

Smart Canteen System

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Abstract- In today's world people don't have enough time to spend in canteen for waiting to take their order. Many customer visit canteen in their recess or lunch break so they have less time to eat. And many canteen software's are not smart enough to handle all tasks efficiently such as inventory management.

This Smart Canteen System is great combination of android application and web application for taking online order and managing canteen data. By implementation of this system customer can save their time.

Keywords- Android application, smart canteen, order, customer etc.

I. INTRODUCTION

Standard manual canteen system or automated canteen system both have their advantages and disadvantages over one another. Where customer time is compromised in both systems. By using this system customer can save their time by placing order remotely over internet and choosing receiving time of order. By this way food they are received is prepared on time so quality of food is also maintain.

The report generation and inventory management through machine learning is one of the key features of this software. Generating food report and stock report system can help canteen to grow more efficiently.

Ease of Use

This system have very friendly user interface. For placing order customer need to install android application and register with the help of personal information. Then on menu page customer can select item. After this customer can choose delivery time and by confirming order his order will be successfully placed on website.

The order and delivery time will be display on chief's screen so they can prepare food on time. Chief also get feedback from customer.

In reports section all reports of canteen will be auto generated as food report, canteen report and stocks report.

II. LITERATURE SURVEY

Canteen Automation System: Monik Shah, Mohd Shaikh, Kautubh Tiwari:

The paper addresses the method of ordering the food from college canteen with the help of android phones. This application enables the end users to register online, read and select the food from given E-menu card and order the food that the user want. After selecting food from E-menu card it will directly appear in the screen of canteen owner and chef who is going to cook food for you. This system also automatically generate reports of total sales, information of registered members. This application is user friendly and interactive but it require constant active internet connection but there is lack of stock management system

Canteen Automation System with Payment Gateway:

The paper addresses us the process of automating Canteen with minimal human assistance, as it uses Automation to control various processes such as cart management and payment gateway systems. This application enables users to many features like proper Gateway Payment system, Delivery tracking system etc. but this paper lack many features like Stock management and most important drawback is this paper uses Outdated technologies as there are several other new advanced Framework available.

Canteen Order Management System for Restaurants:

This paper addresses how technology we can use in manual canteen system, with the help of android application customer can placed order from there table by selecting menu from menu card. It also provide digital bill to the customer. Customer do not need to give their personal information, it uses IP address of android phone. It does not have any android or desktop application or software. In this system developer use some hardware which has less accuracy. In this system there is no use of good user interface. System is expensive as it uses many hardware devices.

III. OBJECTIVES OF THIS PROJECT

1. The main objective of this project is to order food rapidly.

2. Make it convenient for people who have less time.
3. Reduce manual/paper work.
4. Computerized order and billing system.
5. Integration of data for smart report generation for analysis.

IV. TYPES OF USERS

1. Administrator login:

- Take order
- Print bill
- Add/Remove food items
- Update inventory
- Report generation

2. Staff login:

- Take order
- Prepare order
- Take feedback

3. User login:

- Place order
- Schedule order
- Bill payment
- Give feedback

Hardware requirement

1. i3 processor based computer or higher
2. 1 GB RAM
3. 10 GB Harddisk
4. Internet Connection

Software requirement

- 1.Windows 7 or higher
- 2.Android 4 or higher(For android application)
- 3.Web browser (Chrome,Mozilla,etc)

Advantages

- 1 Gives flexibility for ordering food from anyware.
- 2 Scheduling time as per the customer convenience
- 3 Easy to use and reduces manual efforts.
- 4 Most important gives optimize suggestions for stock/resource management by use of machine learning.
- 5 Automated bill generation and report generation forsells,profit,etc.

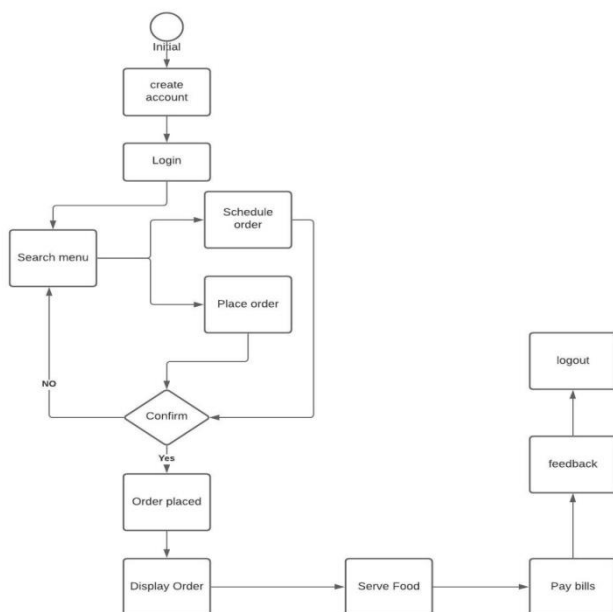
Limitations

1. Requires constant internet connection.
2. Requires android phone for ordering.

Applications

This system can also be used in hotels, restaurants and cafeteria.

V. FLOW CHART FOR SYSTEM



4.1 Flow chart for smart canteen system.

VI. CONCLUSION

It will overcome the traditional issues related to canteen management system. It provides other services like stocks management by machine learning and automated report generation. By use of android and windows platform this is very effective solution for canteen systems.

REFERENCES

- [1] Monik Shah , Shalin Shah , Mohd Danish Shaikh , Kaustubh Tiwari, “Canteen Automation System ” Proc. 12th ACM SIGMOD, pp. 207-216, 1993.
- [2] Diksha Jagtap, Ashwini Kokate, Nisha Gupta, Seema Raysingh, Manjiri Pathak, “ Canteen Ordering System with Daily Update of Calorie Consumption Report” accessed on April 12, 2009.
- [3] 1N. Durga Swathi & 2T. Durga , “ONLINE CANTEEN FOOD ORDERING SYSTEM”

- [4] Ashalatha R, Jayashree Agarkhed – “Evaluation of Auto Scaling and Load Balancing Features” in Cloud International Journal,2018
- [5] Sheifali Gupta, Ph.D. Shivam Gupta, Sourav Garg, Nitin Goyal, Sukhbeer Singh , “Chef Alerting System using Wireless Zigbee Technology”, International Journal of Applied Information Systems, 2017