



RULE BOOK

Line Following Robot (LFR)

Team Formation

- Each team may consist of maximum four members.
- A team may consist of students from more than one institution.
- A person can only be part of one team.
- A person will not be allowed to register for two different teams.

Registration

- Registration Fee for a team – 2000 BDT (for one to three members)
- Additional 500 BDT for an extra member.

Registration link:

https://docs.google.com/forms/d/e/1FAIpQLSdm-x-nlOOYPLL6Dgrkr4TzeRUTHifWEQXL_F9aYYgzWWn6IA/viewform

Schedule & Venue

- Qualification Round: October 17, 2023
- Final Round: October 17, 2023

Venue: KUET

Robot Specifications

- Dimensions – 25 cm x 25 cm x 25 cm (Maximum)
- Weight – 2.5 Kg (Maximum)
- Power Supply Voltage – 24 Volt (Maximum)
- Robot must move autonomously and start with the push of a switch.
- Any type of wireless/wired remote control is not allowed.

Arena Specifications

- Arena Size – 4 m x 4 m
- Two tracks will be used for the two rounds of the competition.
- The tracks may include straight line, curved line, sharp corners, loops, gaps, obstacles, bridges etc.
- Line width – 2.5 cm
- Start and End Box – 25 cm x 25 cm
- The line will be black on white surface (The reverse might be present)
- There will be some checkpoints on the track.

General Rules

- Teams need to be present at the venue at least 30 minutes before the competition
- The robot must be handed over to the organizers 10 minutes before the start of the event.
- All teams will participate in the Qualification Round. The qualified teams will compete in the final round.
- The top three team, based on the score achieved, will be crowned as Champion, 1st Runner Up, 2nd Runner Up.
- Every team member will get a participation certificate.
- The organizers can request the robot anytime during the event for inspection purposes and the teams must oblige.
- The organizers may alter the rules and regulations if need arises.
- If any cases of doubt or confusion arises the decision of judges will be the final.

Contest Rules

- Each team will get 3 minutes of time for calibration. Only one member can handle the robot during calibration.
- After calibration the team will get 5 minutes for traversing the course.
- The robot needs to start it's run before or at the starting box and must pass through at the end box to finish it's run. Stopping at the finish box will result in a bonus point.
- It is not compulsory for the robot to run through all checkpoints but doing so will result in bonus points.
- If the robot diverts uncontrollably from the track, it can be restarted from the last checkpoint.

Disqualification

- The robot must be fully autonomous. Using any types of wireless module will result in a disqualification.
- Any types of non-conformity towards the event rules will cause disqualification.
- Any types of behavioral misconduct of a team member will result in an instant disqualification.
- No refund will be applicable for any type of disqualification

Scoring

Remaining Time, $T = 300 \text{ sec} - \text{Time taken to complete course}$

Checkpoints, $C = +15$

Restarts, $R = -10$

Stopping at End Box, $E = +20$

Total Score, $TS = 0.5T + N_C C + N_R R + E$

Organizer's Disclaimer

- The organizers will not take any responsibility for any damage to the robot during the competition.
- Organizers aren't responsible for disqualification of teams due to the failure of arriving at due time.

Data Consent

- The teams automatically give the right to store and use their given data during the registration and the competition.
- The organizers may disclose the name of participants and pictures in any time frame of the event.

Contacts

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