Rules of the Helvetic Coding Contest

Objectives

1. The contest wishes to let students in the Swiss educational system compete at the highest level in a fair setting. The contest should allow first and foremost the dissemination of knowledge, the improvement of individuals' skills and an opportunity for social networking among participants.

Participation conditions

Eligibility

- 2. Participants must currently live, study or work in Switzerland, and be at least 14 years old.
- 3. Participants must take part in the contest in teams of 1, 2 or 3 people.
- 4. There are two categories of teams: students and professionals.

The students category contains teams consisting only of people currently studying in an educational institution, and who have not yet obtained a Master's degree (in any field) nor started a doctoral program. The professionals category contains all other teams.

5. Contest organizers may allow a team to compete despite not fulfilling the eligibility criteria, if such an exemption is justified by the contest objectives.

Registration

- 6. Teams must register on the contest's website.
- 7. Contest organizers may require participants to prove that their registration information is correct.

 Providing inaccurate information or refusing to prove its accuracy may result in ineligibility from the contest.
- 8. Teams may ask the organizers to be merged with other teams, provided that all participants consent and the number of participants in the merged team is at most 3.

Registration task

9. Teams are required to solve a simple task to prove that they know how to program.

Payment

- 10. Teams are required to pay registration fees in the amount indicated on the contest's website.
- 11. Contest organizers may at their discretion allow teams to pay the registration fee on-site when checking in.

Registration confirmation

- 12. To confirm its participation to the contest, a team must have solved the registration task and paid the fee.
- 13. If there are not enough resources available, contest organizers may close registration at any time. In the event of such a closing, teams get included in the contest on a first-come first-served basis, using the date at which they have both solved the task and paid as a tie-breaker.
- 14. If a disproportionate amount of registrations come from professional teams, organizers may give priority to student teams, in which case professional teams will get included on the aforementioned first-come first-served basis.
- 15. Teams who are refused entry because of limited resources will have their registration fee refunded.
- 16. Contest organizers may accept a team's registration despite not fulfilling the confirmation criteria, if such an exemption is justified by the contest objectives.

Registration deadline

- 17. Contest organizers will set a deadline for registration and announce it on the contest website.
- 18. If there are enough resources available, teams may register or confirm a previous registration after the deadline, and individuals may join existing teams, but their preferences such as T-shirt size might not be accommodated.
- 19. At any time before the registration deadline, teams or team members may withdraw from the contest for any reason and have their registration fee refunded.

Conduct of the contest

20. All participants should arrive on time to the contest, as specified in the contest schedule.

Dry run

- 21. The contest will be preceded by a dry run to get the contestants acquainted with the judging system.
- 22. The duration of the dry run is 30 minutes.
- 23. Contest organizers may extend the duration of the dry run for up to 30 minutes if needed.
- 24. The ranking of the dry run does not influence the ranking of the contest in any way.
- 25. All data on teams' computers will be erased after the dry run.

Duration

- 26. The duration of the contest is 4 hours and 30 minutes.
- 27. Under exceptional circumstances such as contest-halting technical problems, contest organizers may extend the duration of the contest by up to one hour.

Problems

- 28. The contest features algorithmic problems which may be divided into sub-problems.
- 29. Initially, only the problem statements for the first sub-problem of each problem will be visible.
- 30. When a team has solved a sub-problem, the statement of the next sub-problem (if there is one) will be made available to the team on the web interface. A printout of the problem statement will then be delivered as soon as possible to the team's workstation.

Computing environment

- 31. During registration, teams must indicate whether they wish to compete on their own laptops or on lab computers.
- 32. The number of lab computers is limited.
- 33. Contest organizers will reserve some lab computers for people who experience technical difficulties.
- 34. All teams, including those competing on their own laptop, must use the software ("live system") provided by the contest organizers. For reasons of fairness and security, root access and internet access are disabled.
- 35. Teams competing on their own laptop must not access their disk or other storage in a way that would cause an unfair advantage towards other teams.
- 36. Pencils (or pens) and blank paper will be provided. Contestants may not bring their own.
- 37. Teams may bring their own screen, keyboard, and mouse, subject to approval by the contest organizers.

 Particularly noisy hardware, or hardware which would give an unfair advantage over competitors, is not allowed.
- 38. Contest organizers may monitor teams' computers to prevent activities which are contrary to the spirit or the rules of the contest.

Reference material

- 39. During the contest, documentation for the standard library of all allowed programming languages will be provided to the participants.
- 40. The use of any material not provided by the organizers is forbidden and will be considered an attempt to cheat. This also includes T-shirts containing too much text, such as the "Linux Cheat Shirt".

Printing service

- 41. Teams may ask contest organizers to print their source code in order to help with debugging.
- 42. The printing will be delivered to the team's workstation as soon as possible.
- 43. Contest organizers may deny prints to teams who have made excessive use of the service.

Dress code

44. Participants who have received a T-shirt must wear it until the end of the diploma ceremony.

Unauthorized behavior

- 45. Teams may not:
 - sleep, behave rudely, or interfere in any way with the contest organization;
 - try to gain an unfair advantage over their competitors;
 - bring food or drinks in the computer labs;
 - share information with other teams;
 - write or say anything related to the problems in any place where it might be seen or heard by other teams;
 - attempt to overload, crash or exploit the judging system,
 or to obtain a larger amount of computational resources than is allowed.
- 46. Teams who behave in an unauthorized way may be disqualified with or without warning, and may be held liable for any damage that they caused.

Scoring system

Scoring

- 47. To be considered a correct solution, a submission to a sub-problem must successfully pass all relevant test cases.
- 48. Teams may re-submit a solution to the same sub-problem as many times as needed.
- 49. Every sub-problem successfully solved at the nth attempt t minutes after the start of the contest (rounded down to the nearest integer) gives 20(n-1) + t penalties.
- 50. Contest organizers may, if truly necessary, change parts of the testing suite for any of the problems during the contest. Such a change will be announced to all participants.

Ranking

- 51. Teams are ranked by the total number of sub-problems solved, where more is better.
- 52. If teams tie after applying the previous rule, they are ranked by total number of penalties, where less is better.
- 53. If teams tie after applying the previous rule, they are ranked by the submission time for their latest correct subproblem, where earlier is better.
 - Further ties are ranked by the submission time of the second latest correct sub-problem, and so on.
- 54. During the first three and a half hours of the contest, the current ranking will be available to all teams.
- 55. During the last hour of the contest, the ranking display will be frozen.
 - The winners will only be announced at the diploma ceremony.

Prizes

- 56. Contestants in the top 3 teams of the global ranking, as well as contestants in the top 3 next best teams in the students category will receive a prize and a medal.
- 57. Remaining prizes, if any, will be distributed in a raffle, where the winning probability is proportional to the number of problems solved by each contestant's team. Contestants may not win more than one prize (thus the medalists are excluded from the raffle).
- 58. Contestants who do not show up at the diploma ceremony automatically forfeit their prize.
- 59. Sponsors may, at their discretion, award prizes to any contestant of their choosing.
- 60. Once the winners are announced, the contest organizers' decisions are final.

After-contest dinner

- 61. During registration, contestants may choose to reserve a place for the after-contest dinner, which will be held in a location announced on the website.
 - Contestants have to pay for the cost of the dinner.
- 62. The dinner payment must be paid at the same time as the registration fee.
 - Contestants who fail to meet that deadline may have to forfeit their reservation.
- 63. Contestants cancelling their participation before the registration deadline will be reimbursed.

 Contestants cancelling their participation after the deadline may be reimbursed, at the organizers' discretion.

Insurance and liability

64. The organizers, as well as all people involved during the contest organization, do not take any responsibility for accidents, losses, or theft occurring before, during or after the contest, including items left in the wardrobe.

Photography and films

- 65. Contestants consent to being photographed and filmed by the organizers, or persons authorized by the organizers. Furthermore, they authorize the publication of the resulting pictures and films on any media considered appropriate by the organizers, including but not limited to organizers' websites, university websites and magazines, and Swiss newspaper or television programs.
- 66. Third parties that are not competing in the contest nor involved in its organization are forbidden to shoot still photography or video and record sound on the premises of the contest unless explicitly authorized to do so by the organizers.

Copyright of submitted code

67. By submitting their code to the contest judging system, contestants grant the contest organizers unlimited but non-exclusive rights to use and publish their source code.

Final provisions

- 68. These rules may be updated until 48 hours before the start of the contest.
- 69. Specific information about the contest, such as the software ("live system") used or the dinner restaurant, will be published on the contest website and may be updated until 48 hours before the start of the contest.
- 70. Teams who have registered before or up to 1 hour after either a change of the rules or a major change of the contest environment will be notified by e-mail, and may withdraw from the contest by announcing it at most 47 hours after the notification, provided that they offer a reasonable explanation as to why the changes negatively affect them. The participation fees of a team who withdraws in this manner will be paid back in full.
- 71. All teams participating in the contest must accept these rules.