# Experiment: Coverage-based (white box) Unit Testing

## Experiment

 An exercise / experiment involving the learning of how test Java classes with Junit and an approach based on structural (white box) testing will be proposed in the practical activities of the course

## First Step: Pre-questionnaire

- All the participants to the course and to the experiment have to fill the following form until October 31
- https://forms.office.com/e/byfTK6JMXi

# Second Step: Training

- For learning purposes, a class to be tested is proposed
- It should be tested using JUnit and an IDE of your preference, with the aim to obtain the maximum possible structural coverage
  - It is strongly suggested to use Eclipse as IDE and Instruction Coverage as objective
- The class to be tested is Subject Parser
  - It will be available on Teams

## Second Step: training

- Training is free: it is not requested to submit the test cases and there is not a time constraint
- The purpose of the training is to be ready for a classroom exercise to be taken Monday November 4
- In case of problems, I am available for explainations about the training test class

# Subject Parser

- SubjectParser receives input parameters via a text string passed to the constructor and perform a parsing looking for the elements in the input string
- In this text string the first element is a numeric identifier (id), then there is a string (title), finally a range indicator in the form (x/y) or [x/y] with x and y positive integers.

#### **Example:**

1 subject title [1/2]12 test (7/8)

The main method is reported mainly as an example but it is not strictly required that it be tested.