Lab 7: File I/O and Exceptions

UNK CSIT 150 Object Oriented Programming

Objectives

- Practice reading a text file
- Practice reading a binary file
- Practice parsing a string
- Practice dealing with exceptions

General Requirements

In this lab, you must write your code following the proper programming style. The bottom line is:

- Use *indentation* to show the logical structure of your code
- Use blank lines to separate code blocks and give each code block a comment
- Give documentation comment to the class and each method

Programming Practice

1. A binary file named *doubles.dat* is provided with this lab. This file has a list of numbers (doubles) such as 10.2, 20, 5.1, 8, 9.9. This is a binary file, so it is not readable. It does not contain the commas between the numbers. We do not know how many numbers are in the file.

   Read the numbers stored in the binary file into an array. Output the array of values and calculate the average of the numbers in the array.

2. **Bonus**. A text file named *doubles.csv* is provided with this lab. This file has a list of numbers (doubles) in a single line of data in a form of 10.2, 20, 5.1, 8, 9.9. All of the numbers are separated by commas (,) but we do not know how many numbers are in the file.

   Read the numbers stored in this comma-separated value (csv) text file into an array. Output the array of values and calculate the average of the numbers in the array.

Other requirements

- **Use exception handling appropriately.**
- Make your solution as modular as possible, and re-use methods appropriately.