Data Structure and Algorithm

Progress Report No. 3

Sari-sari Store Inventory System

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I.   Objectives

This activity is the continuation of the Progress Report numbers one and two , wherein we are aiming to add a few features. Here are the following objectives we've come up:

- To implement a reliable database system storing and managing users, inventory, and sales records securely and efficiently.

- To design a better display of user-interface.

- To add a function wherein the user can generate and manipulate receipt,

- To add a logout function for security and and

II.   Methods

For this development stage, we worked on improving the functionality and ease of use of the Joan's Store system. One of the key improvements was serving the purpose of the search bar and the how many purchased quantity fields by optimizing the system. Users were able to easily search for items and specify how much of it they wish to purchase. This was easily achieved by the search_item() function which was designed for item lookups. The update_item() function was used to narrow results using an SQL like query. We also implemented the current system date and time on the main interface giving the system users a clear reference for the date and time of transactions.

To the rest of these updates, we implemented new buttons which enhance the system's functionality and extend the things users can do in the system. Users can now add items, produce and view receipts, view sales and cleared active receipts, and also stock which includes priced and low-stock restrictions. Users can also log in and out of the system using a secure remote access. All of these features is provided in the App class, which ensures that the database is prepared and ready before the system pulls up the program which is maintained by the systems interface. Using the app, the system is kept in clear focus by the smooth running of app.mainloop(). All of these updates contribute to the progress of a complete and user friendly point of sale.
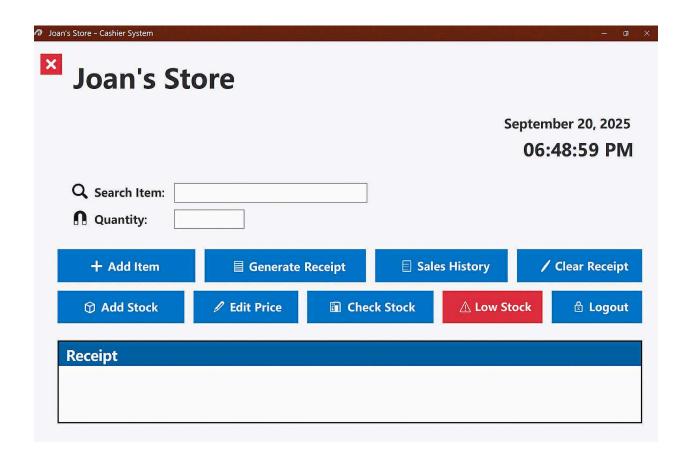
III. Results

Figure 1: User Interface with new functions

In this image, we've added a better user-interface display, and different functions. As of now, we've added Search item, Quantity, Add Item, Add Stock, Generate Receipt, Edit Price, Sales History, Check Stock, Clear Receipt, Low Stock, and Logout buttons.

We've used blue as the base palette of our system, but we're still thinking of doing it on a brown palette for warm, and calmness wherein it displays a welcoming mood.

IV. Conclusion

In this progress report, our conclusion is that we added better User Interface display, add all of the function bottom that are essential to this program, we added add item, generate receipt, sales history, clear receipt, add stock, edit price, check stock, low stock, log out and the receipt.These additions improve user experience and streamline key functions like inventory management and sales tracking.

We are looking forward to our progress and refining our programs' backend and adding more functionality to ensure that the program is running smoothly with these basic features in place. We are on track to develop a fully functional program that meets user needs and supports future growth.

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