# CS2453: Visual Basic
# VB6: Shopping Cart System

## Objectives

- Create and display multiple forms.
- Efficiently use standard modules.
- Create and code menus, submenus and context menus

## Situation

The Shopping Cart program is an adaptation of 2. Shopping Cart on p. 462-464. You are to also include a ContextMenu on the main form. The Context Menu should include the options for Print Books and Audio Books. The program must also begin from a Standard Module and not a form.

## Specifications

1. Recurring Specifications that are required for all programs.
    1. The form must be renamed and the text changed to Shopping Cart by YourFirstName YourLastName. (If Pat Programmer was creating this program, it would be **Shopping Cart 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. An AcceptButton and a CancelButton must be assigned appropriately.
    6. ALL controls on the form must be in logical TabOrder.
    7. All buttons and labels (before TextBoxes) must have AccessKeys.
    8. Form's StartPosition property must be CenterScreen.

9. Values from the input fields MUST be assigned to variables and the variables used in calculations.
10. The text property of Labels must be changed so that Label1 (or similar name) does not appear at runtime.
11. No class level variables unless specifically allowed.
12. Data types for variables and constants must be the most efficient.
13. Use With..End With if and when appropriate.
14. ToolTips
15. 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 to a 10% penalty, but that might be better than 50% or a 0.

2. Recreate the user interface shown above. For this program, your forms must replicate the examples.
3. Constants are to be used for the book price values shown on p 462 and for the tax and shipping charge. Declare these in the Standard Module so that if they shop needed to change them in the future, they would all be in one location and easy to find.
4. The StartUp object (where the program begins) must be the Standard Module and not the main form.
5. Add menus as shown in the images above. At this point, only the main form is required to have a menu.
6. The ContextMenu should be included with the Print Books and Audio Books options. **Do not rewrite the code for these menu items**: either call the Event Handlers or modify the Handles Clause.
7. The About menu will bring an About Box with the name of the program and the programmer's name.
8. Currency values should all be formatted as currency values and right aligned in the output labels.

9. The main form's StartPosition property must be CenterScreen. The subforms (Print Books and Audio Books) must have a StartPosition of CenterParent.
10. An AcceptButton and CancelButton cannot be set (at least not easily at this point) for the main form because of our use of menus. Only set these properties on the subforms.
11. Since the user is not making any input, only Labels are to be used.
12. ListBoxes are to be used on each of the subforms. The user can click on one of the items to select.
13. Coding must be EFFICIENT. It is suggested that you flowchart the validations and calculations to determine all of the possibilities before actually writing the code.

## Assignment Submission

Zip the entire Shopping Cart folder and submit it using Moodle's DropBox for Assignment 6.

## Program Grading Criteria

### Grading Chart

| Item | Possible Points | Points Off | Comments |
|---|---|---|---|
| Recurring Specifications (15 items listed above) | 10 | | |
| Print Books form including GUI and coding | 5 | | |
| Audio Books form including GUI and coding | 5 | | |
| Main form including GUI and coding | 6 | | |
| Main Module including using it as the Startup object | 4 | | |
| Use of constants | 2 | | |
| MenuStrip and coding | 4 | | |
| Context menu and coding | 3 | | |
| About Box | 2 | | |
| Formatting of output labels | 3 | | |
| Correct Calculations | 4 | | |
| StartPostion of forms | 3 | | |

| | | | |
|---|---|---|---|
| Use of ListBoxes | 4 | | |
| Remove Button coding | 2 | | |
| Interface design, spelling and grammar | 3 | | |
| Efficiency of code | 5 | | |
| **Total** | 65 | | |
| **Late/Resubmit (10%)** | -7 | | |
| **Final Total** | | | |