SSVV 2023-2024
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 animals is provided in different order: mouse (1), cat (2), dog (3), cow (4). Insert into the array animals based on the following rules: insert a cow between a cat and mouse that are neighbors, insert a cow between a cat and a dog that are neighbors.

Example: Given array: [1, 2, 3, 4, 3, 2, 1, 1, 2, 3, 1]
New array: [1,4,2,4,3,4,3,4,2,4,1,1,4,2,4,3,1]

Implement the following methods
1) FindPair= finding a pair of mouse-cat or cat-dog
2) InsertCow between a pair of mouse-cat or cat-dog.
3) Solve the Statement problem using the implemented methods above, i.e. implementing the method BeFriends (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 FindPair method (document on test case design using equivalence classes and boundary value analysis and JUnit implementation).
  b) White-box testing for the InsertCow method (document on test case design using paths coverage, decision/condition coverage, loop coverage) and JUnit implementation).
  c) Integration testing for the BeFriends 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?