



It is of course the nature of historical contraction that the shortest distance to a historical destination is never a straight line.

-Ibrahim Babangida

Go straight, turn left, right, make a U turn, again left.... Confused...?? But did you realized something...?? Even following some directions is not everyone's cup of tea. So do you think that you can manage to do this? If yes then here is the twist, create a bot for following these directions and be the champion.

#### PROBLEM STATEMENT:

To build an autonomous line follower bot capable of following a white path on black surface.

# **GENERAL RULES**

- The maximum team size is four.
- The four candidates may or may not be from different colleges.
- No person can be in two teams of the same event.
- Damaging the path will lead to immediate disqualification.
- Decision of Coordinators would be final.

# **EVENT RULES**

- The width of line would be 2.5cm. approx.
- There will be a total of 3 rounds.
- The maximum time allotted to complete the task is 4 minutes in the prelims and 6 minutes in the finals.
- A team can have maximum of three resets & one restart in 1<sup>st</sup> round and five resets & one restart in 2<sup>nd</sup> and 3<sup>rd</sup> rounds.
- After every reset, the bot will be placed at the last check point but each will lead to a penalty (the timer will not be paused during reset).



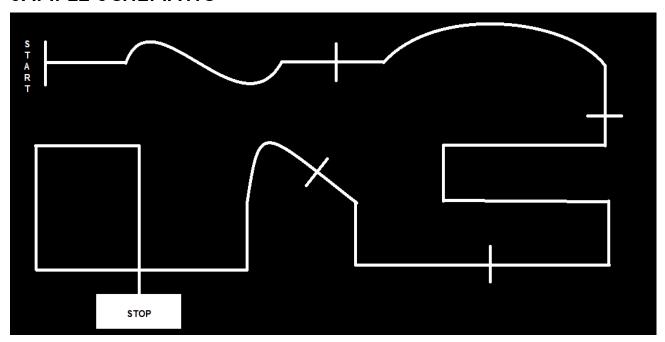


- If a team wants a restart, the bot will be placed at the starting point.
- The run shall start from a predefined starting zone.
- The decision of the event coordinator(s) will be final and binding.

## **SCORING**

- 40 Points will be awarded for successfully crossing each checkpoint.
- 100 points will be awarded for successfully reaching the end point.
- 200 Points will be awarded for stopping at the end point.
- Penalty of 20 points will be imposed for each reset.
- Penalty of 100 points will be imposed for each restart.

## SAMPLE SCHEMATIC



<sup>\*\*</sup>The real arena may differ from the given sample.