

PolyU COMP2021 Assignment 3

Part B: JUnit Programming (50 marks)

Goal: By doing this assignment, you will understand more JUnit.

Recall that in your assignment 1, the teaching assistant has written Assign1Test.java for you. It was used to test the correctness of your Assign1.java.

In fact, Assign1Test.java should be written in JUnit (you did not use that by that time because you haven't taught you yet).

The Assignment Part

You are given 5 sets of files:

- ReadMe.pdf (this file)
- /src (the correct solution of Assignment 1)
 - Assign1.java
 - Assign1Interface.java
- /bin (the place for the compiled classes of src and test, it is empty at this time)
- /lib (junit-3.8.1.jar is placed here)
- /test (work on the files in this directory)
 1. Assign1TestSuite.java
 2. Assign1TestLevel2.java (to test level 2 of Assign1.java)
 3. Assign1TestLevel3.java (to test level 3 of Assign1.java)
 4. Assign1TestLevel4.java (to test level 4 of Assign1.java)
 5. Assign1TestLevel1.java (to test level 1 of Assign1.java) *Already finished for you

Your job: Implement files 1 to 4 above to test Assign1.java using JUnit library. The testing should be done like what Assign1Test in assignment 1 did.

Submit #1 – 4# .java files through learn.polyu.edu.hk assignment box.
Please don't zip the files!

If you successfully finish this assignment ...

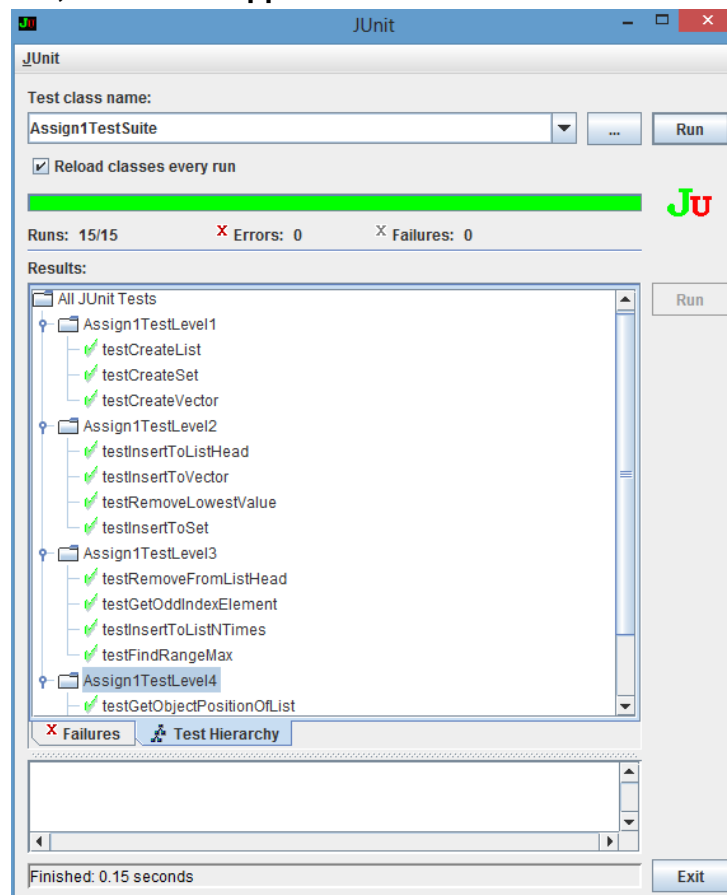
You can type the following commands from console, at the root directory (**On Linux**):

- 1) `javac -d bin src/*.java`
- 2) `javac -cp lib/junit-3.8.1.jar:bin/ -d bin test/*.java`
- 3) `java -cp lib/junit-3.8.1.jar:bin/ junit.textui.TestRunner Assign1TestSuite`
or
`java -cp lib/junit-3.8.1.jar:bin/ junit.swingui.TestRunner Assign1TestSuite`

You can type the following commands from console, at the root directory (**On Window**):

- 1) `javac -d bin src/*.java`
- 2) `javac -cp lib/junit-3.8.1.jar;bin -d bin test/*.java`
- 3) `java -cp lib/junit-3.8.1.jar;bin junit.textui.TestRunner Assign1TestSuite`
or
`java -cp lib/junit-3.8.1.jar;bin junit.swingui.TestRunner Assign1TestSuite`

For the last command, an GUI will appear like this:



Note that we will feed in some other wrong Assign1.java when grading your assignment. In that case, running
`java -cp lib/junit-3.8.1.jar:bin/ junit.swingui.TestRunner Assign1TestSuite` (On Linux)
`java -cp lib/junit-3.8.1.jar;bin junit.swingui.TestRunner Assign1TestSuite` (On Window)
shall indicate the number of failure test cases.

Deadline: 23 Oct 2015, 11:00am

Late Penalty

late x day: your score = raw score * (100 - 20)%

Hint

Create some wrong versions of Assign1.java yourself to test whether or not your test cases are correct

Grading policy

The assignment will be checked using **JDK version 1.7.0**.

One measure only: we will feed in, say, 10 different versions of Assign1, all are wrong, but if your written JUnit files say all are correct, 0 marks. Similarly, if your JUnit files say 7 of them are wrong but 3 are correct, you will get 70% marks.

Plagiarism

It is easy to detect the similarity of source files, and cases will be strictly handled according to the University's regulation, so please don't risk doing that.

Questions?

Ask your teaching assistant Julian (csyfip@comp.polyu.edu.hk) / ask Eric during lecture breaks.