

SSVV 2023-2024

Retake-Take-Home-B Exam Subject

300 XP (100XP implementation + 150XP testing +50XP survey questions about the tasks)

Maximum 5 students per team.

Turn in:

- In the day of the final exam, at 8.am
- On Teams, under Exam-Take-Home-B assignment, submit
 - Java project implementation
 - Java project testing (with JUnit tests for BBT, WBT, integration)
 - One file containing:
 - Black-box testing – test design
 - White-box testing – test design
 - Integration testing – test design
 - One file containing information about the tasks (state the name of the team members)

Take Home B - assignment

Statement problem: An array of tc test cases is provided, on position i, the value of the test case tc[i] represents fail (0)/pass(1). Eliminate the test cases that with pass (1) but change in the new array the value pass (1) with the id of the test case.

Example: Given array: [1,0, 0, 0, 1, 1, 0, 1, 0, 1, 1]

New array: [2,3,4,7,9]

Implement the following methods

- 1) FindAFailTest= finding a test case that has fail (0)
- 2) EliminateAnElementOnAPosition = eliminate an element on a specific position in the array.
- 3) Solve the Statement problem using the implemented methods above, i.e. implementing the method TestsToSolve (as input the array given and as output the array changed).

Task 1) 100 XP - Implementation of the above mentioned methods.

Task 2) 150 XP - Testing

- a) Black-box testing for the FindAFailTest method (document on test case design using equivalence classes and boundary value analysis and JUnit implementation).
- b) White-box testing for the EliminateAnElementOnAPosition method (document on test case design using paths coverage, decision/condition coverage, loop coverage) and JUnit implementation).
- c) Integration testing for the TestsToSolve method (select the integration testing strategy and provide JUnit implementation + document on the integration strategy and the design test cases).

Task 3) 50 XP - Reflect on learning

Describe how did you solve the assignment as a team.

Description: What happened? When and where? Who else was involved? What did you do? What did other people do? What was the outcome?

Feelings: What were you feeling during the situation? What do you think other people were feeling about the situation? How do you feel about the situation now?

Evaluation: What went well? What didn't go well? What positive or negative things did you (or other people) contribute to the situation?

Analysis: Why did (or didn't) things go well? What theories or research can help you better understand the situation?

Conclusions: What did you learn from this situation? If this situation happened again, what would you do differently?

Action Plan: What skills do you need to develop to handle a situation like this better? How will you develop the skills you need?