Rules and requirements for the participants of the Generic Optimization Tournament (GOaT)

Informal description

The problems of the competition are shaped as constructor-simulator programs. Commonly, the aim is to construct a certain model and adjust it to obtain the optimal (best) estimate.

Solutions are evaluated on several parameters. The problems are selected in such a way that it is possible to get a good solution analytically, however it is very difficult or impossible to *calculate* the really best solution without a massive brute force. Some of those problems have several optimal solutions, which vary significantly from each other.

General Provisions

- 1. GOaT is a team competition. The summary team result is composed of the best results of team members. The final result of the team is evaluated on a 100-point scale.
- 2. Participants are asked to solve four optimization problems during the competition. Team members are allowed to organize their work in any way: distribute problems between themselves, or solve problems together, or help each other, and so on.
- 3. It is strictly forbidden to resort to the assistance of persons who are not members of the team. Violation of this paragraph leads to invalidation of the team's results for this competition.
- 4. The results are published the next day after the competition.

Regulations

- 1. The competition begins in November 25, 2020, at 10:00 Moscow time (7:00 UTC) and lasts 2 hours.
- 2. The GOaT competition is held on a dedicated web platform.
- 3. Each participant has an individual account on the competition's platform. Accounts are created and configured by the organizing committee.
- 4. The address of the competition's platform as well as the list of usernames and passwords of team participants will be sent to the team mentor's e-mails a day before the start of the competition. In addition, at this time, the address of the competition's platform will be published on the Tournament website (https://internat.msu.ru/turnir-mm-3/).
- 5. Participants are prohibited from changing account settings, publishing or transferring these data to other people.
- 6. The problems will become available to participants at the start of the competition at 10:00 Moscow time on November 25, 2020.
- 7. Participants are prohibited from logging into the competition's platform from two or more devices. Such actions are regarded as an attempt to deceive the system and are punished with invalidation of the results.
- 8. Simulator programs send the best results of participants to the competition's platform automatically. Results acceptance begins at the beginning of the competition and ends immediately after its end, after 2 hours. Any results received after the end of the competition are ignored.
- 9. During the competition, a textual and voice chat will be open for participants for making questions to the organizing committee of the competition.
- 10. In case of unforeseen circumstances (force majeure) that make impossible all team members to participate in the competition, a team mentor should inform the organizing committee.
- 11. Any attempt to compromise the testing system or data transfer protocols is punishable by team disqualification.
- 12. Verification of solutions begins after the end of the competition. The best decisions of the team are checked against plagiarism; the final results are combined and brought to a 100-point scale.

System requirements for participants' computers

- Availability of Internet access, channel bandwidth of at least 100 kB/sec.
- CPU frequency: 1 GHz or higher
 RAM: 1GB or higher
 OS: Windows, Linux
- Web browser: any one with HTML v5 support.
- Settings: JavaScript and Java applets must be enabled in your browser settings.