CS2453: Visual Basic
VB10: OOP- Inventory on File

Objectives

1. Use Text Files- Open, read from, write to and close text files
2. Create applications using OOP
3. Create a class
4. Create objects
5. Use Collections

Situation

Refer to the Inventory Item Class question (Question 7 on Page 792) of your text book. In addition the properties listed in the question, you are to also include an Update member method in the class definition. This method will be used to update the onHand property of the class.

> You are to design an application that will include a form that will offer the choices to add, update or display Inventory items. (Note the change: The text book only asks you to add and display to the Inventory collection).You can display the choices as either menu options or buttons on the form. If the user wishes to Update, he can modify values of any property except the InvNumber property. If the user wishes to display or Update existing Inventory items, he should enter the InvNumber that can be used to pull up existing data. If that particular InvNumber does not exist in the collection, the user should be notified that the InvNumber does not exist
>
> You are to read from and write to text files in this assignment. When you run the application, the collection of Inventory objects should be populated using a text file. You are to create a text file named Inventory.txt that will initially have data for 5 Inventory items. Data stored in the text file should be meaningful. Read the data from the text file into the collection and then use the form to add new items to the collection, update or display existing items. The requirements for Adding, Updating and Deleting remain the same as the previous assignment.
>
> You will also include on the form the choice to save the existing contents of the Collection to the Inventory.txt text file. Also, include a check to see that if a form is closed or exited from(in other words, if the user closes the form and tries to exit without

clicking on the Exit button or Exit menu option), the program will check to see if any new changes have been made to the Collection since the last save and if so, save the changes to the text file before the form is closed or exited from.

You are to design the form independently and make sure that the interface is as user friendly as possible.

Specifications

1. Recurring Specifications that **are** required for the OOP - Inventory Class program
    1. The form must be renamed and the title changed to reflect your YourFirstName and YourLastName .(If Pat Programmer was creating this program, it would be **Inventory on File by Pat Programmer**)
    2. Code must be grouped and commented in compliance with this course's programming standards.
    3. ALL files, forms, and controls MUST be renamed.
    4. Option Strict and Option Explicit must be ON
    5. ALL controls on the form must be in logical TabOrder using TabIndex in the Properties window for each control.
    6. Data types for variables and constants must be the most efficient.
    7. Use With..End With if and when appropriate.
    8. Use ToolTips
    9. Various erroneous inputs will be tested during the grading process. If any of them result in the program halting of crashing, the **maximum** credit will be 50%. If submitted by the initial deadline, it may be resubmitted until the final deadline. Work that is late or resubmitted is subject to10% penalty, but that might be better than 50% or a 0.

Assignment Submission

Zip the folder and submit it using the DropBox for the assignment.

Program Grading Criteria

Grading Chart

Item	Possible Points	Points Off	Comments
Main Form			
Formatting/layout of Form	10		
Tab Order set	3		
Options to Add, Update and Display	8		
Option to save to file	4		
Class Definition			
Properties and property procedures defined	10		
Method for Updation	5		
Data added to, updated and displayed using Collection	6		
Object/s created	4		
File Handling			
Data file created	6		
Data read from file into Collection Data	6		
read from Collection into file	5		
Check to see if data needs to be saved before form exit	5		
Overall Items			
Documentation	5		
Efficiency of code	6		
Controls renamed and programming specifications adhered to	7		
Total	90		
Late/Resubmit (10%)	-4		
Final Total			