# Overview

To complete this programming exercise, you must create fully tested, production-quality code to solve the problem statement defined in Section 2. This solution may be written in either C# or Java. A skeleton Maven project definition for Java has been provided.

In order to develop your solution, you may

* Use the IDE of your choice
* Use the build / run tools of your choice
* Use the internet as a resource
* Spend as little or as much time as required

# Problem Statement

Our users require a service to generate word counts. They would like to be able to enter a statement, which is then analyzed and added to the existing word count. The service needs to be able to handle multiple users adding statements at the same time. A user expects their entire statement to either be fully added or not at all (the count should never contain only some of the words from their statement).

The users would prefer that punctuation is removed, but this is optional for Phase 1. The examples below contain punctuation.

# Examples

**Scenario 1:**

User 1 inputs: “Where in the world is Waldo?”

Word count is:

in 1

is 1

the 1

world 1

Waldo? 1

Where 1

User 1 inputs: “Waldo? Who is Waldo?”

Word count is:

in 1

is 2

the 1

world 1

Waldo? 3

Where 1

Who 1

**Example 2:**

User 1 inputs: “Welcome to planet Earth” at the same time as User 2 inputs “You are not welcome on planet Earth”.

The count should contain one of the users’ complete statements, before the other user’s statement is added.

If you require any clarifications, please send your questions to April Rathe at [arathe@doranjones.com](mailto:arathe@doranjones.com).

# Solution

Your solution should be returned to [arathe@doranjones.com](mailto:arathe@doranjones.com), copying [mvaccaro@doranjones.com](mailto:mvaccaro@doranjones.com) .

Your solution should include

* Full source code, including tests
* Any external libraries (can be referenced through Maven pom)
* A short write-up of your approach, including tooling used
* Any comments or instructions about your solution