Week of July 28, 2014

Topics for this week: Arrays

Activity Checklist

	Read chapter 12 in your course packet.
	Review the slides Arrays
	Complete lab #23, due by 11:59pm on Tuesday.
	Complete lab #24, due by 11:59pm on Thursday.
	Review the sample program example 9, which illustrates the use of arrays.
	Complete project #9 and submit it to Canvas before 11:59pm on Sunday. Late programs will lose 20% of the possible points for each day that they are late. If you turn this program in prior to 11:59pm on Saturday, you will receive a 5 point bonus, **if** it meets all of the specifications and gives the correct answers.

Learning Goals

It is expected that you will meet the objectives outlined here by the end of the week. You might want to test yourself to see how well you fare. You can be guaranteed that you will be tested on these concepts on your next exam. By the end of this unit, you should be able to:

- Describe the major characteristics of an array in C#.
- Correctly declare and initialize an array in a C# program.
- Tell how the address of an array element is calculated.
- Explain the pitfalls of using an illegal array index.
- Correctly create and use a function that takes an array as a parameter.
- Correctly create and use a function that takes an array element as a parameter.
- Explain what a multi-dimensional array is.
- Correctly use a multi-dimensional array in a program.

Reading Assignment

All reading should be done before you come to class. Your ability to understand the material discussed in class will be greatly enhanced when you come to class prepared.

1. Chapter 9 provides a thorough discussion Arrays in C#. It explains what an array is and how to declare and use arrays in your programs.
2. Slides on "Arrays" - we will go over these slides in class.

Key Concepts

Be sure that you understand the following important ideas presented in this unit.

1. Arrays are convenient when you want a collection of data of the same type.
2. Every element of an array must be of the same type.
3. Array elements are stored in consecutive memory locations. This makes an array very fast to work with.
4. Once an array is declared, you cannot change its size.

Lab Assignment

This week you should complete labs 23 and 24. These labs will introduce you to programming with arrays.

Programming Project

This week you should complete project #9. This project will make heavy use of arrays and will require you to use the Split method to parse a string.

Be sure that you include the declaration that you did not copy any code in all of your source code files. If this statement does not appear in your program, it will not be graded.