

Implementation

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. The system is the combination of Android as well as Web Application. The user will have a username and a password, by using which they can login into the system. This implies that the customer is the regular user of the Canteen. When a user places an order it is saved in a database which can be accessed by staff member or the manager. Then they will prepare your order according to the given time and send an alerting notification that your order has been prepared. While collecting the order user need to show the QR code received while placing the order. Then the user can pay offline if not already payed online and receive a E-bill or demand for a printed bill to be provided by staff.

The system comprises of 3 major modules and their sub modules as follows:

1. **Operator (Canteen Manager )**
2. View all Orders previous and recent
3. View all incomplete Orders placed by Customer
4. Mark orders as completed
5. Print order Bill
6. Accept and Decline orders
7. Total Earnings
8. Add Offers
9. Update Inventory (e-menu card )
10. Add / Remove Staff Member
11. Order Forecasting (Predict Items Most Frequently During Specific Hours by AI)
12. Sales for each day and month
13. Special item for the day
14. Manage all Statistic
15. Change Canteen Name
16. Change Password for operator login
17. View all Complaints by users
18. Logout
19. **Admin Login (Website Manager )**
20. View all operators
21. View all Users
22. Add Operators
23. Add Users
24. Remove Operator
25. Remove User
26. View feedbacks
27. View Complaints
28. Add new Features
29. Remove Features
30. Manage Services
31. Change Password for login
32. Logout
33. **User Login (Customer )**
34. View Menu Items
35. Place an Order
36. View Previous Orders
37. View Ongoing Orders
38. Bill Payment Online or By Cash
39. Compliant against Canteen
40. Complaint against Website
41. Give feedback
42. Edit Profile
43. Change password for login
44. Logout

All of these modules can be considered as a Entity which has some functions. Everything in the system works exactly the same as it would offline without the user physically being there. The sub – modules are the processes which an entity can perform like asking for the menu card, placing an order, paying for the order, etc.