



Maze Solving

League: Junior/Senior
Participation: Team max 3 person

DESCRIPTION

Maze solving robot competition applies to elementary school students (Junior) and SMP and SMA (Senior). Robots used may be homemade robot, or robot assembly / robot kit. The competition consists of two sessions with different difficulty levels for its class category. The competition aims to train participants' mindset in order to complete the track that has been provided with a specific algorithm so as to reach the finish with the fastest time. The trails have a base color white with a black track width +2 cm.

Terms and Conditions

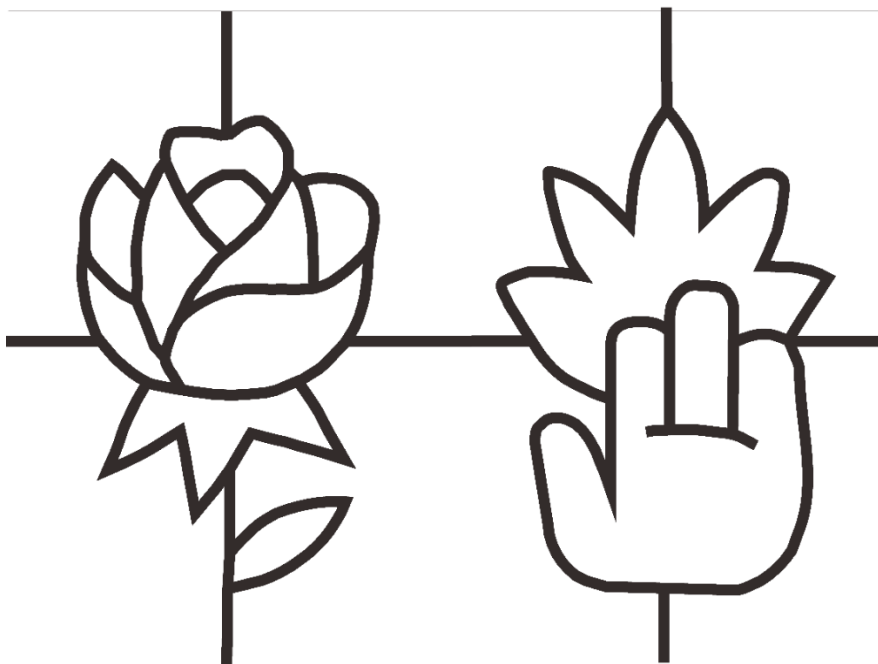
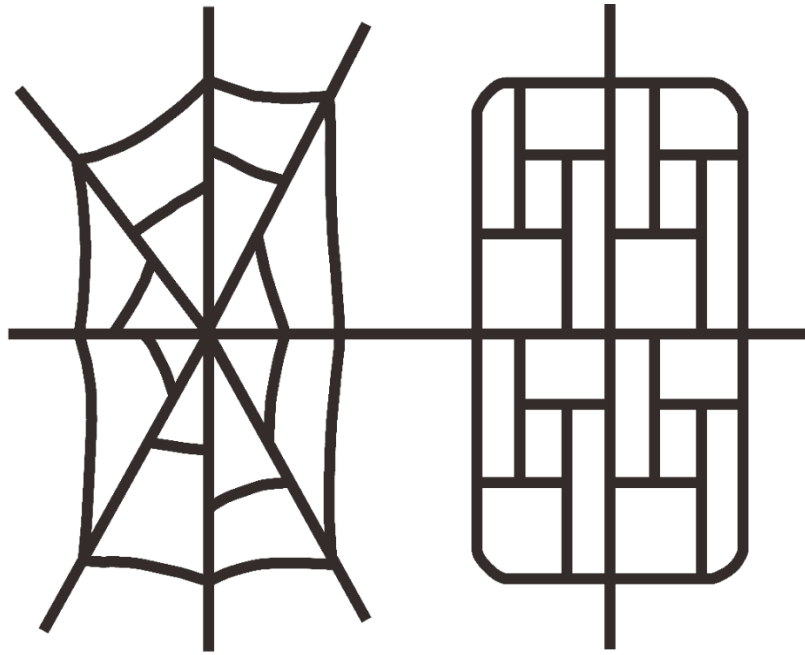
1. Participants maze solving robotic competition JUNIOR is SD
2. Participants maze solving SENIOR is SMP and SMA
3. A team consists of (up to) 2

SPECIFICATIONS ROBOT

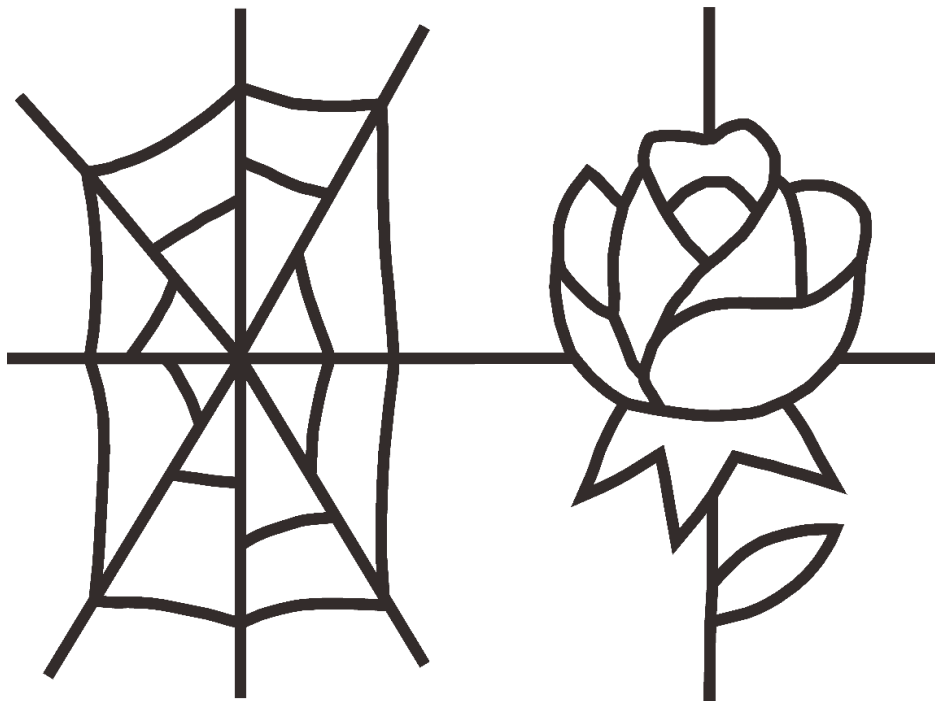
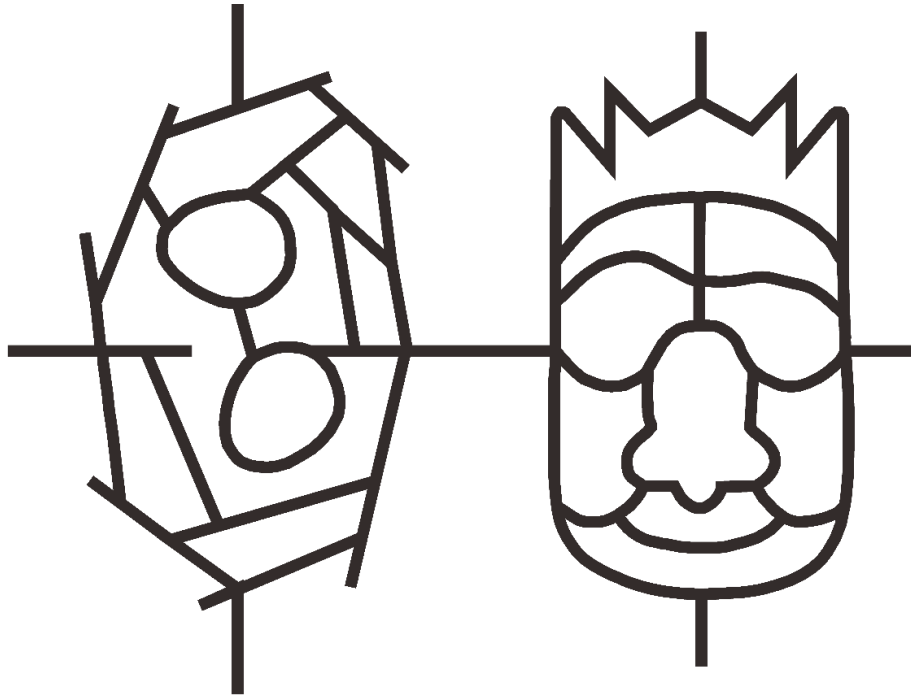
1. Each team is only allowed to take 1 piece robot, must carry a spare set of sensors.
2. The maximum dimension of the robot is 30x30x30cm with a maximum weight of 3 kg
3. The maximum voltage on the robot 12 V.
4. The number of batteries used in robots amounted to a maximum of 8 pieces or 1 set on the robot. Battery backup is the maximum sum to one set of batteries used robot.
5. For the junior and senior categories, robot brought in a state already assembled.
6. A robot must be able to run automatically (without remote control / programmable)
7. The robot must use a wheel.
8. The number of sensors used in robots is not specified.

Race Rule

1. The system is time beat race
2. The fastest time is the winner
3. Point to be taken is half of the total number of points in one track.
4. The time given to each team to complete the maze is 3 minutes (180 s)
5. During the programming session coaches are not allowed into the area of the game and communicate with participants
6. At the time of the race, there can be no communication between the teams, both teams from the same school or from different schools
7. During the race progressed Bluetooth, wi-fi on a laptop and mobile phone just turned off
8. Participants are given the opportunity to re-try as much as 1 times
9. At the time of re-try, the calculation time is running
10. The robot must be running on the track during the race line
11. When the robot is above the track, the robot can only operate with one push of a button.
12. At the time of walking robot, contestants are not allowed to touch the robots without permission from the referee. If a competitor touches the robot without permission from the referee, then the team will be penalized in the form of additional time records
13. Robots have reached the finish had to stop for 3 seconds on the finish line, a robot that does not stop would be considered not finish
14. If at the time the match allotted time has expired, the participant must stop the robot after a signal from the jury and will be considered not finish
15. At the time of judging, participants are prohibited reprogram the robot and the laptop is in a closed state
16. The jury's decision will be final.



Sample Track Maze Solving Junior



Sample Track Maze Solving Senior

Game Systems:

1. A robot must be able to operate with just the push of a button.
2. Trial begins after the jury gave a downbeat.
3. Robot that has been placed in the arena should not be touched by the participants, unless otherwise permitted by the jury.
4. The robot will be declared over if it has passed the finish line and stop over 5 seconds.
5. A robot must complete the route in less than 300 seconds.
6. If the robot is not complete until the allotted time, the time will be recorded as the maximum time of 300 seconds and by the check point is reached.
7. The robot will be given re-try one. If the re-try, then the checkpoint will be reset.
8. Not allowed to re-try if 300 seconds have elapsed.
9. If the robot body out of the line it is considered failed.
10. Not allowed to carry spare parts to the game area.
11. The winner is determined by:
 - a. Summing up the points and time of the session 1 and session 2
 - b. If the same points, then calculated the fastest time.
12. The jury's decision will be final.

ADDITIONAL RULES

1. Before entering the arena, robots, spare batteries, and spare parts are in one box / toolbox to be examined by the committee
2. Participants are not allowed to bring the storage media (flash drive, external hard drive, memory cards, and other portable storage media) into the arena. If the participant caught carrying these things, then the participants will get the sanctions committee
3. The permissible brought into the arena of programming media only, battery backup, and backup parts of the robot. Bags please entrusted to the committee or the Trustees.
4. Participants are not allowed to bring food or drink into the arena game
5. While in the arena, participants must use a name tag that has been provided by the organizer

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