Assignment 1

Console Application

Objective:

Write a **C# Console Application** that parses a csv file:

The application will read all the command line arguments to generate the results.

The following are valid command-line arguments in the application:
1. -h or --help for help to output the instructions on how to use it
2. -i <path> or --input <path> loads the **input file path** specified (required)
3. -o <path> or --output <path> saves result in the **output file path** specified (optional)
4. -c or --count - displays or saves the number of entries are in the text file (optional)
5. -a or --append for appending to an existing output file (optional)
6. -s or --sort <column name> - outputs the results sorted by specified column name

Run: Assignment1.exe -i data.csv -o results.txt -c -s hp
Output:

Bonus
7. -m or --max <column name> - gives you the **name and value** with the **highest** value
8. -n or --min <column name> - gives you the **name and value** with the **lowest** value

Run: Assignment1.exe -i data.csv -o results.txt -s maxcp -c -m hp -n attack

Error Handling:
- invalid path (path does not exist)
- invalid argument

C# Helpful links

https://support.microsoft.com/en-us/help/816149/how-to-read-from-and-write-to-a-text-file-by-using-visual-c

https://www.dotnetperls.com/sort-list

Due date

Next class, week 2 (at the start of class 6:30pm)

Submission

Implement the answers in a new project with the name "Assignment1". This project should be submitted through committing and pushing through GIT to your VGP232 repository which you shared with the instructor.

Grading

Marks: Out of 100 (10% of final grade)

(60) Functional: Does it compile? Does it meet the requirements and work? Does it give the correct results?

(25) Error Handling: Does you application handle bad input? If so, does it handle failures and exceptions gracefully or does it crash?

(15) Naming convention & Comments: Does it follow the coding standards? Are your variables and method names descriptive? Did you leave descriptive comments on methods that does not have obvious functionality?

Coding Standard

C#
https://docs.microsoft.com/en-us/dotnet/csharp/programming-guide/inside-a-program/coding-conventions

Late Assignments

After the due date, the student will no longer be able to submit their assignment and will receive a 0 as I will go over the solution in the next class.