"Inventory management"

- 1] stock income able to sort according to the name, amount of stock, cost of stock, date of import.
- 2] insert new stock data into the data base .
- 3] able to show first expiring product with the date given today.
- 4] customer bill generation by giving the input of groceries.
- 5] todays Sales Report : print all the sold products on that day , as per the requirement :
- Contents in the list (name of the product ,price, no. of items sold, no. of customers bought the product ,total revenue grnerated,profit generated)
- 6] import stock price is different , selling price is different keep in mind.
- 7] able to suggest which product is to be given discount based on recent sales, coming expiry dates.
- All above features to be covered with GUI.

Arechitecture of the program :

1. Launch Program
2. Main window GUI will be opened with attributes
   a) Billing System
   b) Adding Stock
   c) Show Available Stock
   d) Sales Report
   e) AI Suggestions to give discounts

Billing System :

1. The window will ask the inputs as per the labels
2. Labels :
   a) Customer name
   b) Phone number
   c) Single label for name of the product and cost

d) On the right side of the window show the total items taken and cost till that purchase
e) Finally at bottom submit button to generate bill.
3. Finally add this customer billing data to the data base.
4. Reduce the no of items purchased from the main data base.

Adding Stock :

1. Take the todays date.
2. Second generate a window with labels and input as
   a) Name of product
   b) Quantity of items
   c) Price of items
   d) Expiry date of item
   e) For each specific product show a window and take the input.
   f) After inserting data of each item press " > " key to add new data.
   g) At bottom provide a submit button to save the data

Show available stock :

1. When this button is clicked close the main window
2. Print all the available stock data.
3. With entities :
   a) Name of product
   b) No of items
   c) Cost

d) Expiry date of product

e) Total cost of available product, and total stock.

Sales report :

1. Display a window with buttons
2. Todays sales report
3. This weeks
4. This month
5. This year
6. Certain month
7. Certain week
8. Certain date
9. Certain product
10. Highest selling product
11. Most commonly sold products(top 5)
12. Options available to print all these reports in a text or word or csv file as per user requirements.

AI Suggestion :

1. Analyze the most commonly selling product and suggest them as required quantity.
2. Based on the past selling data predict the growth or decrease in the profit or growth of business.
3. On the coming expiry dates suggest the discount on expiring products to make them sell.
4. If possible draw the statistical diagrams like pie chart, bar graph, line plot, box plot, …