

FARMTRACK

Build a robust manual bot that can outlive the rocky, topsy-turvy terrain. Accept the challenge, strike the crags, endure the obstacles and reach the end.

OBJECTIVE

Build a manual wired/wireless bot which can surpass all the obstacles and hurdles on its way and reach the final line in minimum time.

ARENA

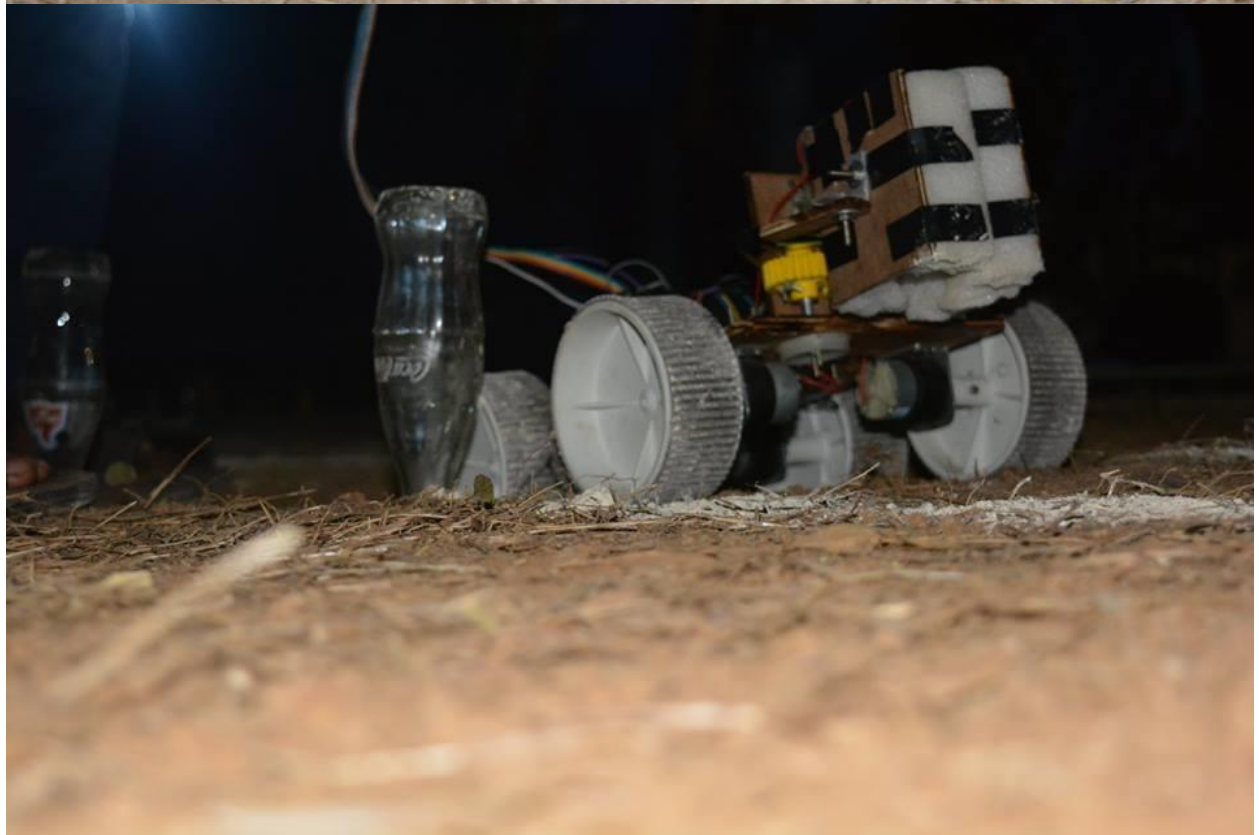
All rounds may have one of the following obstacles

- a) rough terrain track
- b) bumps
- c) nail-bed
- d) see-saw
- e) hanging bridge
- f) water puddle
- g) stones
- h) oil/grease bed
- i) springed door
- j) rotating platforms
- k) slope
- l) ball pick & drop

NOTE:

- 1) There will be some surprise obstacles as well to be disclosed on the spot.
- 2) Final round will have more complex obstacles.







BOT SPECIFICATIONS

- ❖ Bot must have gripper mechanism for picking up ball from some place & dropping it to some other place. The size of ball would be like our normal TENNIS ball. Length of the gripper should not increase from 30 cm in straight position.
- ❖ At the start of match bot size should not be more than 300 mm X 300 mm (length x breadth). However it can expand in any direction after the start of the match.
- ❖ Bot can be wired or wireless with an on board or an off-board power supply.
- ❖ In case of a wired bot, the length of the wire must be a maximum of 2m.
- ❖ Maximum allowed voltage: (D.C.) 24V. No external power supply provided.

GAMEPLAY

- ❖ The robots have to start from the marked starting line on the arena.
- ❖ The event will consist of four stages in total which are:
 - Qualification round
 - Quarterfinals
 - Semi-finals
 - Finals

RULES

- ✓ The teams will not get any time for practicing on the track.
- ✓ Team can touch the bot or take restart only three times with a penalty of extra 20 seconds each. Taking a restart or touching the bot for the fourth time will lead to disqualification.
- ✓ If the bot touches the boundaries of the tracks, a penalty of extra 5 seconds will be imposed.
- ✓ Each obstacle should be completed in less than 2 minutes else the team will be disqualified.
- ✓ Team may skip any two obstacles excluding the final obstacle.
- ✓ No repairing time will be given on the track.
- ✓ Each team will get a maximum of 6 minutes to complete the qualifying round.
- ✓ Only 2 team members are allowed on the track where the bot moves while the game is on.

- ✓ Organizers reserve the right to disqualify any team indulging in misbehaviour or violating any rules.
- ✓ Any team that is not ready at the specified time will be disqualified from the competition automatically.
- ✓ The time and score measured by the organizers will be final.
- ✓ Time and score recorded by any contestant by any other means is not acceptable.
- ✓ The organizers reserve the rights to change any or all of the above rules and scoring pattern as they deem fit. Change, if any will be highlighted on the website.
- ✓ In case of any dispute or ambiguity, event coordinators' decision will be final and binding.

SCORING

- 50 points will be awarded to cross the major obstacle and 25 points will be awarded to cross the minor obstacles.
- 100 bonus points will be awarded if the bot is wireless.
- 200 points will be awarded for crossing the finish line.
- 50 bonus points will be awarded for bot with on-board battery
- 200 points will be awarded for any task involving gripper mechanism
- Final score = (total score) – (time(in seconds) /3)

TEAM SPECIFICATION

- A team of maximum 4 members carrying a valid college ID-card can be formed.
- Students from different educational institutes can form a team.

CERTIFICATE POLICY

- Certificate of Merit will be awarded to top three teams only.

CONTACT INFORMATION

Vikrant K. Chaudhary (CO-Head)

Mob: 9512534585

Bishal Prabhat (CO-Head)

Mob: 7043247056