

Assignment #1 (100 Points)
Due on May 15

For this assignment, you will create a POS system that will have the capability to make a purchase, make a return, add inventory and view reports.

Process:

When app is running:

- Display a welcome message where you will display options and have the user select the following options.

When 1 is selected:

- The whole function for making a purchase, calculating the total price and displaying the total price and giving user thanks for shopping should be implemented in either inheritance or polymorphism
- Retrieve all the items from the array or list
- Ask the user what item they want to buy through Item Name
- Save the item name and price that the user selects to another array or list
- Ask the user if anything else
 - If the user wants anything else, then repeat the question.
 - If the user doesn't want anything else, then calculate the total price by looping through the array or list
 - Display the total
 - Clear the array
 - Save the total in another array or that will consist of the price total
 - Give thanks to the user for shopping
 - Return to the Main Menu

When 2 is selected:

- The whole function for making a return, calculating the total price and displaying the total price and giving user return is completed should be implemented in either inheritance or polymorphism
- Retrieve all the items from the array or list
- Ask the user what item they want to return through Item Name
- Save the item name and price that the user selects to another array or list
- Ask the user if anything else
 - If the user wants anything else, then repeat the question.

- If the user doesn't want anything else, then calculate the total price by looping through the array or list
- Display the total that they will be refunded
- Clear the array
- Give thanks to the user for shopping
- Return to the Main Menu

When 3 is selected:

- Utilize either array or list to save or retrieve the product name and price
- Display a list of products retrieved from the array or list.
- Add the options to either add or remove product
- **When 1 is selected**
 - Ask user for item name and price
 - Save it to an array or list
 - Return to Manage Inventory Page
- **When 2 is selected**
 - Ask user for item name that you want to remove
 - Remove it from the array or list
 - Make error exception for items not found
 - Return to Manage Inventory Page
- **When 3 is selected**
 - Go back to the Main Menu Page

When 4 is selected:

- Retrieve price total from Reports array or list
- Display number of customer that you had for the session (Hint: You can use `arrayname.Count()` to retrieve the total elements in the array or list)
- Display total profits by computing all the values using for loop
- Have user click any key to return to the main menu.

Output:

Welcome to Target! Choose the following options:

- 1) Make a Purchase
- 2) Make a Return
- 3) Manage Inventory
- 4) View Report

If 1 is selected, then output this

Which product would you like to purchase?

/* Retrieve items from array or list */

Item Name	Price
Lego Star Wars	\$25
Cookie	\$5

Which items would you like to buy? _____ (Item name goes here)

Anything else? _____ (Y/N)

If Y is selected,

/*Repeat the question */

If N is selected,

/* Compute the total and display the total*/

Your Total is _____.

Thank you for shopping at Target!

/* Return to Main Menu */

If 2 is selected, then output this

Which product would you like to return?

/* Retrieve items from array or list */

Item Name	Price
Lego Star Wars	\$25
Cookie	\$5

Which items would you like to return? _____ (Item name goes here)

Anything else? _____ (Y/N)

If Y is selected,

/*Repeat the question */

If N is selected,

/* Compute the total and display the total*/

Your Refund total is _____.

Thank you for shopping at Target!

/* Return to Main Menu */

If 3 is selected, then output this

Manage Inventory

The following items is currently stored in the system:

/* Retrieve values from the array or list */

Item Name	Price
Lego Star Wars	\$25
Cookie	\$5

- 1) Add New Item
- 2) Remove Item
- 3) Main Menu

If 1 is selected, then output this

Add Item:

Item Name _____

Item Price _____

/* Save it to an array or list */

Added Successfully!!

/* Then go back to Manage Inventory Page */

If 2 is selected, then output this

Remove Item:

Item Name to remove: _____

Item Removed Successfully

If item is not found

Item Not Found! Please Try Again!

/* Then go back to Manage Inventory Page */

If 4 is selected, then output this:

Reports:

Total Customers: _____

Total Profit: _____

Click any key to go back to the main menu