

Canteen Automation System using Android

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Abstract- The purpose of Canteen Management System is to automate the existing manual system by the help of computerized equipment's and full-fledged computer software, fulfilling the requirements, so that their valuable data can be stored for a longer period with easy accessing and manipulation of the same. The required hardware and software are freely available and easy to work with. Canteen Automation System using Android, as described above, can lead to error free, secure, reliable and faster to manage the system. It can assist the user to focus on their other activities rather than focusing on the record keeping. Thus it will help organization in better utilization of resources. The organization can maintain computerized records without redundant entries. That means that one need not be distracted by data that is not relevant, while being able to reach the data. The aim is to automate its existing system by the help of computerized equipment's and full-fledged computer software, fulfilling their requirements, so that their valuable data can be stored for a longer period with easy accessing and manipulation of the same. Basically the project describes how to manage for good performance and better services for the clients

Index Terms- Management system, Android, Connectivity, Dynamic Database, Computer application, WiFi.

I. INTRODUCTION

The purpose of Canteen Management System is to automate the existing manual system by the help of computerized equipment and full-fledged computer software, fulfilling their requirements, so that their valuable data can be stored for a longer period with easy accessing and manipulation of the same. The required software and hardware are easily available and easy to work with. Canteen Automation System using Android, as described above, can lead to error free, secure, reliable and fast management system. It can assist the user to focus on their other activities rather than focusing on the record keeping. Thus it will help organization in better utilization of

resources. The organization can maintain computerized records without redundant entries. That means that one need not be distracted by data that is not relevant, while being able to reach the data. The aim is to automate its existing manual system by the help of computerized equipment's and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. Basically the project describes how to manage for good performance and better services for the clients

II. OBEJECTIVE OF PROJECT

The main objective of the Project on Canteen Management System is to manage the details of Canteen, Meal, It's Type, Canteen Staff. It manages all the information about Canteen, Bill Payment, Canteen Staff, and Canteen. The project is totally built at administrative end and thus only the administrator has authority to the access. The purpose of the project is to build an application program to reduce the manual work for managing the Canteen, Student Information, Bill Payment, and Student Meal. It tracks all the details about the Canteen Meal, It's Type, Canteen Staff.

Functionalities provided by Canteen Management System are as follows:

- It tracks all the information of Student, Bill Payment, Meal Type, etc.
- Provides the sorting and searching facilities based on various factors. Such as Company Canteen, Student Meal, Meal Type
- Manage the information of Canteen Editing, adding and updating of Records is improved which results in proper resource management of Company Canteen data.
- Manage the information of Meal Type
- Integration of all records of Canteen Staff.

III. TYPES OF USERS

1. ADMINISTRATOR

- Take Order
- Bill Print
- Add/ Remove Food Item
- Add Offers
- Update Inventory
- Sales for each day and month
- Sales for individual item for the day
- Total Earning

2. STAFF

- Order Forecasting
- Offers
- Order placed by Customer

3. USER

- Menu Items
- Place an Order
- Combo Box Selection
- Bill payment

VI. HARDWARE REQUIREMENT

1. i3 Processor Based Computer or higher
2. Memory: 1 GB RAM
3. Hard Drive: 50 GB
4. Internet Connection
5. Android Device

VII. SOFTWARE REQUIREMENT

1. Net Beans IDE 8.2
2. Android Studio
3. MySQL 5.5

VIII. ADVANTAGES

1. Security of data.
2. Ensure data accuracy's.
3. Proper control of the higher officials.
4. Minimize manual data entry.
5. Minimum time needed for the various processing.
6. Greater efficiency and Better service.
7. User friendliness and interactive.
8. Minimum time required.

IX. DISADVANTAGE

1. Requires an active internet connection.
2. Requires Android phone if user is ordering.

X. APPLICATIONS

The system can be used in cafeteria, canteen, restaurants, etc.

XI. CONCLUSION

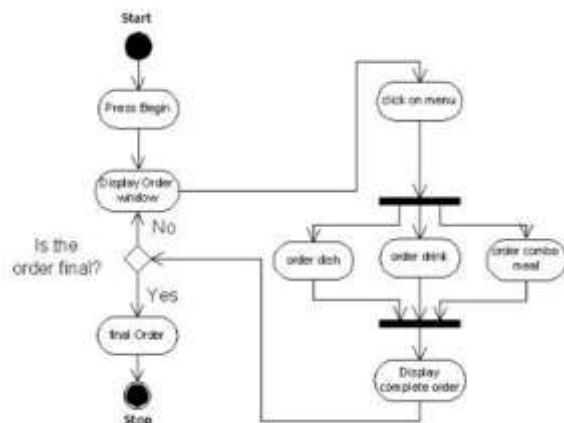
The development of Canteen Automation system involved many phases. The approach used is a top-down one concentrating on what first and steps for moving to successive levels of details.

In primary phase, the system is designed at block level. The blocks are created on the basis of analysis done during the problem identification phase. Different blocks are created for different functions emphasis is put on minimizing the information flow between blocks. Thus, the activities which require more interaction are kept in one block.

IV. ER DIAGRAM



V. ACTIVITY DIAGRAM FOR SYSTEM



During this phase, strict adherence was made to prove software engineering principles and practices. To implement this design, a computer program was written and tested on Net Beans IDE.

It is hoped that effective implementation of this software product would eliminate many problems discovered during systems investigation.

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