

Mandatory exercise: Jenkins

This mandatory exercise reviews your skills in writing NUnit test, managing projects under Git, and constructing build jobs under Jenkins.

NOTE: This exercise is *mandatory*. This means that it is a prerequisite for your admission to the exam of this course that you have handed this exercise in and have a grade of PASSED (see details below).

You shall hand in the hand in in groups (©) – no solo work. The guidelines for group work are stated in the note “Teams, lab exercises and hand-ins in I4SWT.pdf” available on the course Brightspace site under *Gruppetilmelding*.

1 The exercise

You shall hand in your solution to the lab exercises available in *Lektion 01.1+2* and *Lektion 02.1+2* in the course Brightspace site.

Some details on the hand-in:

1. Your hand in shall consist of exactly one (1) PDF document containing:
 - Your team number
 - A table containing the student number and name of each participant in the exercise.
 - A URL to the Jenkins build job containing your solution, e.g.
<http://ci3.ase.au.dk:8080/job/TeamxxHandin1/>
 - A URL to the GitHub repository, you are using as the shared remote repository for your team, e.g.
<http://github.com/TeamSWTxx/CalculatorHandin1/>
 - If you use a private GitHub repository, the user TeamSWTxx must be given collaborator access, or you must include the password to enable me to evaluate your code and tests
2. Your hand-in shall be on time. A late hand-in is not accepted and will be evaluated as “**FAILED**” (see below)
3. You shall hand in your exercise using the Blackboard assignment made available for this exercise.

2 Evaluation of your hand-in

2.1 Evaluation criteria

The evaluation of your exercise depends on fulfilling the above criteria, and the following:

4. Have you implemented a suitable number of features and tests?

By this is meant that all original methods from the "Handtesting Calculator" exercise and at least 2 of the features from "Git Basics" exercise have been implemented. There must be at least 3 tests/testcases for each method, and any exceptions you have implemented should also be tested.

Does your Jenkins build job work? Specifically,

5. Does pushing changes to the related Git repository initiate the automatic build of the Jenkins build job?
6. Does the Jenkins build job pull your solution from the Git repository?
7. Does the Jenkins build job build your solution?
8. Does the Jenkins build job execute the unit tests defined in the solution?
9. Does the Jenkins build job report the result of the unit test run properly?

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2.2 Evaluation grades

The evaluation of this exercise will have 1 of 3 possible grades:

"PASSED"

Your hand-in is of sufficient quality to pass the criteria for approval

"FAILED – RESUBMIT"

Your hand-in is of insufficient quality to pass the criteria for approval. You are granted one resubmittal. The requirements and deadline for this resubmittal will be conveyed along with the grade. The resubmittal will be graded either "PASSED" or "FAILED" (no 2nd resubmittal)

"FAILED"

Your hand-in is of insufficient quality to pass the criteria for approval. You are not granted resubmittal.

Note that your hand-in must be graded PASSED (in either first or second attempt) for the members of the group to be admitted to the exam in the course.

2.3 Evaluation rubric.

The above detailed criteria are also available in a Rubric, visible at the Assignment Hand-In link on Brightspace.