UNIVERSITY OF CALOOCAN CITY
COLLEGE OF ENGINEERING
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Progress Report No. 6 Food Ordering System	
Course Code: CpE201L	**Program:** Bachelor of Science in Computer Engineering
Course Title: Data Structure and Algorithms	**Date Performed:** October 18, 2025
Section: BSCpE 2A	**Date Submitted:** October 18, 2025
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1. Objectives

- Implement the dequeue and enqueue in the program.
- Explore the usage of the queue linear data structure especially in the order system.
- To access the data in the database using queue.

2. Discussion

A queue is a linear data structure that follows the first-in, first-out method. One of the implementations for this is the food ordering system we created. The program has a feature that the first customer to order is also the first customer to receive their food. It follows the enqueue method, adding the customer order into the admin side. On the other hand, dequeue deletes the order on the admin side once it is done.

3. Materials and Equipment

- **Desktop/Device:** It is important to have a device so you can program
- **Operating System:** Operating system are essential since you cannot use your device without it.
- **Python and HTML IDE:** You may use Visual Studio Code

4. Procedure

- We use the Queue linear data structure to our program.
- Implement it to the ordering system, where the order store in the admin side, it shows. the first customer that order the food in their menu.
- It enqueue the order of the customer. It adds new order in the rear of the previous order.
- Dequeue the order once the dish/food is delivered/received completely.

5. Output

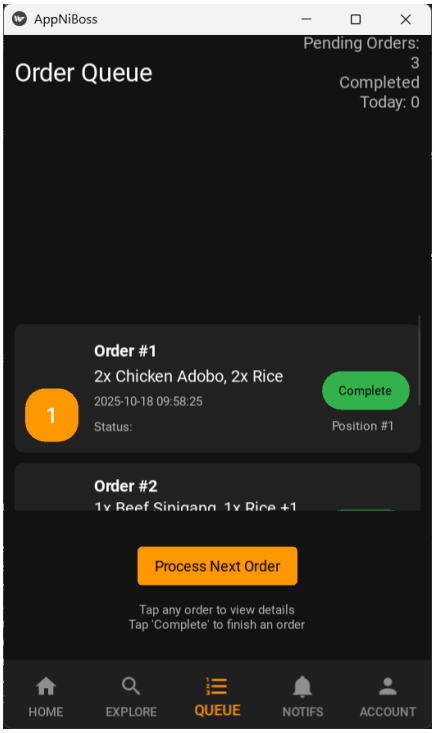

Figure 1.0 Order Queue

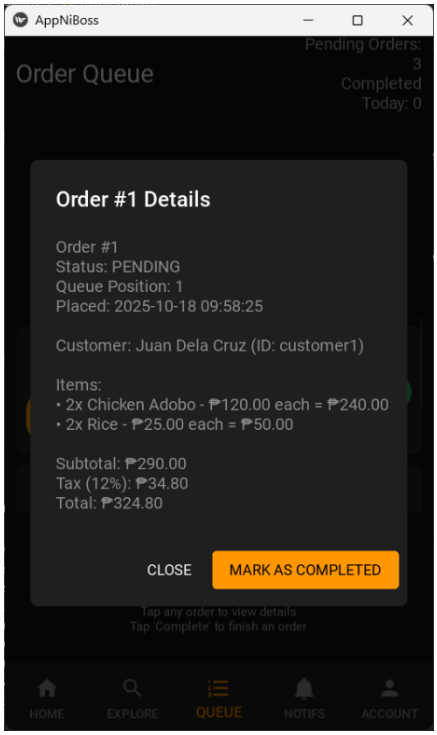

Figure 2.0 Order Details

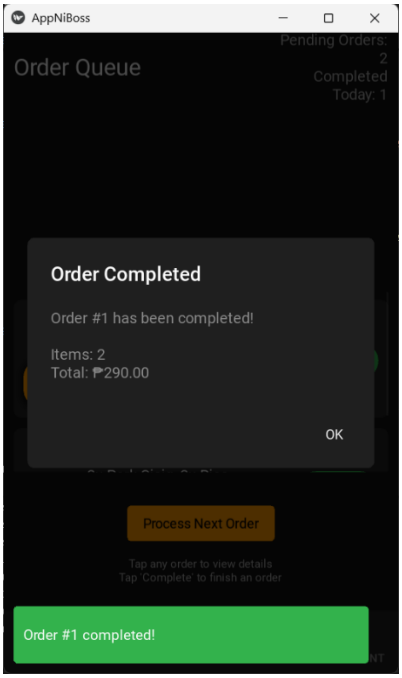

Figure 3.0 Order Completed

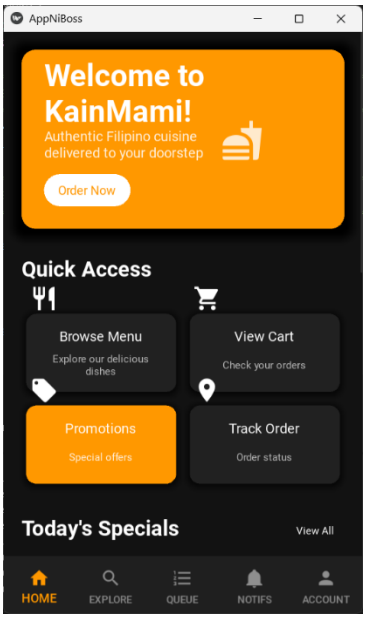

Figure 4.0 User Interface

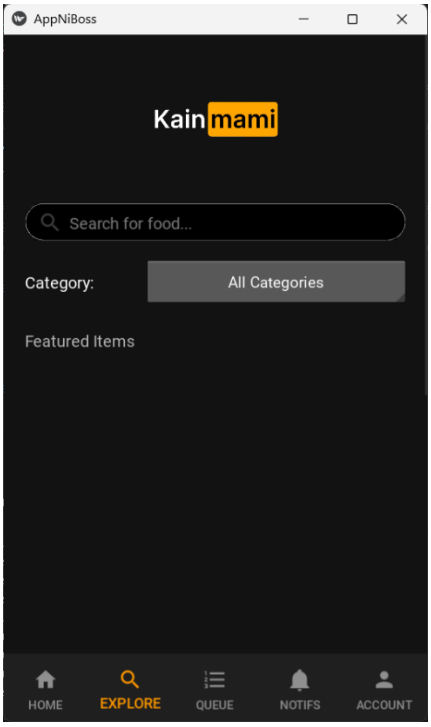

Figure 5.0 Search Engine

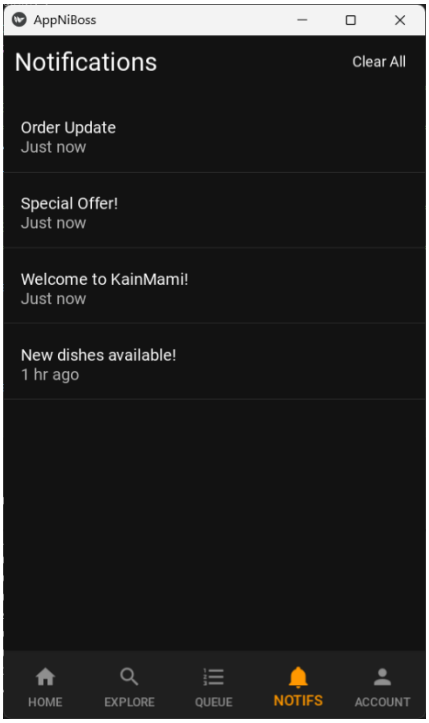

Figure 6.0 Notifications

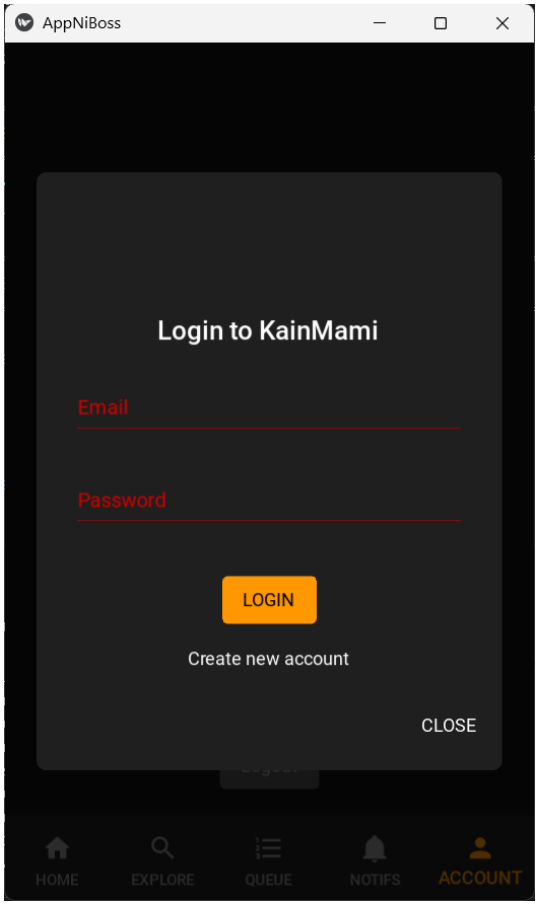

Figure 7.0 Log in interface

We are almost done with our program. We implement different types of methods, libraries, and techniques, combining the database and management system and data structure algorithms. The queue linear data structure is implemented in the food ordering system, and it is stored in our database. The order queue, which shows the implementation of the data structure algorithms, is where it shows the first order and enqueues other orders.

6. Conclusion

In conclusion, our program features a front end (Kivy) and a back end (queue and SQLAlchemy). The project was almost done with a little adjustment and revising to fully implement it for our client. Kivy is one of the useful libraries to have a quality user interface adjusting depending on the device you are using. The queue is implemented in the back end, giving the admin the ability to see what customers should prioritize and avoid delaying orders. SQLAlchemy is the one who is responsible for storing the data from both customer and admin. Without these three, the program will not be completed.