

Assignment 2
Black-box testing



Assignment Objectives:

- Generating test cases based on black box testing.
- Use JUnit for implementing the test cases.
- Testlink - test management tool.
- Use Jenkins for executing the test cases



Assignment = In-Class assignment + Take-Home assignment

- **In-Class assignment**
 - First hour of the laboratory.
 - Maxim 25 XP
 - TO DO:
 1. **[Black-Box Testing]** (10 XP)
 - Maven project created in Lab 01. [See Maven tutorial]
 - EC table for one input variables + Implementing 2 test cases in Junit
 - The test cases will be created **addStudent** feature.
 - Add the project to git (github, public) project.
- Docker-Jenkins+Testlink – install on your computer**
See tutorial document *2024_Info-Jenkins-Testlink.doc*
Install Docker, run the command for docker.
2. **[TestLink]** (10 XP)
 - Create in Testlink a project, a test plan, a test suite.
 - Create in TestLink the 2 implemented test cases.
 3. **[Jenkins]** (5 XP)
 - Creating a job in Jenkins for executing the 2 test cases.
- **Take-Home assignment**
 - At home.
 - Maxim 75 XP
 - TO DO:
 1. All EC/BVA for the **addStudent** feature: excel file with the design of the test cases + Java implementation (40 XP)
 2. Testlink test cases (add the new implemented test cases) (15 XP)
 3. Jenkins job for all test cases (no modification required, use from IC assignment) (10 XP)
 4. Modification of the source code (errors identified and corrected) (10 XP)



Assignment and Delivery date:

1. Assignment date: laboratory 2
2. Delivery date for **In-Class assignment**: laboratory 2 (max 25 XP)
3. Delivery date (first) for **Take-Home assignment**: laboratory 3 (max 75 XP)
4. Delivery date (last) for **Take-Home assignment**: laboratory 4 (max 25 XP)

Turn in:



Delivered and presented in class AND upload on canvas after Delivery in class the following archives (IC for In-Class delivery, TH for Take-Home delivery, 93X change with your group, Name01Name02 the name of the two members of the team)

- a. Lab2_IC_93X_Name01Name02.zip
 - i. Lab02_BBT_Form.xls
 - ii. Source code: Implementation of the test cases.
- b. Lab2_TH_93X_Name01Name02.zip
 - i. Lab02_BBT_Form.xls
 - ii. Source code: Implementation of the test cases.



References

- See Lecture 2.
- See documents for Lab02Files.zip