



K.J. Somaiya College of Engineering, Vidyavihar, Mumbai-77 (Autonomous College, Affiliated to University of Mumbai)

FIND A WAY OR FADE AWAY

presented by EESA

OVERVIEW

Line follower robot is a mobile robot which is able to accurately follow the line. Line follower robot has a great significance in industries where automation is desired. In modern automation technology where huge complexities are involved, robots following different colour lines are used. The competition is based on the **colour line follower**. This competition is held in two levels. With the increase in level, the complexity will increase.

In the first level, there will be multi-coloured lines having Red, Green, and Blue colours, and the task will be to follow the colour which is assigned. In the second round, the change in the colour has to be detected and the changed colour has to be followed by the robot. The robot will be provided by us at the time of competition. Also driver level function to access the hardware will be provided. Robot is built using Arduino by us. Participants have to write the code for the robot to complete the task assigned to them.

RULES

- Students from FY, SY, TY, and LY can participate in this event which is of 2 Levels.
- A team of two participants is required to participate in the event.
- Every Team has to clear level 1 to get into level 2.
- The Total Prize of this event is up to INR (A+B). It is distributed as INR A for the initial level and INR B for the second level.
- The Prize for clearing first level would be given only to the participants from First and Second Year of Engineering. The aim of this prize is to motivate first and second year students to participate in the event. The Third and Fourth Year students are not eligible for the prize of clearing 1st level.
- After clearing Level 1, winner from first or second year (clearing level 2) will be awarded with the total prize of INR A+B. 'Any Winner from third or fourth year of engineering will be awarded with the prize of INR B'.





- In both the levels, participants are expected to write the Code for the working of Robot. Robot will be provided by the orgainzers.
- Participants cannot bring their own Robot.
- Coding time will be precisely of 90 min for each level.
- Judging will be done on the basis of 'Time required' by the team to complete the Level.
- If none of the teams clear level 1/level 2, then winner will be decided on the basis of Maximum Points scored by participant.
- If neither robot reaches the finish point, then the winner of the trial (attempt) will be the robot close to the finish line.
- Team which completes Coding part in '30 mins or less time' will get '3 Free Attempts'. Team which completes Coding part after '30 mins and till 60 mins' will get '2 Free Attempts'. From '60 mins till 90 mins', '1 Free Attempt' will be given. After '90 mins', no 'Free Attempt' will be given. (This is applicable for both the levels).
- For every Failed Attempt, 5 Seconds will be added to your Final Time.
- It is forbidden for the robot to drive off the track. If it happens, the robot will lose the trial.
- Teams will get bonus points on the basis of track length covered by them.

Note:

- Arena will be displayed on the day of event (a basic model of level two has been attached).
- Extra time for understanding the robot will be provided.
- Team cannot exceed from 3 members per team.
- The decision given by referee will be final and no interference will be tolerated.

Prerequisites:

- Participants should be aware of coding in Arduino & interfacing with the sensors.
- Participants must be acquainted with line following bot's algorithm.





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Reference links: https://www.youtube.com/watch?v=ClCtul8l8el

Registration fee: Rs. 100/- (Team of 3) Prizes Worth: Rs. 8000/-

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