

# ***A Mini Project Synopsis on***

## **Supermarket Billing System**

**S.E. - I.T Engineering**

**Submitted By**

**Suyash Jadhav      20104136**

**Karan Maurya      20104070**

**Pratham Lotankar      20104025**

**Ashish Mundhada      20104107**

**Under the Guidance Of**

**Prof .Yamini Patil**



**DEPARTMENT OF INFORMATION TECHNOLOGY**

**A.P. SHAH INSTITUTE OF TECHNOLOGY**

**G.B. Road, Kasarvadavali, Thane (W), Mumbai-400615 UNIVERSITY OF MUMBAI**

**Academic Year : 2021-22**

## CERTIFICATE

This to certify that the Mini Project report on **Supermarket Billing System** has been submitted by Suyash Jadhav (20104136), Karan Maurya (20104070) , Ashish Mundhada (20104107), Pratham Lotankar (20104025) who are a Bonafide students of A. P. Shah Institute of Technology, Thane, Mumbai, as a partial fulfillment of the requirement for the degree in **Information Technology**, during the academic year **2021-2022** in the satisfactory manner as per the curriculum laid down by University of Mumbai.

Ms. Yamini Patil  
Guide

Prof. Kiran Deshpande  
Head Department of Information Technology

Dr. Uttam D.Kolekar  
Principal

External Examiner(s)

- 1.
- 2.

Place: A.P Shah Institute of Technology, Thane Date:

## TABLE OF CONTENTS

1. Introduction. ....	1
1.1 Purpose .....	1
1.2 Objectives. ....	1
1.3 Scope .....	2
2.Problem Definition .....	4
3.Proposed System .....	5
3.1Features and Functionality .....	
4.Project Outcomes .....	7
5 .Software Requirements .....	7
6.Project Design .....	8
7. Project Scheduling .....	9
8. Conclusion. ....	10
9.Reference.....	11
Acknowledgement.....	

## **Chapter 1**

### **Introduction :**

This software project is a traditional supermarket billing system with some added functionality. This system is built for fast data processing and bill generation for supermarket customers. The billing system consists of an SQL database and effective front end designed in netbeans. The billing database is a vast collection of product name, price and other product specific data. A product when billed is searched from the database and its price is added to the bill based upon the product quantity. The system also contains discounts on various products so that the product is offered at discounted price while billing. The supermarket billing system is built to help supermarkets calculate and display bills and serve the customer in a faster and efficient manner. This software project consists of an effective and easy GUI to help the employee in easy bill

calculation and providing an efficient customer service.

### **1.1 Purpose:**

The purpose of Supermarket billing system is to help supermarkets calculate and display bills and serve the customer in a faster and efficient manner. This software project consists of an effective and easy GUI to help the employee in easy bill calculation and providing an efficient customer service. The supermarket billing system is used to maintain a healthy relationship between the customer and the store managers by providing transparency in the billing system which validates that exact price has been quoted for the purchases. It ensures and provides ease of payment to customers.

### **Objectives :**

The objective of the Project on Supermarket billing System is to produce a new software which manages sales activity done in the supermarket, maintaining stock details. The developed project will be user friendly. Supermarket billing will reduce paperwork in supermarket store. Billing system is computerized system therefore it can handle very large product records and prepare any report in desired format. Supermarket billing system can automatically calculate large calculation while billing. Supermarket billing system saves customers and system users time in billing queue. Supermarket billing project reduces man power.

This project will serve the following objectives:-

- Add and maintain records of available products.
- Add and maintain customer details.
- Add and maintain description of new products.
- Add and maintain new entered category of products.
- Provides economic/financial reports to the owner monthly or weekly and yearly.
- Provides a convenient solution of billing pattern.
- Make an easy to use environment for users and customers.

## **Scope:-**

Our project is helpful to computerize the item transaction, sales activity record keeping which is a very huge task and maintaining the stock. This project will help the store user in fast billing. This project enables user to maintain a great database of all customers visited and purchase product from the store. Project will enable to see report regarding product and category. The system will store and recognize customer reservations. The software will display view of calculations of every transaction. It satisfy the user requirement. Be easy to understand by the user and operator. Be easy to operate. Have a good user interface. This project will help the store keeper in fast billing . This project enable store keeper to maintain a great database of all customers visited and purchase product from store. Project will enable to see report regarding product and category. Easy to maintain in future prospect.

## **Chapter 2**

### **Problem Definition :**

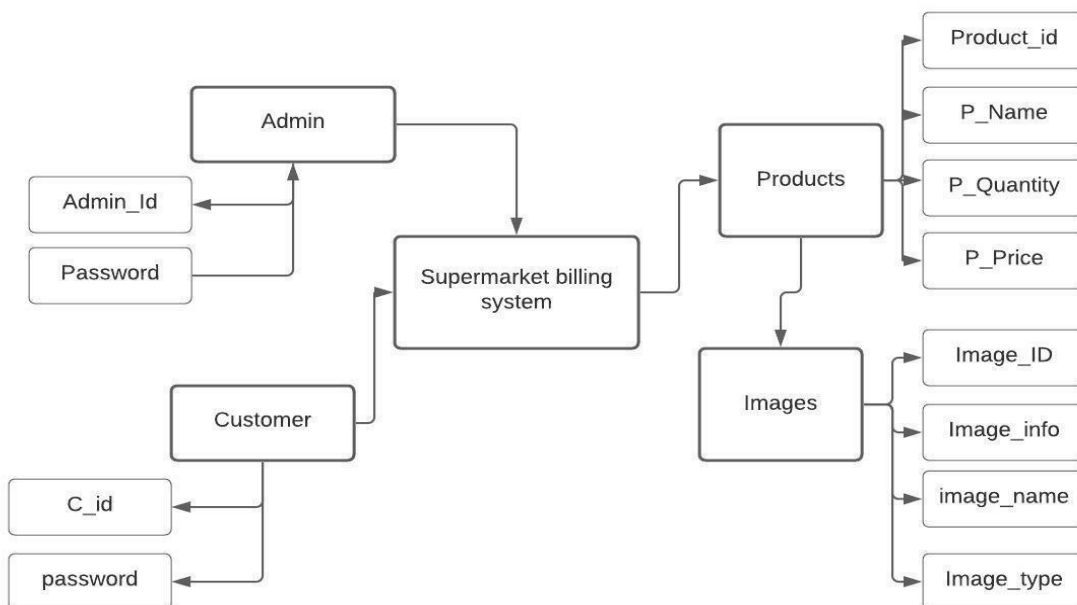
1. Time Consumption:- Manual systems are time consuming, as the business owner must keep track of Supermarket sales on a daily basis, while updating the system manually at the end of the day.
2. Poor Communication:- A manual Supermarket system requires employees and managers to write down each time an item is removed from the Supermarket. if one employee forgets to mention that the last coffee product has been removed from the Supermarket, a manager expects the item to still be available for a customer during a sale. compared with a technical Supermarket system, a manual Supermarket system does not help the communication in the workplace.
3. Physical counts:- A manual Supermarket system does not provide any number, as all numbers from the Supermarket are gained through physical supermarket counts.

## **Chapter 3**

### **3.1 Proposed System :**

The aim of proposed system is to develop a system of improved facilities. The proposed system can overcome all the limitations of the existing system. The system provides proper security and reduces the manual work.

- Security of data.
- Ensure data accuracy's.
- Proper control of the higher officials.
- Minimize manual data entry.
- Minimum time needed for the various processing.
- Greater efficiency.
- Better service.
- User friendliness and interactive.
- Minimum time required.



### **3.2 Features And Functionality:**

- **Sales on account-** Some supermarket still maintain the open account for regular buyers, The POS should keep an informed account, and the system should make ready bills as needed.
- **Coupon redemption-** The application must turn out the coupon at checkout. The advance system may verify coupon against bought items and will evaluate percentage off amounts.
- **Sell per unit weight-** The program must amalgamate with sales at checkouts. The cashier enters the code for the product and weighs it. The tool evaluates the final cost and print total weight, unit cost and final cost on the receipt.
- **Suspend transaction-** The solution must be able to suspend the transaction and shift to another. Later the original transaction can be amended, cancelled or edited.
- **Easy ,Fast and Robust Billing:-** The cashier just needs to scan the product and print the bill. In some cases, They can even hold the bill and recall the same thereby serving the long queue of customers faster.

This project will serve the following points:-

- a) Each item has its name, By entering the name the system displays item description and item price.
- b) Administrator can add supplier details and item details with price.
- c) Saves money and resources of organization and excludes of use of paper or sheets in making bill.
- d) It provides accuracy and faultless in billing calculations.

## **Chapter 4**

### **Project Outcome:**

- Administrator has to login to access the system.
- He can add, update or delete details of Products.
- Easily Scalable to grow with changing system requirements.
- Improved information security, restricting unauthorized access.
- In manual system, much storage space for data files is required so to overcome this problem, an automated well managed database is developed for saving storage space.
- Editing, adding and updating of Records is improved which results in proper resource management of Billing system and also to check records and data.

## **Chapter 5**

### **Software Requirements :**

- FRONT END :- NETBEANS .IDE 2021CE



- LANGUAGE : JAVA



- BACK END: MYSQL ;XAMPP  
(FOR SERVER ) PHPMYADMIN



## **Chapter 6**

### **Project Design :**

In this phase, a logical system is built which fulfils the given requirements. Design phase of software development deals with transforming the clients's requirements into a logically working system. Normally, design is performed in the following in the following two steps:

#### **1. Primary Design Phase:**

In this phase, the system is designed at block level. The blocks are created on the basis of analysis done in the problem identification phase. Different blocks are created for different functions emphasis is put on



minimising the information flow between blocks. Thus, all activities which require more interaction are kept in one block.

## **2. Secondary Design Phase:**

In the secondary phase the detailed design of every block is performed.

**The general tasks involved in the design process are the following:**

1. Design various blocks for overall system processes.
2. Design smaller, compact and workable modules in each block.
3. Design various database structures.
4. Specify details of programs to achieve desired functionality.
5. Design the form of inputs, and outputs of the system.
6. Perform documentation of the design.

System reviews.

## **User Interface Design**

User Interface Design is concerned with the dialogue between a user and the computer. It is concerned with everything from starting the system or logging into the system to the eventually presentation of desired inputs and outputs. The overall flow of screens and messages is called a dialogue.

The following steps are various guidelines for User Interface Design:

1. The system user should always be aware of what to do next.
2. The screen should be formatted so that various types of information, instructions and messages always appear in the same general display area.
3. Message, instructions or information should be displayed long enough to allow the system user to read them.
4. Use display attributes sparingly.
5. Default values for fields and answers to be entered by the user should be specified.
6. A user should not be allowed to proceed without correcting an error.
7. The System user should never get an operating system message or fatal error.

## EBILL SUPERMARKET



LOGIN HERE

User Name

Password

LOGIN

CANCEL

## **Chapter 7**

### **Project Scheduling Template**

<b>Sr. No</b>	<b>Group Member</b>	<b>Time duration</b>	<b>Work to be done</b>
<b><u>1</u></b>	Karan Maurya  Suyash Jadhav	1 <sup>st</sup> week of January	Implementing 1 <sup>st</sup> module/ functionality <i>(Designing the main page/admin will login with security verification and will enter to the main menu)</i>
		2 <sup>nd</sup> week of January	Testing 1 <sup>st</sup> module <i>(Main menu /This will consist of the main page where admin will have to select the following options:</i> <ul style="list-style-type: none"><li>• Product details</li><li>• Search product</li><li>• Cash out</li></ul>

<u>2</u>	Pratham Lotankar	3 <sup>rd</sup> week of January	Implementing 2nd module/ functionality (designing next page/ <i>functionality: Here information of Customer i.e. Customer name and Customer IDs will be shown</i> )
<u>3</u>	Ashish Mundhada	By the end of march month	Implementing 3rd module/ functionality ( <i>Transfer page/ functionality: On this page admin can view the list of total items and bill cash out</i> )

## **Chapter 8**

### **Conclusion:**

Our project is only a humble venture to satisfy the needs to manage their project work. Several user friendly coding have also adopted. This package shall prove to be a powerful package in satisfying all the requirements of the school. The objective of software planning is to provide a frame work that enables the manger to make reasonable estimates made within a limited time frame at the beginning of the software project and should be updated regularly as the project progresses.

### **At the end it is concluded that we have made effort on following points...**

- A description of the background and context of the project and its relation to work already done in the area.
- Made statement of the aims and objectives of the project.
- The description of Purpose, Scope, and applicability.
- We define the problem on which we are working in the project.
- We describe the requirement Specifications of the system and the actions that can be done on these things.

- We understand the problem domain and produce a model of the system, which describes operations that can be performed on the system.
- We included features and operations in detail, including screen layouts.
- We designed user interface and security issues related to system.
- Finally the system is implemented and tested according to test cases.

## **References**

- Greek
- Quora
- Github
- Reddit
-

## **ACKNOWLEDGEMENT**

This project would not have come to fruition without the invaluable help of our guide **Ms. Yaminee Patil** . Expressing gratitude towards our HOD, **Prof. Kiran Deshpande**, and the Department of Information Technology for providing us with the opportunity as well as the support required to pursue this project. We would also like to thank our teacher **Ms. Rujata Chaudhari** who gave us her valuable suggestions and ideas when we were in need of them. We would also like to thank our peers for their helpful suggestions.

