

Brief Description

This project aims to simulate an everyday restaurant. Wherein the customers orders and the waiter takes the customers' orders. Then the waiter will forward these orders to the chef, to be cooked. After cooking, the chef will give the dishes to the waiter and the waiter will serve the dishes to their respective customers. Then after eating the customers will pay the bill.

The project utilized arrays and structures to store different data such as customer number, orders, status, and etc. The data that are stored can be accessed or manipulated by the different users in the system.

The program starts with the main menu with 4 options: customer, waiter, chef, and exit. If the customer menu is chosen it will first ask if it is a new customer or an old customer. If the user is a new customer a customer number will be assigned to the user by the program and will immediately be directed to order. And if the user is an old customer the user must input its customer number and the program will search if the customer number is existing or not. The customer is only able to pay after the waiter serves the dishes. The waiter will then send the orders to the chef and the status of the ordered food will be 'pending'. And then after the dishes are cooked, the waiter can serve the cooked dishes for the customer to eat. Also, the waiter can view the orders that are currently not paid as well as the total income, number of customers paid, total number of customers, and current number of customers inside the restaurant. Lastly, the waiter can close the restaurant when all the customers have already paid. The chef will then cook the pending orders however, the chef can only cook the first N dishes (where $N \leq 3$). After cooking the pending orders, the chef will deliver the dishes to the waiter however, the chef can only deliver up to 3 dishes at a time.

This simulation has set limitations. The restaurant will be closed when 20 orders has been ordered or served, or 20 customers has been reached. Also, the restaurant can only hold up to 5 customers therefore a new customer is not allowed to enter the restaurant when 5 customers are currently inside the restaurant.