Super Market Billing System

Technology Used - C++ , VS code

In today's fast-paced retail world, having an efficient billing system is essential for smooth customer service and accurate financial management. This project is a Billing Management System developed in C++ to address these requirements.

This system provides an easy-to-use interface for cashiers to enter details like item names, quantities, and prices. It calculates VAT (Value Added Tax) at two levels and creates bills showing item details, totals before and after VAT, and a summary of the purchase.

The supermarket billing system helps supermarkets quickly and accurately create invoices, improving customer service. It's making simple for staff to handle billing and serve customers efficiently. This software keeps financial records accurate and reduces mistakes. By ensuring transparent billing and correct amounts, it helps maintain a good relationship between customers and store management, ensuring smooth payments.

Working of the Super Market Billing System Project

1. User Authentication:

- The system starts with a password prompt to ensure only authorized users can access it. If the password is incorrect, the user gets two more attempts before the system exits.

2. Main Menu:

- After successful authentication, the user is presented with a menu offering three options:

  - **Enter New Entry:** To input new billing details.
  - **View Previous Entries:** To view past bills stored in the system.
  - **Exit:** To close the application.

3. Entering New Billing Details:

- When the user selects "Enter New Entry," the system prompts for the number of items to be billed.
- For each item, the user enters:

  - Item name
  - Quantity
  - Price per unit

- The system calculates the total price for each item (quantity multiplied by price).

4. VAT Calculation:

- The system applies VAT based on a two-tier structure:

  - 3% for items priced at or below $100.
  - 10% for items priced above $100.

- The total price including VAT is calculated for each item.

5. Generating and Displaying the Bill:

- The system generates a formatted bill that includes:

  - Item names
  - Quantities
  - Prices
  - Total prices before and after VAT

- The bill is displayed on the console for customer verification.
- The bill is also stored in a file ("HIS.TXT") for record-keeping.
- The bill number is incremented and updated in another file ("COUNT.TXT").

6. Payment Summary:

- The system calculates the total amount due.

- The cashier enters the amount of cash given by the customer.
- If the cash is sufficient, the system calculates and displays the change to be returned.
- If the cash is insufficient, the system prompts the cashier to re-enter the correct amount.

7. Viewing Previous Entries:

- When the user selects "View Previous Entries," the system reads and displays the contents of "HIS.TXT" file, showing all past bills.

8. Exiting the System:

- The user can choose to exit the system from the main menu, which safely closes the application.