

CS 1400 Fundamentals of Programming

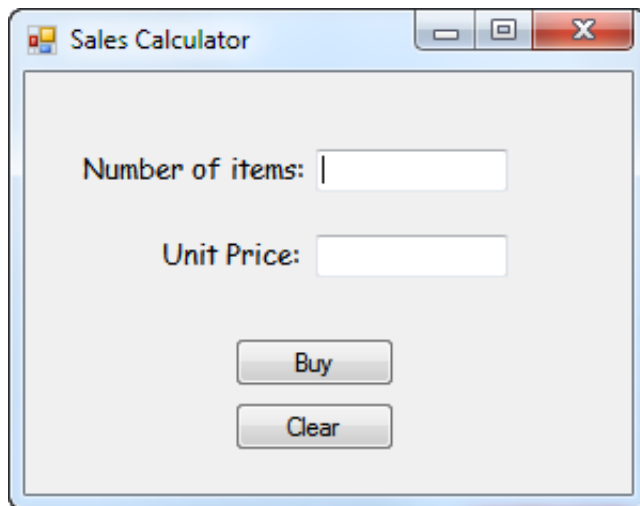
Programming Project 5: Sales Invoice Application

Objective:

At the completion of this project, you will have created an application that

- contains a simple class definition
- creates an object of the class
- sends messages to the object to store and retrieve information, and
- uses a graphical user interface

Project Description:



In this project you will create a class that models a simple Sales Invoice. All of the data for a sale and all of the business logic required for your program will be contained in your **SalesInvoice** class. At a minimum, your class should contain

- A variable to hold the number of items sold, and
- a variable to hold the unit price for these items.

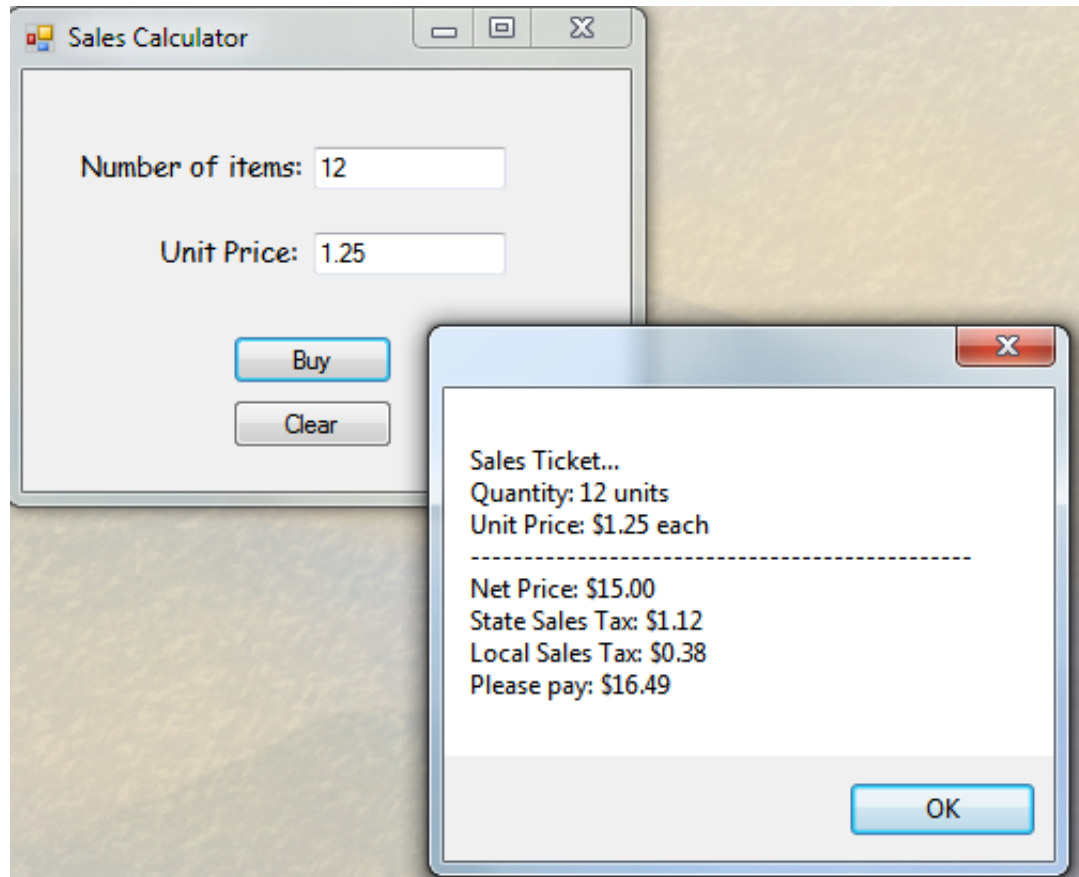
Your class should also contain the methods needed by the Form class to create an invoice and present it to the user. Design your user interface so that it offers the functionality shown on the left. Your interface should be intuitive and easy to use.

Program:

Your program should work as follows:

- The user will enter in some number of items and a unit price.
- When the user clicks on the **Buy** button, your program should
 1. Create a SalesInvoice object.
 2. Store the values entered by the user in your SalesInvoice object using the appropriate setters.
 3. Using methods in your SalesInvoice class, calculate the net sales

- value, the amount of state and local tax due, and the gross sales value. Use a state tax rate of 7.45% and a local tax rate of 2.5%.
4. Display an invoice for the user, similar to the one shown here. I used a MessageBox to show this invoice.



- The Clear Button will clear the Text Boxes.
- You will have a Menu Strip with an Exit and an About Menu item.

You can find some hints for doing this program [here](#)

Format and document your code in accordance with the course style guidelines. Include a file prologue identifying you as the author. Be sure that you have complete method prologues for every method that you write. Submit your project using the instructions outlined in the Course Syllabus, Programming Projects section.

File(s) to Submit:

Place your complete project folder into a zip file and name the zip file proj_05_your-initials_V1.o.zip. For example, I would name my file proj_05_RKD_V1.o.zip. Submit this assignment as Project #5 on Canvas.

Grading Criteria

Description	Points	Your
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	possible	points
Project meets grading guidelines: o Source code files contain a declaration that you did not copy any code o Project has been submitted to Canvas o Code meets style guidelines o Code is properly documented	5	
Your project contains a SalesInvoice class that encapsulates all of the data and the methods required to model a sales invoice, as outlined in the specifications above.	10	
Your user interface works as instructed and your program calculates and displays the required information correctly.	10	
Your program correctly uses an object of the SalesInvoice class to store the sales data and calculate needed values. There is a clear separation of Form operation and business logic in your program.	10	
Early Bonus (+5 pts) or late penalty (-20% per day)		
Total	35	

Sample Program

You can get an executable that runs correctly [here!](#)