

# LAB211 Assignment

Type:  
Code:  
LOC:  
Slot(s):

Long Assignment  
J1.L.P0023  
175  
5

## Title

Create a Java console program to manage a Fruit Shop (Product and Shopping).

## Background Context

Fruit Shop management system in java is basically developed for manage the Fruit Shop. In the Fruit Shop, product and Shopping management is very important. By making system is computerized it make possible to reduce effort, work is efficient and increase their revenue opportunities for shop owner.

## Program Specifications

The program provides shop owners tools to run their business effectively. The program's functions as below:

### 1. Main Screen as below:

#### FRUIT SHOP SYSTEM

1. Create Fruit
2. Update Fruit
3. View orders
4. Shopping (for buyer)
5. Exit

(Please choose 1 to create product, 2 to view order, 3 for shopping, 4 to Exit program).

### 2. Function details:

#### 2.1. For Fruit Shop owner

##### Create product (Fruit):

- **A Fruit has attributes:** Fruit Id, Fruit Name, Price, Quantity and Origin.
- From "Main Screen", use select item (1) to create Fruit (Fruit Id must be enter). After each Fruit is created, the system shows message: Do you want to continue (Y/N)? User chooses Y to continues, if you chooses N, the program returns main screen and display all Fruits what are created.

##### View orders

- To view orders list, who buy and how many product

Customer: Marry Carie

Product	Quantity	Price	Amount
---------	----------	-------	--------

1. Apple	3	1\$3\$	
----------	---	--------	--

2. Mango	2	2\$	4\$
----------	---	-----	-----

Total: 7\$

Customer: John Smith

Product	Quantity	Price	Amount
---------	----------	-------	--------

1. JackFruit	3	3\$	9\$
--------------	---	-----	-----

2. Mango	2	2\$	4\$
----------	---	-----	-----

Total: 13\$

## 2.2. Update Fruit

- o Enter Fruit ID, update Quantity if it exists, otherwise ask for create product (Yes/No: User choices 'Yes' to go to option 1, 'No' returns main screen.

## 2.3. Shopping

- Customer selects item 3, the program displays all fruits. For example:

List of Fruit:

++ Item ++	++ Fruit Name ++	++ Origin ++	++ Price ++
1	Coconut	Vietnam	2\$
2	Orange	US	3\$
3	Apple	Thailand	4\$
4	Grape	France	6\$

To order, customer selects Item, for example: when customer selects item 1, the program shows:

**You selected: Coconut**

**Please input quantity:**

After customer inputs quantity of fruit, the program shows message: Do you want to order now (Y/N). If customer selects N, the program returns to List of Fruit to continue ordering. If select Y, the program displays by Quantity descending order:

**Product | Quantity | Price | Amount**

**Coconut    3        2\$6\$**

**Total: 6\$**

Input your name:

Customer inputs his/her name to finish ordering. The program returns main screen.

## Technical Requirements

1. Using Object-Oriented programming style.
2. Use only core Java functions and classes.
3. Only use ArrayList and HashTable to store data (is required).

### Guidelines

Slot	Task	Description
1	<ul style="list-style-type: none"><li>- Code Design</li><li>- Create Fruit</li></ul>	<ul style="list-style-type: none"><li>- Student should create Fruit class with some its attributes: Fruit Id, Fruit Name, Price, Quantity and Origin</li><li>- Using ArrayList to store the Fruit</li></ul>
2	<ul style="list-style-type: none"><li>- Shopping</li></ul>	<ul style="list-style-type: none"><li>- Using ArrayList to store items that customer bought fruit and using HashTable to store order of customer.</li></ul> <p>Eg: <code>hashTable.set(&lt;customer name&gt;,&lt;list of items bought&gt;)</code></p>
3	<ul style="list-style-type: none"><li>- Shopping</li></ul>	
4	<ul style="list-style-type: none"><li>- View order</li></ul>	
5	<ul style="list-style-type: none"><li>- Review program</li></ul>	