

Mandatory Assignment – J3

02160 – Agile Object-Oriented Software Development

v. 2019-2-27

Instructions

It is mandatory to complete this exercise and to submit it in 2 weeks (deadline is 12-03-2019 11:59). To deliver the exercise, upload a text file (or just a comment) with the link of the GitHub repository containing your solution as well as the usernames used.

It is recommended to work in pairs and, in this case, it is necessary to clearly state that during the submission in DTU Inside. Additionally, during the following sessions, you might be asked to explain your solution. In case you are not able to properly explain the solution and answer related questions, the whole exercise will be considered as failed.

Exercise 1

Write a Java program which fulfills the same requirements of assignment J1:

Design a simple program to play a simplified version of checker¹. Specifically, the program has to print the board and then alternatively ask the correct player to insert the old and the new coordinates of the piece to move. The system has to check whether the coordinates refer indeed to a player's owned piece and that the new position fulfills the requirements (i.e., diagonal forward move in an empty cell). The program has to continue until the user terminates it. It is not mandatory to implement jumps (or multiple jumps) and piece crownings.

Implement the assignment using object orientation, exceptions handling (for example, in case of bad input from the user) and unit tests. Also, provide a class diagram explaining your solution. It is not mandatory to use generics.

The code has to be located in a GitHub repository and the class diagram has to be uploaded as **PDF file** in the repository². To create the UML Class diagram you can use the academic license of Signavio, by registering with your DTU email at <https://academic.signavio.com>.

¹See <https://en.wikipedia.org/wiki/English draughts>.

²How to upload a file into GitHub: <https://help.github.com/articles/adding-a-file-to-a-repository/>.