

Regulations of cyber security competition «MIEM RealCTF 2019»

1. Main regulations

- 1.1. The aim of the competition is increasing the level of theoretical skills of students and the accomplishment of their practical skills in the organization and ensuring the effective functioning of information security systems, forming of complex vision of information security problems for students and increasing the rating and prestige of technical specialties
- 1.2. Definitions
 - 1.2.1. Team – a group of people with a captain. Number of members – from 3 to 7 inclusively.
 - 1.2.1.1. School team – a team of participants receiving secondary education.
 - 1.2.1.2. Academic team – a team of participants receiving secondary or higher education.
 - 1.2.1.3. Team of young professionals – a team of participants under 25 years old who receive a secondary / higher education or graduated.
 - 1.2.2. Participant profile – a form on the web site real.hsectf.ru, which has to be filled by team captain at registration.
 - 1.2.3. Team token – a unique character set for each team which allows to get access to team account.
 - 1.2.4. Service – a vulnerable application developed by organizers for the competition.
 - 1.2.5. Task – an object/probem/goal developed by organizers for the competition.
 - 1.2.6. Qualls session – a period of time from the moment of activation of team token by a team captain until the expiration of 48 hours or the end of the qualls.
 - 1.2.7. Flag – a string that matches pattern HSE{*}, where * – any printable symbols.
 - 1.2.8. Checking system – a control system of flags and teams scoring.
 - 1.2.9. Jeopardy – a competition format where teams solving tasks. Flag is an answer.
 - 1.2.10. Attack - Defence – a competition format where teams have to patch vulnerabilities in provided services and exploit network attacks on the other teams.
 - 1.2.11. Organizing committee – a group of people responsible for the observance of competition rules.
 - 1.2.12. Organizers – group of people responsible for the competition.
 - 1.2.13. Parthens – organizations or people supporting the competition.
- 1.3. The competition's organizing committee: co-founders of the student organization "Higher School of CTF"; Sorokin Alexander Vladimirovich – Senior Lecturer, Deputy Head of Computer Security Department of MIEM HSE; Firstov Mikhail Pavlovich – a head of research group of FBK CyberSecurity.
- 1.4. Competition organizers:
 - Department of Computer Security of Applied Mathematics Faculty, Moscow Institute of Electronics and Mathematics National Research University «Higher School of Economics»
 - Members of student organization «Higher School of CTF»
 - Independent observers appointed by the competition's organizing committee
- 1.5. Partners of competition: Kaspersky Lab, FBK CyberSecurity, Defence Group, DoDo Pizza, Ubisoft

2. Quals regulations

- 2.1. The qualifying round is held from 00:00 April 15, 2019 to 23:59 April 21, 2019. Moscow time.
- 2.2. Teams of 3 to 7 people who have **reached the age of 16** and indicated the correct data in the participant's profile on the site real.hsectf.ru until April 14, 2019 (inclusively) are allowed to participate.
- 2.3. After the start of the qualifying round, only the teams whose members do not live in Moscow are allowed to change the composition of the team members, in agreement with the competition's organizing committee, but not more than 50% of the original line-up.
- 2.4. Persons who indicated incorrect data in the participant's profile or who have not attained the age of 16 are **not allowed** to participate in the competition.
- 2.5. During the qualifying round, a team selects 48 hours convenient to the team members from the interval from 00:00 April 15, 2019 to 23:59 April 21, 2019 (Moscow time). At the selected time, a captain starts a session of the qualifying round for his team, clicking on the link with the specified team token and the "Start tour" button. The team will have 48 hours to complete the tasks of the qualifying round after that.
- 2.6. If there are less than 48 hours until the end of the qualifying round and team launches the qualifying round session during this period, the qualifying round session of the team will last until 23:59 April 21, 2019.
- 2.7. Teams are **strictly prohibited** to spread the team token outside their team.
- 2.8. Teams are **strictly prohibited** to spread any information about the tasks of the qualifying round (the names of tasks or services, flags, solution details, types of vulnerabilities in tasks or services, etc.) before the end of the qualifying round.
- 2.9. Teams are **strictly prohibited** to harm the infrastructure of the competition's organizers (delete flags from vulnerable services or tasks on the organizers' server, generate an unreasonably large amount of traffic to the organizers' server, etc.)
- 2.10. Teams are **strictly prohibited** to apply social engineering skills to other teams or competition's organizers (to ask for flags, to ask leading questions regarding the decision of tasks, etc.)
- 2.11. Teams are **allowed** to ask questions regarding the technical part of the decision of the task of the qualifying round, as well as report any errors found in the chat <https://t.me/hsectf> or to personal messages of the organizers. At the same time, questions should be formulated so that the organizers can answer "Yes", "No" or "No comments".
- 2.12. According to the resume of the qualifying round, the organizing committee determines the results of the qualifying round, including (but not limited to) the position of the teams, the winning team and the awardee teams. The position of the teams depends on the following criteria (priority according to the order of list): game score, the time of the last flag, the presence of violations of the competition regulations.
- 2.13. The criterion for the final results of the qualifying round is the agreement with the results of more than 50% of the members of the competition's organizing committee.
- 2.14. In the case of a team receiving a valuable prize based on the results of the qualifying round, **the team assumes responsibility** for compliance with the tax laws of its country.
- 2.15. The team receives prizes for the qualifying round only if the team is physically present in more than 50% of the initial line-up in the final tour.

3. Final tour regulations

- 3.1. The final round is held for two days, on May 18 and 19, 2019 at Russia, Moscow. st. Tallinskaya, 34

- 3.2. Teams consisting of 3 to 7 people who have **reached the age of 16** and indicated the correct data in the participant's profile on the website real.hsectf.ru are allowed to participate in the finals of the competition, except for:
 - 3.2.1. teams which participants took 1-3 places in RuCTF (<https://ructf.org>)
 - 3.2.2. teams that have underage foreign members
 - 3.2.3. teams that have violated the competition regulations
 - 3.2.4. teams with participants whose employers are competition Partners
 - 3.2.5. teams that are not physically located in the competition venue
- 3.3. The final tour takes place in the format of Jeopardy and Attack-Defense
- 3.4. Teams are **strictly prohibited** to distribute the token team outside their team.
- 3.5. Teams are **strictly prohibited** to distribute any information about the tasks of the final tour (the names of tasks or services, flags, solution details, types of vulnerabilities in tasks or services, etc.) before the end of the final tour.
- 3.6. Teams are **strictly prohibited** to apply social engineering skills to other teams or competition's organizers (to ask for flags, to ask leading questions regarding the decision of tasks, etc.)
- 3.7. Teams are **strictly prohibited** to harm the infrastructure of the competition's organizers (remove flags from vulnerable services or tasks on the organizers' server, generate an unreasonably large amount of traffic to the organizers' server, etc.).
- 3.8. Teams are **allowed** to ask questions regarding the technical part of the decision of the task of the final tour, as well as report any errors found in the chat <https://t.me/hsectf> or to personal messages of the organizers. At the same time, questions should be formulated so that the organizers can answer "Yes", "No" or "No comments".
- 3.9. According to the resume of the final round, the organizing committee determines the results of the final round, including (but not limited to) the position of the teams, the winning team and the awardee teams. The position of the teams depends on the following criteria (priority according to the order of list): the final game score (Jeopardy + Attack-Defense), the time of the last flag, the presence of violations of the competition regulations. The organizers demonstrate formulas of the game score for teams before the start of the final tour.
- 3.10. The criterion for the final results of the final tour is the agreement with the results of more than 50% of the members of the competition's organizing committee.
- 3.11. In the case of a team receiving a valuable prize based on the results of the qualifying round, the **team assumes responsibility** for compliance with the tax laws of its country.
- 3.12. Nonresident teams **independently** provide payment for transport services and accommodation for the duration of the competition, as well as search for hotels and tickets.
- 3.13. Teams ensure compliance with legislation and are responsible for transporting of underage participants.

4. Final regulations

- 4.1. Teams are responsible for any actions that they perform as part of solving tasks for qualifying and final tours.
- 4.2. No one except the teams is responsible for the actions performed by the teams during the competition.
- 4.3. The organizers and the organizing committee have the right to change the regulations without notifying the participants, which requires the consent of more than 50% of the members of the organizing committee.