the confirmation of an employee/student unique id.
3) Cheap & Easy Maintenance of Records: It maintains employee records, such as the food preparations ordered by them, transactions made, available balance and soon.
4) Quick Generation of Reports: It generate several reports, such as employee consumption report, item wise consumption report, sales report, etc.
5) Flexibility: These systems can be employed by both kinds of organizations that allow a ordering in their canteens, and those that only provide a fixed menu. People can choose items of their choice from a menu of website.

C. Limitation

1) Requires an active internet connection.
2) Requires Android phone for ordering the food.

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III. CONCLUSION & FUTURE WORK

A. *Conclusion*

1) It will overcome the issues related to traditional Smart Canteen System and provide scalable and reliable.

2) It provides frequent ordering list for fast ordering

3) To implement this design, a computer program was then written and tested in visual studio environment.

4) It is hoping that effective implementation of this software program product would remove any troubles determined during device investigation.

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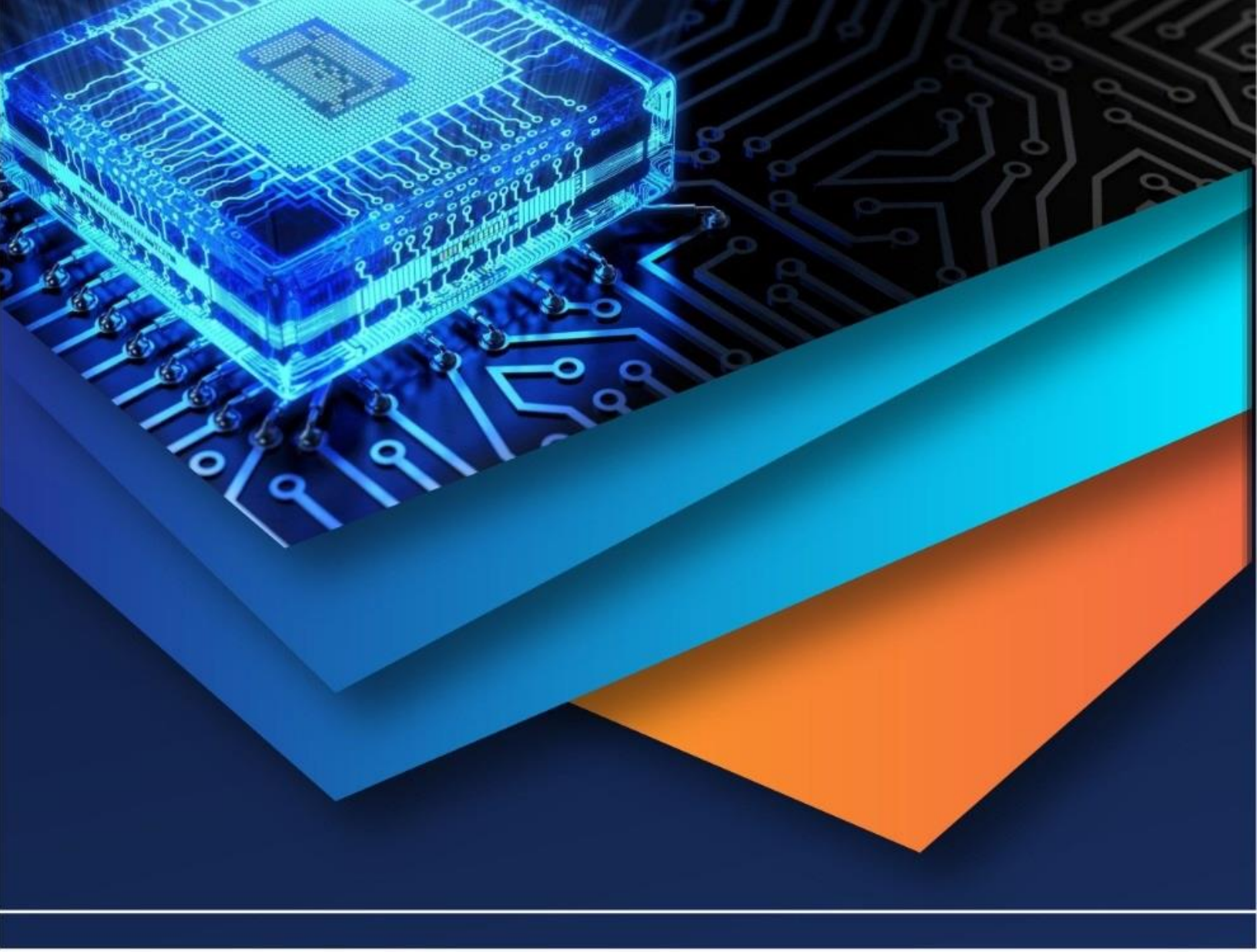

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