

FOP2 Mini Project – 2021

Program Description

Cafe Point of Sale System

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This is a point of sale computer program for a coffee shop.

The program displays the menu from an inventory file, allows the user to process orders and save them to a transaction file.

The System Menu

The **menu items** are read from an **inventory csv file** in the format: *[item name], [price]*

Each menu item name and price is added to an **ArrayList of MenuItem objects**.

Item Number options

The user is **allowed** to enter as **many items** as they want from the list of menu items.

The Remove Option

The user **can delete** items from their order by selecting the this option and entering the **item order number** from the current order displayed.

The Payment Option

The user **complete the transaction** by selecting this option and entering the required information.

The program will then *process* the customers transaction using the following *steps*:

1. The total price is calculated from ordered item prices within **MenuItem ArrayList**.
2. The user selects *CASH or CARD* transaction.
 - If **cash transaction** then the **amount tendered** will be entered and **change** calculated from the price difference if any.

- If **card transaction** then the **card type** (Visa/Master) will be selected.
- 3. The program gets the transaction **timestamp** in the format (*dd/MM/yyyy HH:mm:ss*) and saves the transaction in an **ArrayList of TransactionItems**.

An appropriate **receipt** will then be generated on screen.

The Exit Option

When the coffee shop owner exits the system, all the days transactions are written to a **transaction.csv** file from the **ArrayList of TransactionItems**.

Transaction Formats

Cash Transaction format

[Date and time stamp], [Item/s Purchased], [Price], [Amount tendered],
[Change given]

Card Transaction format

[Date and time stamp], [Item/s Purchased], [Price], [Card Type]

References Used

- [Java Text File I/O Introduction](#)
- [Java ArrayList W3Schools](#)
- [Text-based Menu Driven Program in Java \[Part 2/3\]](#)
- [Java Clear Console Stack Overflow Answer](#)
- [Java Keyboard class for User Input Validation](#)
- [Java read files W3Schools](#)
- [Java write files W3Schools](#)
- [repeating sequence Stack Overflow Answer](#)
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