p:e accounting

Work Sample – Development Team

Work sample

Description

The task is to create an implementation of Conway's Game of Life, for more information see http://en.wikipedia.org/wiki/Conway's Game of Life, especially the section "Rules"

The game needs a "seed" of some sort to initialize itself and here something suitable can be chosen, user selected input, random selection etc.

Evaluation

The purpose of the work sample isn't to test that you can solve a difficult technical problem nor are we focusing on that the implementation is fast, or has a pleasing graphical interface.

What we are judging is the code structure, choice of class names, how these communicate with each other, the abstraction between logic and model and so on. The whole game could reasonably be implemented directly in a main() method using not too many lines of code, but we are more interested in seeing a technically elegant solution. We also hope see an eye for details, that the code is uniform with respect to naming, line breaks, keywords such as final among others.

- How well chosen are the classes?
- How separated is the implementation with respect to logic and presentation? Is it necessary for the code responsible for drawing the game board to know about the inner details of the operation of Game of Life?
- How testable is the code? Is it easy to test selective parts? How many lines of code are covered by test cases?
- How easy is to make changes to the game logic, such as size of game board?

Test cases

The implementation should be complete with relevant test cases with suitable frameworks. Internally, we have a test coverage of at least 90% as a benchmark.

Submit

The implementation should be submitted with the necessary source code to compile in addition to a compiled version as a runnable JAR file. If a build system was used (Ant, Maven, ...) we are grateful that relevant build scripts are included as well.