THE RESERVE OF THE PROPERTY OF

UNIVERSITY OF CALOOCAN CITY

COMPUTER ENGINEERING DEPARTMENT



Data Structure and Algorithm

Progress Report No. 1

Sari-sari Store Inventory System

Submitted by: Instructor:

Adoracion, Jerick Dave D.

Engr. Maria Rizette H. Sayo

Calica, Ljay L.

Enverzo, Kyle Andrey D.

Gabuyo, Ivan Love D.

Luminario, Venice Lou Gabriel M.

THE PROPERTY OF THE PROPERTY O

UNIVERSITY OF CALOOCAN CITY

COMPUTER ENGINEERING DEPARTMENT



I. Objectives

In this activity, we are tasked to make a system wherein we will be implementing different types of data types. 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 make a simple user-interface design
- To add a simple log-in feature
- · To implement different data types such as array, and linked- list to our system

II. Methods

When building the Saris-sari store inventory system, the first step we took was to come up with a plan and the flow of the software. Right off the bat we decided to use Python as the main programming language, due to it being very versatile and user-friendly. While designing the windows for the login and signup pages.

The very first system we integrated was the easiest, which was the login and sign-up form system. We designed login forms for new users and were able to use the user credentials to login. If the login credentials authenticated successfully, the system took the users to and alternate user interface which at the moment is a mock-up for the entire system. Users are

ALD WY

UNIVERSITY OF CALOOCAN CITY

COMPUTER ENGINEERING DEPARTMENT



able to see the title 'Joan's Store' at the top of the screen as the first iteration for the cashier dashboard.

We have also incorporated the concept of a linked list in the system. It is not fully realized at this stage, but the linked list will eventually be instrumental in the management of cart items and sales history.

III. Results

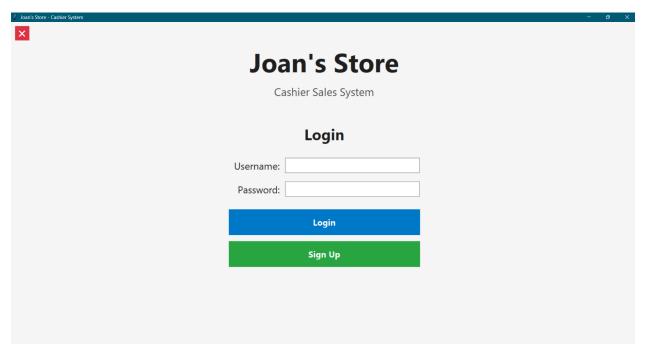


Figure 1: Simple Log-in interface

This picture shows a simple log-in feature where you should log-in or make a new account in order to access the system's interface.



UNIVERSITY OF CALOOCAN CITY

COMPUTER ENGINEERING DEPARTMENT



Login		
Username:	jonard	
Password:	***	

Figure 2: Simple Log-in interface

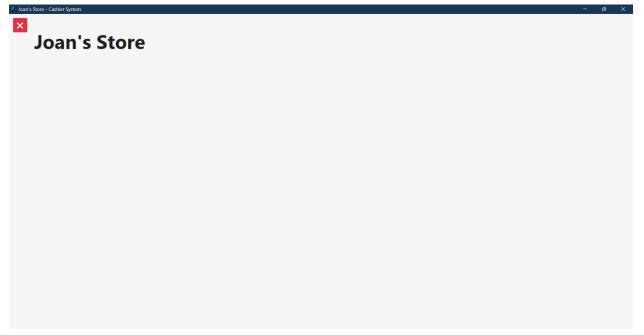


Figure 3: Tentative display of the system

This is still just the basic/ tentative platform for the key features of our system,

UNIVERSITY OF CALOOCAN CITY



COMPUTER ENGINEERING DEPARTMENT



IV. Conclusion

At first we made a regular interface. In the first interface we have a login feature wherein you can input and sign in an account, and for the second interface after you login or sign up, you will be directed into the platform for the key-features. In the following progress report, we will improve the log in interface and also we will add some key buttons for the cashier system.

In conclusion, our group reused our project in the Database Management System course, and revised the whole system. In other words, we're planning to remake our system but with a better and precise version.

References

[1] Python Software Foundation, Python 3 Documentation. [Online]. Available: https://docs.python.org/3/

. [Accessed: Sept. 13, 2025].

[2] J. E. Shipman, An Introduction to Tkinter. New Mexico Tech, 2013. [Online]. Available: https://tkdocs.com

. [Accessed: Sept. 13, 2025].

[3] D. R. Hipp, SQLite Documentation. SQLite Consortium, 2024. [Online]. Available: https://www.sqlite.org/docs.html

. [Accessed: Sept. 13, 2025].

[4] A. Clark, Pillow: Python Imaging Library (Fork). 2015. [Online]. Available: https://pillow.readthedocs.io



UNIVERSITY OF CALOOCAN CITY

COMPUTER ENGINEERING DEPARTMENT



. Accessed: Sept. 13, 2025]

5] A. Sweigart, Automate the Boring Stuff with Python, 2nd ed. San Francisco, CA, USA: No Starch Press, 2019.