# GlobalX Sorting Assessment — Tech Spec Document

This document describes the solution implemented here as a solution for the GlobalX recruiting assessment.

## Name Sorting Problem

The problem to be solved is to sort a list of names by Family Name and then any of one to three possible Given Names. Input to the program is a list of full names, each of the form:

[first given name] [second given name] [third given name] [family name]

The second and third given names are optional.

## The Solution

The solution provided solves the problem by reordering the parts of the full name so that a string comparison can be invoked on the full name where the family name appears before the given names. This is the simplest solution to the problem.

## Problems and Limitations

One problem with the program rests in the fact that the list of family and given names are *space* separated, but some family names have a space such as “von Neumann”. This semantic feature cannot be represented in the input format chosen. We ignore this limitation.

## Tests

## Build Pipeline

## Output

## Sorting Algorithm

Two sorting methods are available in the program. The default sorting method uses the classic Quick Sort algorithm. Code for this Quick Sort is included in the static generic class QuickSort<T>.

A custom QuickSort class was implemented making available the ability sort an array of names using the classic QuickSort algorithm. The s

## Execution Options