FOLKRACE

ROBOTU FIESTA 2022

ROBOT

The robot must be autonomous (it moves independently, not additionally controlled by the operator).
In the starting position, the largest dimensions of the robot are 20 x 15 cm (length and width), there are no height restrictions, and the robot's mass is up to 1 kg.
The robot is prohibited from:
change dimensions;
damage the surface of the track or injure spectators;
emit gases, liquids or dust;
actively ram other robots;
use other robots for movement.
The robot must have a start/stop button or a remote control (recommended).
In order to avoid fraud, the remote control must be placed in the marked area after starting the robot.

COMPETITION FIELD

The outdoor surface color is black and the walls are white. Both are made of (or coated with) plastic.
The walls bordering the competition field are white, 12 ± 1 cm high.
The competition field is closed and curved.
The width of the field varies between 100–120 cm.
The competition field may have several simple obstacles: hills, pits, other freely placed obstacles on the track. Also, the track can be equipped with walls that prevent the robot, which orients itself only according to the outer wall, from crossing the track.
The competition field can be of two levels, i.e. the track may have a bridge, etc.

COMPETITION

1. **The goal of the competition is to simulate a real car rally.**
2. **At the same time, up to 5 robots can compete on the competition track.**
3. **The team consists of no more than 3 members.**

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COMPETITION RULES

The robot with the most points wins:
one point is awarded for one round completed in the correct direction;
a penalty of one point is given for one round completed in the opposite direction;
A round is considered complete when the robot, after crossing the starting line, makes a complete circle and crosses the starting line repeatedly.
The duration of one ride is 3 minutes.
At the beginning of the competition, all robots are lined up at the starting line.
The starting positions and subgroups of the robots are determined by drawing lots.
When the contestants are ready, the referee gives the start signal.
The robot must start moving five seconds after the start signal is given.
If the robot does not start moving within 5 seconds after the start signal, it is considered a false start.
A robot that causes a false start receives a warning. If this happens a second time, the bot is disqualified.
A robot that has finished the competition or made a false start must be removed from the field by a team member at the direction of the referee.
If the competition is stopped (e.g. because all robots are stationary for 15 seconds), the referee has the right to instruct a team member to remove from the field the robot that is obstructing the movement of the remaining robots.
The robot that disturbs the movement is placed in the same place after 10 seconds.
If the robot gets stuck on the track, but does not interfere with the movement of other robots, the team representative has the right to decide what actions to take:
leave the robot in the place of the track where it is;
return the robot to the starting line.
If the robot gets stuck, the team has the right to ask if it is possible to return the robot to the starting line. After receiving permission, a team member can return the robot to the starting line without disturbing other robots and participants.
If the robot is re-parked at the starting line during the run for any reason, one point is deducted for each re-parking.
If the rules are not followed, the referee disqualifies or removes the robot from the track.

17. Subgroups have up to 5 members.
18. Each subgroup has 3 runs.
19. After each run, subgroups are formed anew,
taking into account the results of robots.
20. If after all runs there are several robots with the same number of points, an additional run is announced.
21. The winner of the additional run is the robot that first completes one lap in the correct direction. In the additional run, the positions of the robots at the starting line are determined by drawing lots.
22. Only one team member can be at a distance of less than 2 m from the track.

ORGANIZATION

1. The robot must be registered before the competition. Registration consists of a technical inspection of the robot, as well as giving the robot a competition number.
2. The technical inspection of the robot must be performed at the time specified by the competition organizers.
3. The result of the competition is displayed next to the competition field.
4. All questions and problems that arise during the competition are decided by the competition judge. If this cannot be done, the final decision rests with the referee.
5. Protests can be filed by the team member who is registered with the first number.
6. The final decision is made by the referee and competition organizers. All claims are accepted during or immediately after the competition. Claims are not processed later. The final decision is made by the referee of the competition after all discussions and clarification of the circumstances.