Combinatorial Optimization
A4M35KO

Grading System

To get an assessment, the following requirements have to be met:

- obtain at least 25 from 44 points.
  - 8 points for each test I,II (written at lectures).
  - 8 points for practical test (written at the seminar).
  - 10 points for semester project.
  - 10 points for homework assignments No. 1-5 (2 points for each assignment if successfully submitted till the deadline, -1 point each week after the deadline).

- for more information, please check the course website
  https://cw.fel.cvut.cz/wiki/courses/a4m35ko/start

Homework

- homeworks can be coded in **C++, Java or Python**.

- each homework (the source code) must be handed in to the UploadSystem (https://cw.felk.cvut.cz/brute) with a hard deadline, specified in the UploadSystem.

- it is graded automatically by the UploadSystem.

- there is 1 penalty point for each commenced week unless the homework is uploaded.

- check https://cw.fel.cvut.cz/wiki/courses/a4m35ko/upload_system for technical requirements on the submitted source code

Semester Project

- each student chooses from the following two options:

    1. **Cocontest**. Students participating in the contest implement a solver for one specific combinatorial optimization problem.

    2. **Research on chosen topic**: a student chooses a non-trivial problem from the combinatorial optimization area on which he/she will work during the semester. The topic must be approved by the lab teacher!

- the students express their choice of semester project by submitting a text file into UploadSystem with the strict deadline of 10.03.2017, 23:59.

- a student gets points only if he/she presents the project on the Lab #13.

Combinatorial Optimization Contest — Cocontest 2017

- **Optimization competition**
  - single real-life optimization problem.
  - the assignment is to implement the solver, no report needed.
  - solutions are evaluated by the UploadSystem.
  - grading comprises both the ability to solve given instances well enough and the rating among the other students.
  - computation time of the solver on server is bounded.

- **Changes from the last year:**
  - optional and not considered to be a semester project.
  - only solutions were required, while this year your source codes run on a server
  - more information about last year at https://cocontest-1225.appspot.com/

Research on Chosen Topic

- students can solve a problem for some company, project, diploma thesis etc.

- the assignment has two parts: written report and implementation.

- submission is divided into 3 parts constrained by deadline. The parts uploaded after the deadline without a reasonable excuse are not accepted.

- 4 penalty points for the late delivery of files for each commenced week.

- written document is between 4 and 8 pages.

- the evaluation is performed by the student's lab teacher, it considers fulfillment of formal requirements and the work quality.
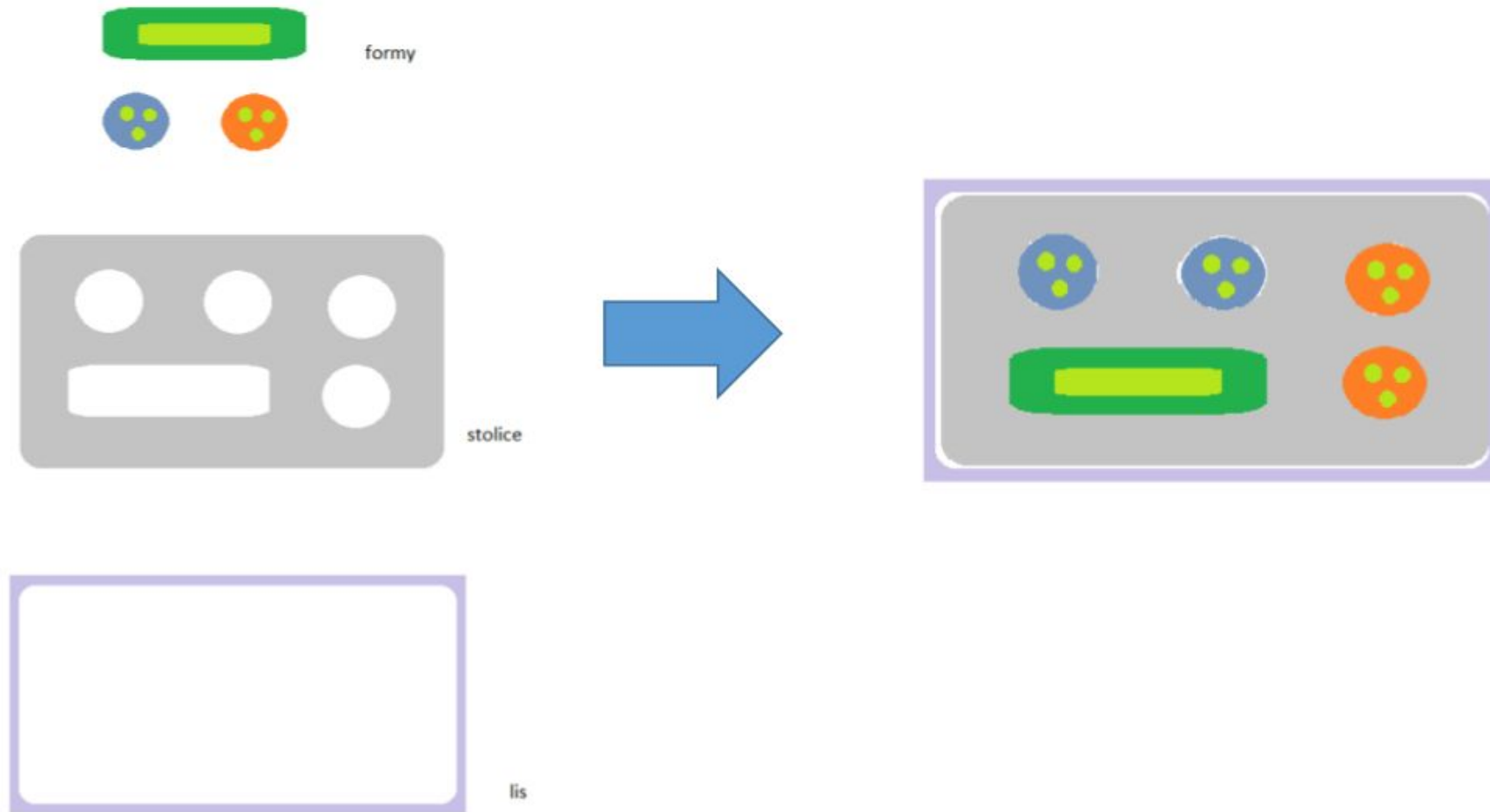
Past successful topics

o Animal position estimation
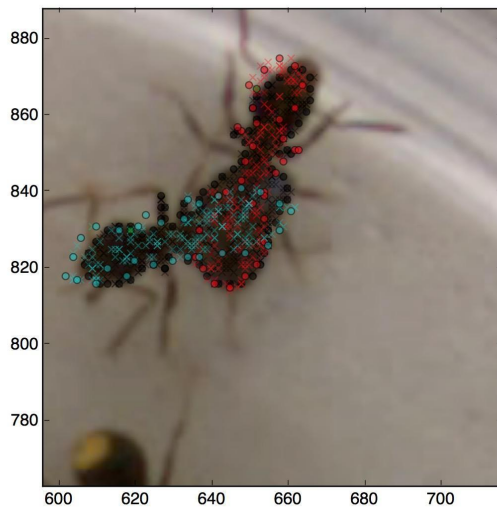
o Stackelberg equilibrium in a selection game

Past successful topics

o   Scheduling of wax pressers

For more information about what we are doing, our projects, thesis topics etc., please visit:

http://industrialinformatics.cz/