

Dye & Durham Coding Assessment

The Dye & Durham coding assessment is just that, an assessment. The problem domain is deliberately simple, and you could very easily write an extremely terse solution that satisfies the requirement. But our goal is not to see you implement a trivial sorting algorithm. Most importantly it is to understand how your code communicates it's purpose clearly and with empathy to your potential team members. What do we mean by empathy? Empathy here is caring about how easy your code is to understand and navigate for the next engineer who touches it. Secondly it is to understand your ability to compose quality code that adheres to [SOLID](https://en.wikipedia.org/wiki/SOLID_(object-oriented_design))) (https://en.wikipedia.org/wiki/SOLID_(object-oriented_design)) principles. Thirdly, to see how you write tests.

Implement the solution as a console app using .NETCore.

So, give us your best effort, a solution that you are proud of.

The Goal: Name Sorter

Build a name sorter. Given a set of names, order that set first by last name, then by any given names the person may have. A name must have at least 1 given name and may have up to 3 given names.

Example Usage

Given a file called unsorted-names-list.txt containing the following list of names;

```
Janet Parsons
Vaughn Lewis
Adonis Julius Archer
Shelby Nathan Yoder
Marin Alvarez
London Lindsey
Beau Tristan Bentley
Leo Gardner
Hunter Uriah Mathew Clarke
Mikayla Lopez
Frankie Conner Ritter
```

Executing the program in the following way;

```
name-sorter ./unsorted-names-list.txt
```

Should result the sorted names to screen;

```
Marin Alvarez
Adonis Julius Archer
Beau Tristan Bentley
Hunter Uriah Mathew Clarke
Leo Gardner
Vaughn Lewis
London Lindsey
Mikayla Lopez
Janet Parsons
Frankie Conner Ritter
Shelby Nathan Yoder
```

and a file in the working directory called sorted-names-list.txt containing the sorted names.

Assessment Criteria

We will execute your submission against a list with a thousand names.

Your submission must meet the following criteria.

- The solution should be available for review on github.
- The names should be sorted correctly.
- It should print the sorted list of names to screen.
- It should write/overwrite the sorted list of names to a file called sorted-names-list.txt.
- Unit tests should exist.
- Minimal, practical documentation should exist.

Awesome, but not essential criteria

- Create a build pipeline like Travis or AppVeyor that execute build and test steps.

Submission

When you are done let us know the url of the repo.