Week of August 11, 2014

Topics for this week: Streams and File I/O

Activity Checklist

	Read chapter 14 in your course packet
	Review the slides File I/O
	Complete lab #26. It is due by 11:59pm on Tuesday.
	Complete lab #27. It is due by 11:59pm on Thursday.
	Complete project #11. It is due by 11:59pm on Sunday.
	Study the code example here that illustrates some important concepts in file I/O.

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 concept of a stream.
- correctly declare the stream objects that are used for file input and file output.
- correctly append to a file or write over an existing file.
- check to see if the end of the file has been reached when reading from the file.
- explain the difference between character and binary I/O.
- correctly format data when writing to a text file.
- write a program that correctly reads and writes text data.

Reading Assignment

All reading should be done before you come to class.

1. Chapter 14 in the course packet discusses the C# stream classes that are used for file I/O.
2. Streams and File I/O - we will go over these slides in class. One of the major topics in this set of slides is how we handle error situations when reading and writing files.

Key Concepts

You should be sure that you understand the following important ideas about streams and file I/O:

1. A stream is a sequential set of data. We read from **Input Streams** and we write to **Output Streams**.
2. To read from a file, you need an object of the **StreamReader** class.
3. To write to a file, you need an object of the **StreamWriter** class.
4. In C#, data can be stored in a file either as **text** data (ordinary unicode characters), or as **binary** data. Binary data is stored on disk exactly as it is stored in the computer's memory.

Lab Assignment

This week you should complete labs 26 and 27. These lab will give you some practice dealing with file I/O issues.

⚠️ 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.