## Individual assignments - General description

This year we have a first edition of the 2ID90 course with individual assignments. In total there will be two of them. The main intention of these assignments is to give additional opportunities to have hands-on experience with the material. Apart from this we hope that instuctions will become more lively and better visited. To further stimulate that, the individual assignments count for part of the final grade.

The two individual assignments have the following characteristics in common:

- individual: all students hand in their own result;
- **short**: turnaround time of approximately a week;
- small: to give an indication, the program should take less than a 150 lines of code (including mandatory documentation);
- automatically graded: Peach will grade your work.

Next to the detailed descriptions of the individual assignments, there are a few general remarks.

- You are required to write clear documentation for your code artifacts: loops, variables, methods, method parameters, ...
- This documentation should form approximately half of your code.
- Based on the *quality* and *quantity* of this documentation your automatically computed grade may be *reduced*.

## Approach

You are advised to follow an approach similar to the one described below.

- 1. download, unpack and open a given netbeans project;
- 2. work at your algorithm, documentation and/or tests;
- 3. perform the JUnit tests;
- 4. if not satisfied with test results, continue at 2;
- 5. hand in into Peach;
- 6. if not satisfied with the computed grade, continue at 2.

## **JUnit**

JUnit is a framework to write repeatable tests. For these individual assignments we recommend you to write your own tests (examples are given). Good choices of tests help you to make correct implementations.

## Peach

Given correct input Peach will perform the following tasks:

- Run its tests on the algorithm; this may actually take some time.
- Determine and show a grade, based on the (hidden!) results of the tests.
- Check the input for fraud.
- Check the input on quantity of documentation.