



Store Billing System



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Store Billing System

Project Outline:-

- Introduction
- System design diagram
- Functionality
- Merits & Demerits
- Conclusion
- Future Enhancements



INTRODUCTION

Product Inventory

The system features an interactive interface that allows users to easily view available products. Each product is listed with its price and current stock level, ensuring accurate and up-to-date information.



Cart Management

Customers can add multiple items to their cart, making the shopping experience seamless and efficient. The system updates the cart in real-time, reflecting any changes in quantity or product selection.



Billing and Sales Tracking

The system generates bills with a unique identifier and tracks total sales for the day. This provides a clear overview of daily revenue, aiding in financial management and reporting.





SYSTEM DESIGN DIAGRAM

ALGORITHM

1. START THE SYSTEM.
2. USER AUTHENTICATION MAXIMUM 3 ATTEMPT
3. ENTER SHOP NAME AND POS OPERATOR NAME
4. DISPLAY THE MAIN MENU WITH OPTIONS: VIEW PRODUCTS,VIEW PRODUCTS BY CATEGORY, VIEW LOW STOCK ITEMS, RESTOCK PRODUCT, ADD TO CART, CHECKOUT, VIEW TOTAL COLLECTION, AND EXIT.
5. IF "VIEW PRODUCTS" IS SELECTED, DISPLAY ALL AVAILABLE PRODUCTS NAME WITH THEIR PRICE AND STOCK.
6. IF "VIEW PRODUCTS BY CATEGORY" IS SELECTED, DISPLAY CATEGORY AVAILABLE PRODUCTS NAME WITH THEIR PRICE AND STOCK.
7. IF "VIEW LOW STOCK ITEMS" IS SELECTED, DISPLAY ALL PRODUCTS HAVING 1 STOCK WITH THEIR PRICE AND NAME
8. IF "RESTOCK PRODUCT" IS SELECTED,
 - ASK FOR THE PRODUCT NAME.
 - HOW MANY QUNATITY TO RESTOCK.
 - ASK IF POS OPERATOR WANTS TO ADD MORE RESTOCK PRODUCTS.



SYSTEM DESIGN DIAGRAM

ALGORITHM

9 IF "ADD TO CART" IS SELECTED:

- ASK FOR THE PRODUCT NAME AND QUANTITY.
- CHECK STOCK AVAILABILITY.
- IF AVAILABLE, ADD THE PRODUCT TO THE CART AND UPDATE STOCK.
- ASK IF THE USER WANTS TO ADD MORE PRODUCTS.

10 IF "CHECKOUT" IS SELECTED:

- GENERATE A BILL WITH GST (18%).
- DISPLAY PAYMENT OPTIONS (ONLINE/CASH).
- VALIDATE UPI ID
- UPDATE TOTAL SALES FOR THE DAY.

11 IF "VIEW TOTAL COLLECTION" IS SELECTED, DISPLAY THE TOTAL SALES AMOUNT.

12 IF "EXIT" IS SELECTED, TERMINATE THE PROGRAM.

13 STOP.



FUNCTIONALITY

1 Extensive Product

Showcases 25 products across diverse categories, including Electronics and Furniture, enabling users to browse and select items easily.

2 Multiple Cart

Facilitates the addition of multiple products to the cart before checkout, streamlining the shopping experience for bulk purchases.

3 Interactive Bill

Generates a detailed bill that includes GST (18%) and a unique bill number, ensuring accuracy and compliance with tax regulations.

4 Flexible Payment

Offers online and cash payment methods, providing customers with convenient options to complete their transactions.



MERITS & DEMERITS

Merits:

- ✓ Easy to use and simple interface.
- ✓ Prevents unauthorized access with login security.
- ✓ Helps in tracking sales and stock management.
- ✓ Provides quick billing and checkout process.

Demerits:

- ✗ Console-based (no graphical user interface).
- ✗ No database integration (data is not stored permanently).
- ✗ Limited functionality compared to advanced POS systems.



CONCLUSION

- The Store Billing System is a basic yet efficient way to manage sales.
- It ensures security with a login system and manages stock effectively.
- This project helped in learning Java programming, conditional statements, loops, and arrays.
- Future improvements can include a database and GUI interface.



FUTURE ENHANCEMENTS

- ◆ **Graphical User Interface (GUI)** – Convert the console-based system into a user-friendly GUI using Java Swing or JavaFX.
- ◆ **Database Integration** – Store product details, sales records, and user data using MySQL or SQLite for better data management.
- ◆ **Barcode Scanner Support** – Implement barcode scanning to quickly add products to the cart and reduce manual entry errors.
- ◆ **Discount & Offer System** – Add discount coupons, seasonal offers, and membership benefits for better customer engagement.
- ◆ **Multiple User Roles** – Allow different roles such as Admin, POS Operator, and Manager with specific permissions.
- ◆ **Invoice Generation** – Generate and print invoices with customer details for better record-keeping.
- ◆ **Online Payment Integration** – Support UPI, card payments, and digital wallets for cashless transactions.
- ◆ **Stock Alert System** – Notify when stock is low to help in restocking products efficiently.

**THANK
YOU**

