Problem Statement JARVIS

ISSUED BY

Team Topbot

Introduction & Background

This is an AI based event where the participants have to make an intelligent bot that will find its way out of the maze. The design of the maze will be unknown to the participants. The bot is required to find its way by the process of trial and error.

Objective

The participants will make a bot that will be capable of finding its way out of the maze in a given time limit. The scoring will depend on the time of completion.

how To Apply

STEP 1:

Make a team of maximum 3 students and get yourself registered at https://topbot.in

STEP 2:

Pay the registration fees (Free for non IIIT students) using one of the following media:

1. Cash
2. Tezz

General Guidelines

1) Each team must assign a team leader.
2) Each team must consist of maximum 3 people.
3) The participants are required to make their own robots.
4) Each team will be given only one chance. In case you are unable to complete the task, a partial score will be provided to you based on your position and distance from finish.
5) The decision of the judges will be final.

Specification For Robot

1) Bot should not be greater than defined dimensions, i.e. 20cm X 20cm X 15cm (L X B X H).
2) You are free to use any microcontroller.
3) Bot should be powered using batteries only. No direct power supply is allowed. The maximum allowed voltage to power the bot is 24V.
4) The net weight should not exceed 2 kg.

Rules & Regulations

1) The maximum time to complete the course is 20 minutes. In case the bot is not able to finish the maze, partial score will be given, but the team will not be qualified for cash prize.
2) Changing batteries is not allowed during the event.
3) The team members are not allowed to touch the bot.
4) Arena dimensions 12ft X 12ft.

5) Other rules will be conveyed to the participating teams through email.

Scoring Criteria

1) Scoring will be based on time to complete the maze.
2) In case of tie (unlikely) the decision will be made by the judge by factoring other conditions.
3) To be eligible to get the cash prize, the bot must solve the maze in given time.
4) In case a bot is unable to complete the finish line, partial score will be given. If the team comes in a winning category they will get other prizes (intended prize - cash prize).