

Customer Service Operation System

(C.S.O.S)

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Intro to Project

- This Program is meant for businesses that mainly focus is dealing with customers for example gas stations and grocery stores. It is an operation system with the focus to be organized and user friendly. It will consist of three different classes
 - Business Class
 - Person Class
 - Employee Class
- This program I am making is my point of view of what needs to change in these type of systems because I have experience in both the cashier position and I have worked as a manager and in both scenarios there were plenty of situations that would have been way easier like when the cashier makes a refund the system would count it as a sale instead of doing the math so the manager would automatically know that there was a refund placed instead of having to go through all the extra work to try to figure out what went wrong.

When First starting the operation system it will ask if you are a new employee or current one,

- For New employees, the manager will have to come and login and input all your information and then it will generate a six-digit password for you, basically the manager is going to make you an ID

Worker ID Card

First Name:

Last Name:

Age:

Email:

Employee ID #:

Employee Password:

- For current employees you will have to login using your worker ID and password to enter the system

Once the login process is over it will function like any other cash register out there it will ask you for the type of item and then to enter the price for example.

- What type of item is it?
 1. Tobacco
 2. Non-Taxable
 3. Taxable
 4. Gas
- Type: 2
 - Non-Taxable \$10.05

Every time a customer comes it will store it into separate memory locations to allow the manager to get a detailed list of how many total customers came in for that shift and the number of products that where sold and total amounts for each product for example,

Closed Shift Report	
Business Name	
Address	
Date, Time	
Number of Customers	####
Types of sales	
Tobacco	\$amount
Non-Taxable	\$amount
Taxable	\$amount
Gas	\$amount
Total Shift Report	\$amount

Classes

Business Class (This class will be used for composition)

➤ Private

- Business class will have the private data for
 - Address
 - Date
 - Time
- It will have a private function that will ask for Address
- It will automatically figure out the date and time using the system

➤ Public

- It will have accessors and mutators
- Non-default constructor stating each variable

Person Class

➤ Private

- This Person Class will have the basic information of a person
 - String First Name
 - String Last Name
 - String Email
- It will have a private function that will ask for First, last name and email

➤ Public

- It will have accessors and mutators
- Non-default constructor stating each variable

Employee Class

➤ Private

- This Class will inherit from the Person Class and have the information for the employee
 - Int Worker ID
 - Int Age
 - String Position
- It will have a private function that will ask for Worker ID, Age and Position

➤ Public

- It will have accessors and mutators
- Non-default constructor stating each variable

Main Class

- This class will be the main class where mostly everything will be done
- First
 - It will ask for current employ or new employ
 - If it is a current employ, they would have to login in
 - If it is a new employ the manager is going to have to generate a five-digit ID with all the employs information that will be stored on to a .txt file, then the user ID and password will be stored in a vector
- After the login process is over the program will be in do while loop until the manager closes the shift
- It will have four vectors for types of products
 - Tobacco
 - Non-Taxable
 - Taxable
 - Gas
- It will allow the user to enter the amount and pick what type of product it is then it will send it to a function to do the math and return the total
- Functions
 - calculatTotal () this function will calculate the and return total

- printReport () this function will print Business name, address, date, time, and how many customers we had all shift how many types of products with amounts and total sales on a .txt like the previous example shown before in the introduction,

Closed Shift Report	
Business Name	
Address	
Date, Time	
Number of Customers	####
Types of sales	
Tobacco	\$amount
Non-Taxable	\$amount
Taxable	\$amount
Gas	\$amount
Total Shift Report	\$amount