

## Assignment 9

(Points: 100) Chapter 21, Collections; specifically, the StringCollection Class

### Set Up

1. The assignment instructions are in this document, not in the text. **StringCollections** are not covered in our text, but more than sufficient details are available on the internet.

Research time! Our current (5<sup>th</sup> Edition) text, as well as its predecessor, discusses a String Collection Editor back in Chapter 15; however, not even an honorable mention is made to a **StringCollection** class as a viable means of controlling data. So, we will.

Instructions consist of following the material found in Chapter 21, where useful, and researching the internet to develop a **StringCollection** class. This class has been available at least since Visual Studio 2010, but it takes “using” it to make the IDE recognize its existence. My opening lines of preprocessing directives are as follows. The idea of the project is to use strings; I chose cities, but you may use any theme you wish (surprise me) as long as it uses strings.

```
using System;
using System.Collections.Generic;
using System.Linq; using
System.Text; using
System.Collections;
using System.Collections.Specialized;

namespace StringCollectionCities
{
    class Program
    {
        // Create a StringCollection
        private static StringCollection favoriteCities = new StringCollection();
        private static string selection;
```

As an aside, the last line declaring the variable “selection” was added because I used several methods, and a couple of them needed to “see” the variable; hence, it was moved to a global status.

### Minimum Required Features

1. Create a menu, not a large one, that accommodates, *at minimum*, **adding** a string to the StringCollection, **removing** a string at a designated (by the User) index (location) and **exiting** the application. with an “x” or “X”.
2. If no data changes are made and the User goes directly to exiting, as shown in Exhibit B, below. **15-point special Assessment** if missing or not running as shown: must access and display the open list in the StringCollection.

**Exhibit A.** StringCollection in Runtime. When in doubt as to an instruction, code to this Exhibit in these situations.

```
file:///H:/__Blackboard/1536_ww_Winter_2014/Week09/Assignment/StringCollection/StringC

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Index  Favorite Cities
-----
0      Amelia Island
1      Orlando
2      Nassau County
3      Jacksonville

M E N U
A - Add a city to the Collection
R - Remove a city from the Collection
X - Exit the Application

Select an A, R or X -> a
Add a new city or an 'x' to exit adding -> Papillion
At which index between '0' and '3'? -> 3
Added Papillion at Index 3
Add another new city or 'x' to exit adding -> Alvo
At which index between '0' and '4'? -> 0
Added Alvo at Index 0
Add another new city or 'x' to exit adding -> x

Index  Favorite Cities
-----
0      Alvo
1      Amelia Island
2      Orlando
3      Nassau County
4      Papillion
5      Jacksonville
```

[ Same screen continued on the next page. ]

```
M E N U
A - Add a city to the Collection
R - Remove a city from the Collection
X - Exit the Application

Select an A, R or X -> r

Remove a city from which index? -> 3

Removed Nassau County at Index 3

Index  Favorite Cities
-----
0      Alvo
1      Amelia Island
2      Orlando
3      Papillion
4      Jacksonville

M E N U
A - Add a city to the Collection
R - Remove a city from the Collection
X - Exit the Application

Select an A, R or X -> x

Program ends 2/5/2015 8:46 PM
Press the Enter key to continue.
```

**Exhibit B. 15-point special Assessment** if missing or not running as shown: must access and display the open list in the StringCollection. Runtime with User performing Add or Remove options, Exit only. When in doubt as to an instruction, code to this Exhibit in these situations.

```
file:///H:/__Blackboard/1536_vw_Winter_2014/Week09/Assignment/Strin

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Index  Favorite Cities
-----
0      Amelia Island
1      Orlando
2      Nassau County
3      Jacksonville

M E N U
A - Add a city to the Collection
R - Remove a city from the Collection
X - Exit the Application

Select an A, R or X -> x

Program ends 2/5/2015 11:35 PM
Press the Enter key to continue. _
```

Compress to a .zip-file, attach it to the assignment drop box on blackboard.