**SE401: Software Quality Assurance & Testing**

**Activity 5.1: Unit Testing**

# Objective

The objective of this activity is to develop a test suite for unit testing using JUnit

# Specification of the Program to be Tested

You are given the source code of a Java class named StringUtil.java. This class provides a public static method

public static String pluralize(String word)

The specification of the method is as follows:

Input: The argument word is a single word in English.

Output: If the word is a singular noun, it returns the plural form of the noun. Otherwise, it returns the original word.

Exception: if the argument is not a properly formed English word, an IllegalArgumentException should be thrown.

# Requirements of the Lab Exercise

1. Write a JUnit test suite to adequately test the pluralize() method. You may use any combination of functional testing techniques to develop the test cases.
2. Execute the JUnit test suite and report the results.

# Deliverables

1. The source code of the JUnit test suite.
2. The test report generated by JUnit.
3. A report that discusses the techniques you used to design the test suite.
4. A summary of the defects revealed by your test suite (with references to specific test cases).

All files must be in one of the following formats

* + Plain text, including source code and scripts.
  + Microsoft Word and Excel
  + PDF

The entire deliverable set must be packaged in a single archive file using one of the following formats

* + ZIP
  + TAR and GZIP (GNU zip)
  + JAR