

# Grading Scheme

## 2ME3 Fall 2023 - Assignment 1

Grading Rubric for A1:

6' Existence of required Java files:  
six Java files, each is worth 1'

50' Content of each class/interface:

AbstractShape - 5'

CollisionDetector - 5'

Point - 10'

LineSeg - 10'

Circle - 10'

Rectangle - 10'

Check classnames, existence of fields and methods, setter/getter methods do expected work, non-default constructors assigning field values properly...

(Note1: students can add extra fields and methods more than specified in the UML diagram, but not less.

Note2: to be consistent, the static field is supposed to be named as numberOfInstances, but in the Rectangle class it is numOfInstances which is a typo. Thus students can use either numberOfInstances or numOfInstances with no penalty).

10' Compilation and Running

30' Correctness:

static field 10': each numberOfInstances 2'

Note: some students may create LineSegs when constructing Rectangle, which may have an impact on the numberOfInstances, no penalty for this case.

intersection 20': each test case 1'

20 test cases listed in the slides

4' Coding Style:

Tidy code, Naming convention, Indentation ....

Above total is 100.

Bonus 10', if all 20 intersection cases are correct and no duplicated code used.