

## STUDENT ACTIVITY 2.2 KEY: FORMS INHERITANCE

MTA Course: Windows Development Fundamentals

Topic: Understand Windows Forms inheritance

File name: WinDevFund\_SA\_2.2\_Key

### Lesson Objective:

**2.2:** Understand Windows® Forms inheritance. *This objective may include but is not limited to:* implementing forms inheritance in applications for visual inheritance.

### Resources, software, and additional files needed for this lesson:

- Microsoft Visual Studio® 2008, or
  - Microsoft Visual Basic® 2008, Express Edition  
(<http://www.microsoft.com/express/downloads/#2008-Visual-Basic>)
  - Microsoft Visual C#® 2008, Express Edition  
(<http://www.microsoft.com/express/downloads/#2008-Visual-CS>)

### Directions to the student:

Answer each of the following questions.

### Content

#### Part I:

Consider the following situation and answer the questions that follow:

*An application to track purchase and sales data requires four forms. The first form, frmTransaction, needs to display basic summary information about a transaction from a database. Two additional forms, frmSalesDetail and frmPurchaseDetail, display the same information as frmTransaction, plus additional details. A fourth form does not draw from the database and allows the user to select a report to print.*

1. Identify the base form.  
**frmTransaction**

2. Identify the inherited form or forms.  
**frmSalesDetail and frmPurchaseDetail**
3. Write the class statement(s) necessary to set up the desired forms inheritance relationships.
  - a. **Visual Basic:**  

```
Public Class frmSalesDetail Inherits
    frmTransaction
Public Class frmPurchaseDetail Inherits
    frmTransaction
```
  - b. **Visual C#:**  

```
public class frmSalesDetail : frmTransaction
public class frmPurchaseDetail : frmTransaction
```
4. If a change is made to the base class, what should you do to update the inherited form(s)?  
**Build the project (by selecting Build Solution from the Build menu).**

## Part II:

Using Visual Studio, create the forms described below using forms inheritance. Note that for this assignment, the forms do not need any source code beyond what is required to implement inheritance. For example, the menu items do not need have any associated event handlers or other functionality.

Two forms share the same menu bar with a handful of standard Windows menu items (File: New, Open, and Save; Edit: Copy, Cut, and Paste, etc.). They also share two buttons (OK and Cancel) and TextBoxes (with Labels) for a person's name, address, and phone number. In addition...

- One form also includes business contact information, such as company name, fax number, and job title.
- The other form includes personal information, such as gender, birth date, and marital status.

**Answers will vary, but the forms should utilize inheritance to implement the shared features.**