Computenigma 2020

Empowering Technology for Digital Evolution

Line Follower Robot

Official Rule Book

BAIUST Computer Club is welcoming students to participate in the Line Follower Robot Competition.

Announcements:
- Participants must bring their respective Student IDs for verification purposes at the event.
- There will be two rounds. As:
  Round 1: The first round will be started by using the basic line following challenges where selection will be time wise.

  Round 2: The final round will be started by a complex track. While following the Line Follower Robot (LFR) will face curved lines, round loops, intersections, right angles acute angle, line gaps, bridge, and/or zigzag.
- For calibration purposes, one of the track will be available to the participants for an hour on competition day.

Conditions:
- Only the students of College, and Universities is allowed to participant without limiting scope. Security clearance is necessary for every participant.
- Members of a team can be from different institutions too.
- Participants will have to participate with their team which minimum of two (2) members, and maximum three (3) members.

Registration Link for Line Follower Robot: http://bit.ly/registration-computenigma2020

Deadline for Registration: December 25, 2019

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Registration Fees for Line Follower Robot: 1000 BDT (2 Members) or 1500 BDT (3 Members)

Payment Submission:
Interested participants will have to directly pay in advance for their participation fee by using Mobile Banking Payment Method "bkash".

Payment Procedure for paying through bKash for Line Follower Robot:

1. Go to bKash Menu by dialing *247#
2. Choose 'Send Money' option by pressing '1'
3. Enter our billfold number: XXXXXXXX.
4. Enter BDT. 1000/1500 BDT
5. Enter a reference against your payment: LFR
6. Now enter your PIN to confirm: XXXX.
7. Please wait for confirmation text from bKash.
8. Please save the confirmation text after receiving it.
9. Write down the payment code to the registration form.
10. Done!

Start Receiving Payment: December 26, 2019

Deadline for Payment: January 01, 2019

Rules and Regulations:
- Only Selected team will be allowed to participate in the main event.
- Before starting the competition, each team will have to submit their bot.
- After bot submission, the teams are not allowed to make any changes to the bot.
- During race, only two (2) members are allowed to stay in the arena.
- During runtime, if any of team members touch their bot, they get restart from the last completed checkpoint. If the bot gets out of track, Restart will be compulsory.
- Maximum number of restarts is five (5).
- Maximum allowed voltage difference between any two points of the circuitry is 24V.
- Every bot will must need to have a power switch/kill switch.
- No external communication is allowed during controlling the bot.

Specifications:
- The autonomous robot must satisfy the following design rules-
  1. Height: Maximum 25 Centimeter
  2. Length: Maximum 25 Centimeter
  3. Width: Maximum 25 Centimeter
  4. Weight: Maximum 2 Kilogram

- **Power:** Each team have to bring its own power supply for the bot. No additional equipment/parts will be supplied in the competition.
- Readymade circuit board is allowed but readymade LFR is not allowed.

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- No constructed set such as LEGO or MECCANO is allowed.
- The maximum number of allowed switches is two including the power switch and the reset switch.
- No wired/wireless communication between the operator and the line follower is allowed. If found, the team will be disqualified immediately.

Arena Specification:
- Track will be printed 'Black on White' surface.
- Track line will have a minimum breadth of 2.5 centimeter through the whole track.
- Sharp turns will be 30°, 35°, 80° and 90° angles. There won't be any angle less than 30°.
- There will be curves and discontinuity in the line.
- The bridge angle will be a maximum of 45°.

Point Distribution:

Activity	Point
Passing Checkpoints (One – Six)	10*6 = 60
Endpoint (Checkpoint: Seven)	20*1 = 20
Optional Checkpoint	5*1 = 05
Each Restart	-10

Disqualifications:
- Disrespecting the competition judges.
- Disrespecting the security rules, and any opponent teammate.

Flexibility:
- The organizer reserves the right to change competition prizes and/or modifies the rules and regulations of the competition as and when necessary, with/without prior notice.

Liabilities:
- Participating teams will be responsible for the safety of their robots always, and they are also liable for any accidents caused by their team members or their robots.
- The event organizing team members won't be responsible nor liable for any incidents or accidents caused by participating teams or their equipment's.

For more information, please feel free to contact to: +8801533619472

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