



Grocery Store Management System with Recommendation Feature

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Abstract: The purpose of the Grocery Store Management System is to automate the existing manual system with the help of computerized equipment and full-fledged computer software, fulfilling their requirements, so that their valuable data/information are often stored for an extended period with easy accessing and manipulation of the same. The required software and hardware are easily available and straightforward to figure with.

Grocery Store Management System, as described above, can lead to an error-free, secure, reliable, and fast management system. It can assist the user to consider their other activities rather than consider the record keeping. Thus, it'll help organizations in better utilization of resources. It is possible for organizations to maintain computerized duplication. In other words, one does not have to be distracted by irrelevant information in order to succeed in the knowledge. The project is developed with the objective of making the system reliable, easier, faster, and more informative. Basically, the project describes the way to manage permanent performance and better services for the clients.

Keywords: Grocery Store Management System, Billing System, Full-Fledged Computer Software, Better Services for the clients.

I. INTRODUCTION

A Grocery store management system is the system where all the aspects related to the proper management of a grocery store are done. These aspects involve managing information about the varied products, staff, managers, customers, billing, etc. This system provides an efficient way of managing grocery store information. Also allows the customer to get and buy the things purchased.

This project is based on the sales transaction and billing of items in a grocery store. The first activity is based on adding the items to the system along with the rate which is present in the grocery store and the name of the items which the grocery store will agree to sell. This authority is given only to the admin (administrator). Any modifications to be wiped out the item name and therefore the rate is often done only by admin. He also has the proper to delete any item. As the customer buys the products and involves the billing counter, the user is meant to enter the item name he purchased and therefore the quantity of the item he had purchased. This is not an enormous task.

This study is to produce software that manages the sales activity done in a grocery store, maintaining the stock details, and maintaining the records of the sales done for a particular month/year. The users will consume less time in calculation and therefore the sales activity are going to be completed within a fraction of seconds whereas manual system will make the user write it down which is a long procedure and so paperwork will be reduced and the user can spend more time on the monitoring the grocery store. The project is going to be user-friendly and straightforward to use.

The system will display all the things whose name starts with the letter selected by the user. He can select out of those displayed. Finally, a separate bill is going to be generated for every customer. This will be saved in the database. Any periodic records are often viewed at any time. Admin provides a singular username and password for every employee through which he can log in.

II. AIM AND OBJECTIVES

1. To study the functions of the Grocery store management system.
2. Examine challenges being faced by the manual system.
3. To form a software fast in processing, with a good user interface.
4. To make sure accurate statistics of the product item.
5. For a straightforward record of goods in store and proper identification.



III. MOTIVATION

Super market can easily manage their store using management system. Everyone has a grocery shop from where he buys all the daily required products. These small shops suffer from complicated stock management due to load of work for the employees and as they have to keep records books for their stock management and billing purpose. The Existing system which are available in market are expensive, small grocery store cannot afford it. Our system will help these small stores to easily manage their store as this system will reduce the work for employees.

IV. LITERATURE SURVEY

³INVENTORY MANAGEMENT SYSTEM

Year: 2019

Author: Reshmi Sunder, Nitheesh. S., Dharanidharan. S.

Abstract: Inventory management system which is helpful for the business operators, where shopkeeper keep the records of purchase and sales. Mismanaged inventory means disappointed customers ,too much cash tied up in slower sale and warehouses .This inventory is eliminate paper work, human faults , manual delay and speed up process .This inventory management system will have the ability to track sales and available inventory, tells a shopkeeper when it's time to reorder and how much to purchase. Inventory management system is windows application developed for windows operating systems which focused in the area of inventory control and generate .The software is made up of two parts: The frontend is developed using Microsoft Visual basic 2010 and the Backend from SQL server Database 2008. Keywords: Database, Inventory, public, software.

⁵Smart Goods Billing Management and Payment System

Year- 2018

Author: Jatin Arora

Abstract: In the present scenario, it is essential to have an automatic billing system for shopping malls, supermarket and other wholesale & retail stores. Numerous billing systems like barcode scanning mechanism-based systems or tag-based systems are available within the market. It is important to exchange such existing system with better and robust systems so hereby we proposed "Smart Goods Billing Management and Payment System for Shopping Malls". In this system, the essential fundamental is barcode scanning for products, but we replace the traditional barcode scanner for faster and better results. In our prototype, the android phone is getting used as a barcode scanner for easy , better and portable barcode scanner. This scanner is connected wirelessly to MCU via Bluetooth module. MCU is additionally connected to PC/Laptop for creating the database of all customers, their products, and bills. This database also tracks the entire sale and number of products sold per day. In addition, RFID technology is implemented during this system for payment through card-based system. Simulation and hardware-based results are proposed during this paper.

V. PROBLEM STATEMENT

Effective management of grocery store for reducing workload on the shopkeeper

Being Computer Technology students, we had to go into the business department to learn some basic sales and grocery store management topics to increase our intellectual understanding on the project at hand it was really tasking. Building a standard Grocery Store management system was not an easy task looking at the problems of existing manual system.

The factors for these difficulties are:

- 1. Time Consumption:** Manual systems are time consuming, as the business owner must keep track of Grocery store sales on a daily basis, while updating the system manually at the end of the day.
- 2. Poor Communication:** A manual Grocery store system requires employees and managers to write down each time an item is removed from the Grocery store. If one employee forgets to mention that the last coffee product has been removed from the Grocery store, a manager expects the item to still be available for a customer during a sale. Compared with a technical Grocery store system, a manual Grocery store system does not help the communication in the workplace.
- 3. Physical Counts:** A manual Grocery store system does not provide any number, as all numbers from the Grocery store are gained through physical Grocery store counts. One of the difficulties of running a manual Grocery store system is that physical Grocery store counts must be performed frequently to control the items in the Grocery store. This is time consuming and can cost the business money, if employees must come in to assist outside of business hours.



4. **Daily Purchases:** Keeping track of daily purchases is another difficult controlling measure with manual Grocery store systems. A manual Grocery store system requires the employees to write down the items sold during a single workday is can be a difficult task, together employees may lose the list of things sold or another may forget to write down a purchase.

5. **Ordering Supplies:** A manual Grocery store system does not update at the end of the day with an updated Grocery Store.

VI. PROPOSED SYSTEM

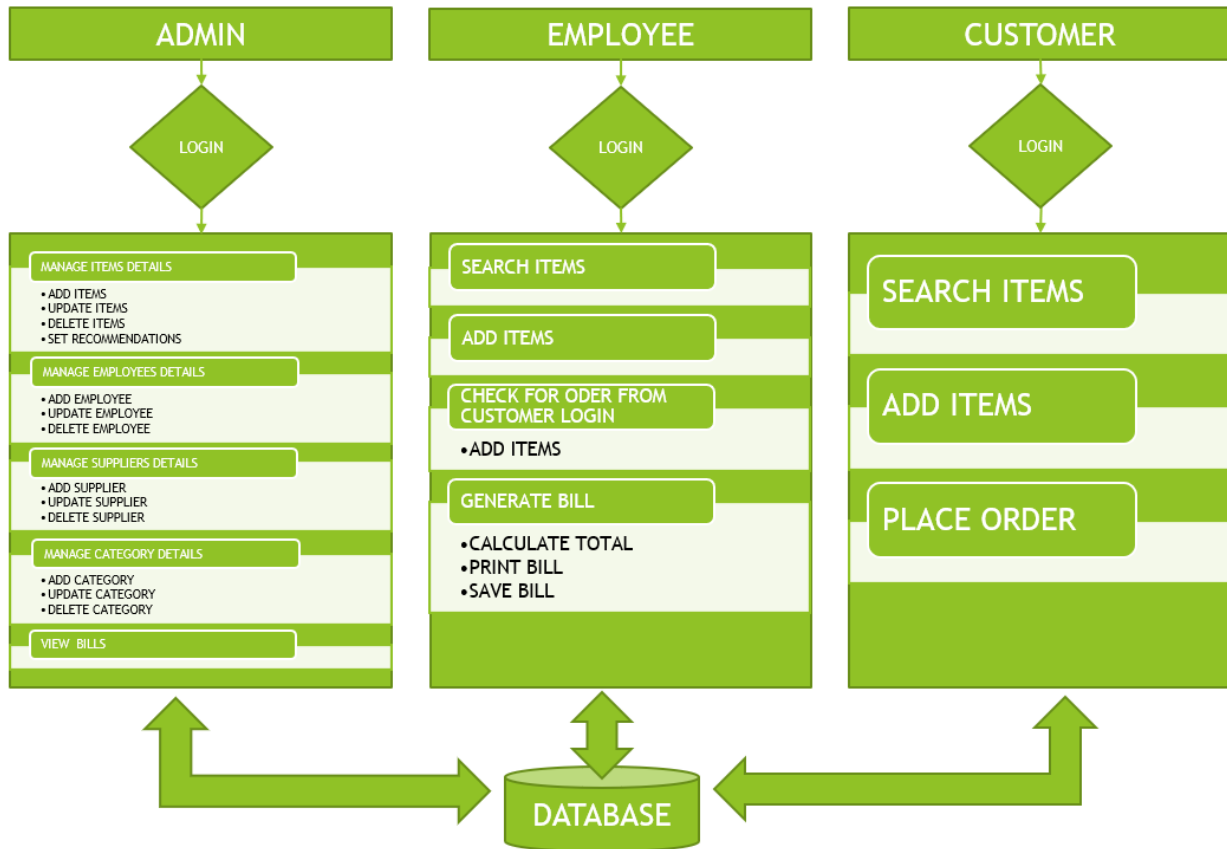


Fig. 1 Proposed System

VII. METHODOLOGY

Effective management of grocery store for reducing workload on the shopkeeper

Grocery store management system is the system where all the aspects related to the proper management of grocery store are done. Management of these aspects involves dealing with various products, staff, managers, customers, billing etc. This system consists of 3 users:

1) Admin:

Admin has control of the inventory management system of the store. He keeps on updating all the information about the store. He can manage the following things.

• **Manage Employees:**

1. Admin can manage all the personal details of the employee like the name, address, contact number, and the username and password from which the employee can log in.
2. Can add or remove an employee.
3. Update or modify the details of the employee.

• **Manage Category:**

1. Admin can manage the category details of the items like id, name & description.
2. Can add or remove any category.
3. Update the details of the category.



- **Manage supplier:**

1. Admin can manage all the personal details of the Supplier like name, address, contact detail, etc.
2. Can add or remove a supplier.
3. Update or modify the details of the supplier.

- **Manage items:**

1. Admin can add or remove the items from the stock of the products.
2. Add or update the details of the products whenever there are changes in the stock.

- **View bills:**

1. Admin has access to view the details of the bills of past orders.

2) Employee:

Employee searches and adds the items to the bill as per customer's requirements and also checks if orders have been placed by the customer through customer login and adds those items too and then generates a bill.

3) Customer:

Customers can easily add the products using the system as per their requirement to reduce wastage of time and employees just need to generate the bill and provide the products.

All these users are connected to the database. And therefore, after each activity performed by any of the users the database is constantly updated.

VIII. FUTURE SCOPE

Various supermarkets have easy functioning of their store due to smooth management of bills, stock, and the information of the products.

Small grocery shops lack easy management as there is a lot of documentation and overload for the employees due to the unavailability of the management system.

As the existing system is expensive which the small grocery store can't afford, our system is user-friendly and less expensive which will help in easy management of the store.

Our system has some limitations where all the 3 users which are Admin, Employee, and Customer, cannot use the system simultaneously which can make the management and billing work faster.

Also, this Grocery Store Management System can be used for managing other stores too if appropriate changes are done in the system.

IX. CONCLUSION

Grocery store Management System has to do with making an appropriate efforts to stop the rising problem to all manual grocery store operations in order to enhance the operation of such grocery stores.

In this project, the software or system that can be used to aid all grocery stores that are still operating manually has been successfully developed.

The software can be implemented in all types of the grocery store. The software has a large memory for storing all the goods in the grocery store and also keeping records it is highly effective and accurate.

With business opportunities increasing as never before, companies are in direct need of efficient management.

Maintaining a methodical way to manage large databases is one of these key areas, especially in the Retail Sector.

DBMS is a vital tool for the future growth of business organization.

It offers a simple, efficient, and reliable way of storing, managing and accessing data.

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