# C# Application Development

### **Assignment Two Requirements**

Assignment Date: Week 2

**Due Date:** Day before next class @ 11:59 pm

### **Assignment Objective**

Creating and initializing classes using the various techniques discussed this week.

#### Your Task

Write a console application that emulates the screen shot shown below. The program asks the user for input (top section of the screenshot), then creates three instances of Contact objects, then adds them to an array and then outputs the contents to the console (bottom part of the screenshot).

```
Enter Contact Information
First Name: Kevin
Last Name: Gill
Age:
Address: 45645 Muffin Dr.
City:
             Sunnydale
Province: BC
 Postal Code:V4T Y8U
First Name: Tanya
Last Name: Sounders
Age: 54
Age: 54
Address: 103-4590 Vision Pl
City: Charming
City: Cha
Province: BC
 Postal Code:V6H I8O
First Name:
 Last Name: Boss
Address: 1207-5566 Blank St
City: Valleyville
Province: AB
 Postal Code:M4R Y6Y
Contacts Entered:
Kevin Gill (42)
 15645 Muffin Dr
Sunnydale BC V4T Y8U
Tanya Sounders (54)
103-4590 Vision Pl
Charming BC V6H I8O
Boss (23)
1207-5566 Blank St
Valleyville AB M4R Y6Y
```

#### Requirements:

- 1) Name your project COMP3602Assign02.
- 2) Create a class named Contact in a separate source file with the following fields:

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FirstName

LastName

Age

Address

City

Province

PostalCode

- 3) Create property methods for each field
- 4) Write any appropriate constructor or constructors
- 5) Override the ToString method to return LastName, FirstName using an interpolated string
- 6) Prompt and collect data for three contacts from the user
- 7) Use the collected data to create and populate three instances of the Contact class
- 8) Populate the objects using the **three** techniques discussed in class this week:
  - 1. For the first Contact, create an empty object and then populate the data via properties
  - 2. For the second Contact, call a parameterized constructor
  - 3. For the third Contact, use the Object Initializer syntax
- 9) Add the Contact objects to an array
- 10) Output the contents of the Contact objects by iterating through the array

(check out the <u>foreach</u> loop)

Format the output as follows (Canadian Postal standards plus age):

FirstName LastName (Age)

Address

City Province PostalCode

(one space between City and Province, two spaces between Province and Postal Code)

- 11) Place the output code (all code that is outputting text to the console) in one or more utility methods in a dedicated class (in a separate source file)
- 12) Set the Console Title property as shown in the screenshot above (using your Student Number)

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# **C# Application Development**

### For all your code, be sure to:

- Use ample spacing
- Comment intelligently

## Marking Criteria (Out of 12):

- Correct solution naming conventions (1/1)
- Contact class design (3/3)
- Output is formatted correctly (2/2)
- Problem solution is reasonable and efficient (4/4)
- Coding style (2/2)

### Please Hand In:

1. Zip your entire project and upload the zipped file to Assign02 in the Learning Hub.

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