CS2453: Visual Basic
VB2: Theater Revenue

Objectives

- Effectively create, use and type variables and constants.
- Gather input.
- Create mathematical statements to solve a problem.
- Group controls.
- Incorporate keyboard access including tabbing.
- Utilize the AcceptButton and CancelButton
- Write simple exception handlers.
- Locate and debug logic errors

Situation

See p. 204, "4.Theater Revenue" for the basics of the assignment. Include enhancements as specified below:

Specifications

1. The form must be renamed and the text changed to Theater Revenue by YourFirstName YourLastName. (If Pat Programmer was creating this program, it would be
   Theater Revenue 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. Set a logical TabOrder for ALL controls on the form.
7. All buttons and labels (before TextBoxes) must have AccessKeys.
8. Using the GroupBox control create an input area using appropriate labels and TextBoxes. It will allow the user to input the required values.
9. Create a Label to display the total number of tickets sold (both Adult and Child). The output to be displayed must use concatenation and should be in the format:
   "Total Tickets Sold Today: <total count>".

where <total count> is be calculated from the values entered by the user.

10.   Create a Label to display the current date in Long Date format. Use the LOAD event to populate this field.

11.   Create three buttons: Calculate Ticket Revenue, Clear, and Exit. Write appropriate code for each button.

12.   Use a properly named constant for the percentage kept by the theater. It MUST be a single. Include any required coding to assure its data type is a single.

13.   Values from the input fields MUST be assigned to variables and the variables used in calculations.

14.   When displaying the gross and net Revenue values, the amounts must be displayed as currency ($15,000.00)

15.   Exception handler/s with the appropriate message/s must be included. If the program crashes because of invalid input or processing, it will be eligible for a MAXIMUM of 50% credit, maybe less.

16.   Coding:
- When the user clicks on the Calculate button, the total count of tickets sold, Gross and Net Revenue values will be computed and displayed in the appropriate labels.
- When the user clicks on the Clear button, the contents of the text boxes and the labels used for displaying Revenues will be cleared. The focus is returned to the first TextBox.
- When the user clicks on the Exit button, the program ends.
- When the cursor is in one of the four TextBoxes, the background color will be Yellow. When the cursor is no longer in the TextBox, it will return to White. Hint: GotFocus and LostFocus events.

Assignment Submission

Zip the entire Theater Revenue folder and submit it in the DropBox for the Assignment

Program Grading Criteria
Grading Chart

Item	Possible Points	Points Off	Comments
Program is properly commented including comments at the beginning of the coding page	4		
Option Strict, Option Explicit must be ON	3		
All files, forms, and controls are renamed, Form's text includes programmer's names	2		
GroupBox with TextBoxes and Labels	2		
Access keys for all buttons and labels preceding TextBoxes	3		
AcceptButton and CancelButton	2		
Logical tab order for all controls	3		
Changing of background color when TextBoxes have and lose focus	3		
Exception Handler/s (Try Catch)	4		
Correct naming and use of a Constant.	2		
All TextBox values assigned to variables using most efficient data types.	4		
Gross and Net Revenue values formatted as currency	2		
Total Tickets Sold displayed in a label using concatenation.	2		
Coding for Clear button	2		
Label to display the current date (Long Date format)	1		
Coding for the Load Event Procedure	2		
Coding for Exit button	1		
Coding for Calculation	4		
Interface design, spelling and grammar	2		
Efficiency of code	2		
Total	50		
Late/Resubmit (10%)	-5		
	Final Total		