

















### LFR RULE BOOK 1.0

This competition is open to all the students of college and undergraduate students of all universities.

### RULES

- 1. It is mandatory to submit the robot before the competition starts, after which no modifications to the bot can be made for the immediate round.
- 2. Race time will be 3 Minutes for the qualifying round and 5 minutes for the final round.
- 3. The bot with the best lap time wins or qualifies for the next round.
- 4. Once the robot has crossed the starting line, it must remain fully autonomous, or it will be disqualified.
- 5. The lap is disqualified if the LFR runs off the board or cuts the track. It is okay for both wheels to go outside the tapeline, but if both wheels go inside the inner edge of the tapeline the lap is disqualified.
- 6. Points will be awarded only if the robot travels the whole path between two checkpoints and crosses the new checkpoint. No checkpoint can be skipped. Touching the bot during runtime is a compulsory restart from the checkpoint. Restart is a must in case the bot gets out of track. The bot must restart from the last completed checkpoint.
- 7. Max no of restarts: 6.
- 8. Each team can consist of maximum 3 members. Additional One member will cost extra BDT 500 with the total fee amount.
- 9. Time recorded by the judge shall be final. Overall decision by the judges regarding the segment and conduct is final and may not be challenged.

## ROBOT SPECIFICATIONS

The robot must meet the following dimensions and specifications:

#### a. Maximum Dimension of the Robot:

Length: Maximum 30 cmWidth: Maximum 30 cmHeight: Maximum 30cm

- b. Maximum weight: 2kg
- c. The Bot must run on wheels, metal wheeled bots are not acceptable, they must have rubber wheels.
- d. Any kind of communication module is strictly prohibited. Jamming devices, such as IR LEDs, intended to saturate the opponents IR sensors, are not allowed. Usage of such devices will result in direct disqualification.
- e. The potential difference between any two points should not exceed 24 volts DC.
- f. Robots must use an on-board power supply. No external power supply will be allowed. Each team should bring their own power supply for robot.
- g. Readymade circuit boards are allowed but readymade bots.
- h. Modification in bots after successfully completing one round is allowed.
- i. No construction set such as LEGO or Meccano is allowed.

# Special Cases

- 1. Rules may be modified by the ompetition committee as long as they are published prior to the event.
- 2. Participating teams are responsible for the safety of their robots and liable for any accidents caused by their team members or their bots.

**Event summary:** The objective of this contest is for a robot to follow a black line on a white background without losing the line and navigating several sharp turns. The robot to complete the course in the shortest period of time while accurately tracking the course line from start to finish wins and goes to the next round. There will be in total of three rounds with three different tracks.

# MAP FOR THE FIRST ROUND

