

# FIT5171 Applied Session 2

## Hands on with Maven & JUnit

Week 2, 2024

Please do complete the preparation tasks before coming to the tutorial. Your active participation is the most important!

In this tutorial, you will work individually to get familiarised with some of the frameworks and tools that we will be using throughout the course assignments: Maven and JUnit.

Each student would preferably have a laptop/desktop computer. Please let your tutor know if you don't have one so that we can try to make alternate arrangements for you.

As all other tutorials, this will be a hurdle. Have fun!

### 1 Task

Below are the requirements of a string calculator method `public int add(String numbers)`. You will create add method for each requirement incrementally. You will be develop the requirements using TDD.

1. The method can take up to 2 numbers, and will return their sum (for an empty string it will return 0) for example "" or "1" or "1,2"
2. The method now can take any amount of numbers
3. Allow the Add method to handle new lines between numbers (instead of commas)
4. The following input is ok: "1\n2,3" (will equal 6)
5. Support different delimiters, the beginning of the string will contain a separate line that looks like this: "//delimiter\n[numbers. . .]" for example "//;\n1;2" should return three where the delimiter is ';' item The first line is optional. All existing scenarios should still be supported.
6. Calling add with a negative number will throw an exception "negatives not allowed" – and prints the negative number that was passed. If there are multiple negatives, show all of them in the exception message.
7. Numbers bigger than 1000 should be ignored, so adding  $2 + 1001 = 2$
8. Delimiters can be of any length with the following format: "//[delimiter]\n" for example: "//[—]\n1—2—3" should return 6
9. Allow multiple delimiters like this: "//[delimiter1][delimiter2]\n" for example "//[;][:]\n1-2;3" should return 6
10. Make sure you can also handle multiple delimiters with length longer than one char