

Final Project Report

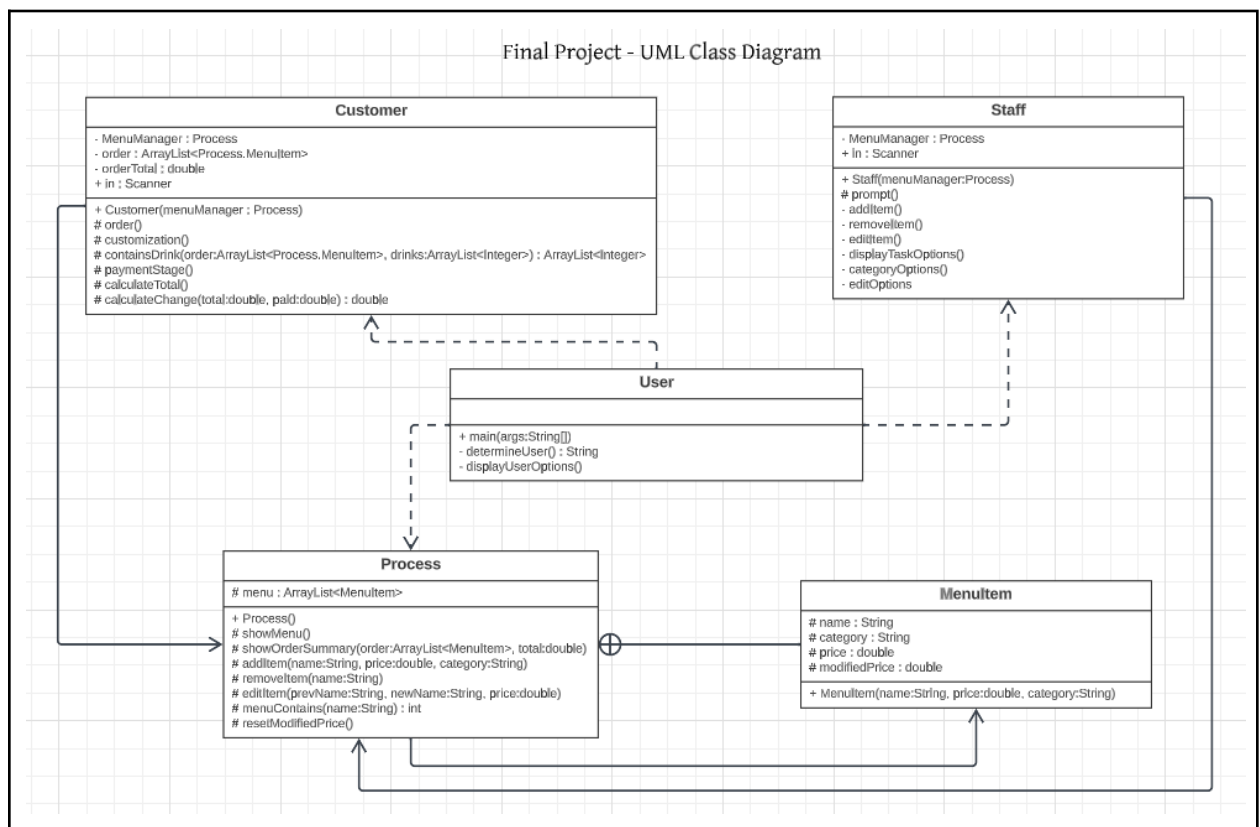
Project Introduction

This application is a simpler implementation of a coffee shop online ordering system or mobile application. It simulates some of the common operations in digital applications of cafes such as Starbucks, for both, the customers' needs and the staff's needs. Some features of this application, from the customers' perspective, allow them to select items from the cafe's menu, customize appropriate items, get an order summary, and pay for their purchases. From the staff's perspective, this application will allow users to manage the menu by adding new items, editing items, and removing items from the menu as well.

Objective

As previously stated, this application's objective is to allow customers to order online as usual, with options to add from the menu, customize, and pay. Additionally, staff users are given menu management responsibilities. As in real-world ordering systems, this application also has error/exception handling when invalid inputs are provided. One of the crucial objectives of this application is to provide a pleasant and seamless experience to all of its users.

UML Diagram



Results

Sample output for a customer:

```
Choose which user you are (Enter the corresponding integer)
1 - Customer
2 - Staff
3 - Terminate application

Your choice: 1

-----MENU-----

Drinks:
1) Hot Americano --- $4.0
2) Iced Americano --- $4.0
3) Hot Latte --- $4.0
4) Iced Latte --- $4.0
5) Cappucino --- $4.5
6) Chai Latte --- $5.0

Food:
1) Banana Bread --- $4.0
2) Sandwich --- $5.0

-----

Welcome!
Please enter the names of the items you'd like to order, separated by a comma:
banana bread, sandwich

Your order summary today is:

      QTY      Description      Price
      1      Banana Bread      4.00
      1      Sandwich          5.00

                                SUBTOTAL      9.00
                                TAX            0.92
                                TOTAL          9.92

Please enter the amount you'd like to pay (only enter the number): 20.00

The change you'll receive is $10.08

~~~~~

Thank you for stopping by. Have a great day!

Would you like to log in to the application again? (yes/no): no
```

Sample output for staff:

```
Choose which user you are (Enter the corresponding integer)
1 - Customer
2 - Staff
3 - Terminate application

Your choice: 2

Hello, staff! What would you like to do? (Enter the corresponding integer)
1 - Add a new menu item
2 - Edit an existing menu item
3 - Remove an existing menu item
4 - Log out of the staff profile

Your choice: 1

Enter the name of the new item: Hot Chocolate
Enter the price of this new item: 4.00
Choose the category of this new item: (Enter the corresponding integer)
1 - Drink
2 - Food

Your choice: 1

NEW MENU:

-----MENU-----

Drinks:
1) Hot Americano --- $4.0
2) Iced Americano --- $4.0
3) Hot Latte --- $4.0
4) Iced Latte --- $4.0
5) Cappucino --- $4.5
6) Chai Latte --- $5.0
7) Hot Chocolate --- $4.0

Food:
1) Banana Bread --- $4.0
2) Sandwich --- $5.0

-----

What would you like to do next? (Enter the corresponding integer)
1 - Add a new menu item
2 - Edit an existing menu item
3 - Remove an existing menu item
4 - Log out of the staff profile

Your choice: 4
```

Detailed View

- Customers can select items from the menu.

```
-----MENU-----  
  
Drinks:  
1) Hot Americano --- $4.0  
2) Iced Americano --- $4.0  
3) Hot Latte --- $4.0  
4) Iced Latte --- $4.0  
5) Cappucino --- $4.5  
6) Chai Latte --- $5.0  
  
Food:  
1) Banana Bread --- $4.0  
2) Sandwich --- $5.0  
  
-----  
  
Welcome!  
Please enter the names of the items you'd like to order, separated by a comma:  
banana bread, sandwich
```

- Customers can customize their drinks.

```
-----  
  
Welcome!  
Please enter the names of the items you'd like to order, separated by a comma:  
iced americano  
  
Which size would you like 'Iced Americano' in? (small +$0 / medium +$1 / large +$2)  
Please input one of the following (small/medium/large): medium  
  
Would you like whipped cream on top of 'Iced Americano' for an additional $1? (yes/no) : yes
```

- A summary of the order is displayed, including the total cost.

```
-----  
  
Welcome!  
Please enter the names of the items you'd like to order, separated by a comma:  
iced americano, banana bread  
  
Which size would you like 'Iced Americano' in? (small +$0 / medium +$1 / large +$2)  
Please input one of the following (small/medium/large): medium  
  
Would you like whipped cream on top of 'Iced Americano' for an additional $1? (yes/no) : no  
|  
Your order summary today is:  
  
      QTY      Description      Price  
      1      Iced Americano      5.00  
      1      Banana Bread      4.00  
  
                        SUBTOTAL      9.00  
                        TAX      0.92  
                        TOTAL      9.92
```

- Cash payments will be taken and the change is calculated.

```
Your order summary today is:

      QTY      Description      Price
      1      Iced Americano      5.00
      1      Banana Bread        4.00

                                SUBTOTAL      9.00
                                TAX           0.92
                                TOTAL          9.92

Please enter the amount you'd like to pay (only enter the number): 10.00
|
The change you'll receive is $0.08
```

- Error handling when the customer pays less than what they owe.

```
Your order summary today is:

      QTY      Description      Price
      1      Iced Americano      4.00
      1      Banana Bread        4.00

                                SUBTOTAL      8.00
                                TAX           0.82
                                TOTAL          8.82

Please enter the amount you'd like to pay (only enter the number): 5.00

Insufficient money was provided. Your total is $8.82
  Please enter the amount you'd like to pay (only enter the number): 8.00

Insufficient money was provided. Your total is $8.82
  Please enter the amount you'd like to pay (only enter the number): 9.00

The change you'll receive is $0.18
```

- Error handling when the customer chooses something that is not on the menu.

```
Welcome!
Please enter the names of the items you'd like to order, separated by a comma:
sourdough loaf, banana bread
|
Warning: sourdough loaf is not on the menu.

Your order summary today is:

      QTY      Description      Price
      1      Banana Bread        4.00

                                SUBTOTAL      4.00
                                TAX           0.41
                                TOTAL          4.41
```

- Exception handling when the customer provides an invalid input.

```
Choose which user you are (Enter the corresponding integer)
1 - Customer
2 - Staff
3 - Terminate application

Your choice: hello
An error occurred due to an invalid choice. You will proceed as a customer.
```

- Staff can add new items to the menu.

```
Hello, staff! What would you like to do? (Enter the corresponding integer)
1 - Add a new menu item
2 - Edit an existing menu item
3 - Remove an existing menu item
4 - Log out of the staff profile

Your choice: 1

Enter the name of the new item: Hot Chocolate
Enter the price of this new item: 4.00
Choose the category of this new item: (Enter the corresponding integer)
1 - Drink
2 - Food

Your choice: 1
|
```

- Staff can edit existing menu items.

```
Hello, staff! What would you like to do? (Enter the corresponding integer)
1 - Add a new menu item
2 - Edit an existing menu item
3 - Remove an existing menu item
4 - Log out of the staff profile

Your choice: 2

-----MENU-----

Drinks:
1) Hot Americano --- $4.0
2) Iced Americano --- $4.0
3) Hot Latte --- $4.0
4) Iced Latte --- $4.0
5) Cappuccino --- $4.5
6) Chai Latte --- $5.0

Food:
1) Banana Bread --- $4.0
2) Sandwich --- $5.0

-----

Please enter the name of the item you'd like to edit:
banana bread
Which of the following properties would you like to edit? (Enter the corresponding integer)
1 - Item name
2 - Item price
2
What is the new price of 'banana bread'? 3.50
```

- Staff can remove menu items.

```
Hello, staff! What would you like to do? (Enter the corresponding integer)
1 - Add a new menu item
2 - Edit an existing menu item
3 - Remove an existing menu item
4 - Log out of the staff profile
```

Your choice: 3

Enter the name of the item to be removed from the menu: Sandwich

NEW MENU:

-----MENU-----

Drinks:

- 1) Hot Americano --- \$4.0
- 2) Iced Americano --- \$4.0
- 3) Hot Latte --- \$4.0
- 4) Iced Latte --- \$4.0
- 5) Cappucino --- \$4.5
- 6) Chai Latte --- \$5.0

Food:

- 1) Banana Bread --- \$4.0
