Development Project

Software Engineering Candidate

**Description:**

This project was designed to assess the aptitude of the “Software Engineer” applicant. This project was not designed to be difficult, but rather give a sense of the coding style and approach the candidate takes in working through this exercise.

Note: You can use the programming language of your choice. Preferred (C#, Python, JavaScript, Java)

**Project:**

Classes have finished for the school year and the school district administration is curious to see the results of the 5th grade class from each school. The teachers have already taken the liberty of providing a flat file containing the names and grades of each student. While this would be relatively easy to solve, the administration is asking for an automated way of providing any number of files and receiving the desired results in an output file.

Note: Three files containing grades for classes have been given for use in this project. Please use these files when generating your output file.

**Business Requirements:**

1. The output file should be a text file.
2. Student scores of 0 should be ignored during the calculation.
3. Student scores with a decimal should be truncated to the nearest whole number before calculating class average
   1. For example, 99.9 should be truncated to 99
4. All class averages should be rounded to one decimal place
   1. For example, 88.3342 should be 88.3
5. The output file should contain the following:
   1. The highest performing class (output in a prominent way)
   2. The average score for all students regardless of class
   3. For each class:
      1. Average score for the class
      2. Total number of students within the class
      3. The number of students used to calculate the class average
      4. The names of any students who were discarded from consideration
6. Feel free to add any other information you may find to be useful.
7. Consider ways in which your code would fail and within reason present as production ready of an application as you can
8. Limit your time to something reasonable (1-3 hrs). If you run out of time just leave a comment where you would have done something
   1. For example, a comment indicating where you would handle an exception if time permitted
9. Our goal is to assess as much your thought process as your code! We all strive to write clear and robust code. Even this toy exercise can break in a lot of ways, be paranoid while still meeting the requirements.

**Submission Requirements:**

Please submit a zip file containing the generated output file and all created class/module files written to complete this project.

It’s usually easiest to provide a link to your code on Google drive or Github to avoid problems with email filtering