

LINED IT

PROBLEM STATEMENT:

Teams have to build an autonomous robot which will follow a black/white line and keep track of directions while going through the course.

BOT SPECIFICATIONS:

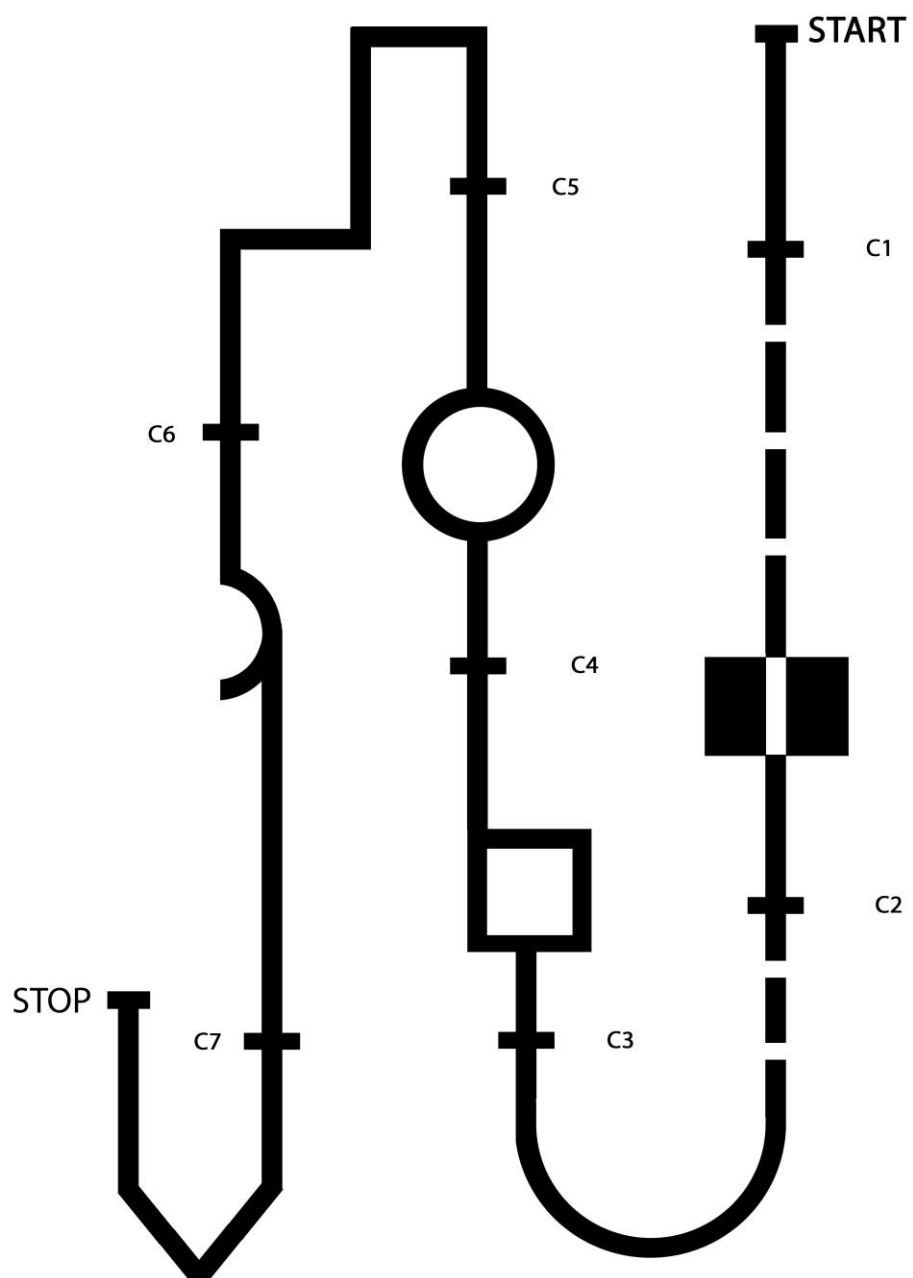
- 1.** The bot should fit into a box of size (25x25x25 cm).
- 2.** Robots must not use ready-made mechanisms Lego kits or similar assemblies. However, ready-made sensors and microcontroller kits can be used.
- 3.** No part of the robot should exceed the given dimensions during ANY PART of the event.
- 4.** In all cases, any on-board power supply devices like batteries are to be included in the maximum dimension limit.
- 5.** Potential difference between any two points on the bot should not exceed 24 volts.
- 6.** The rules are subject to change.
- 7.** In case of disputes, the decision of team vssut robotics society is final.

GAMEPLAY RULES:

- **The event is divided into two segments: Prelims and Finals.**
- **The judgement will be made strictly on the basis of points acquired during the run.**
- **A team may consist of a maximum of 4 members. Students from different educational institutes can form a team.**
- **Teams are not allowed to replace parts between runs. They are, however, allowed to replace defective sensors, but with a penalty added to it.**
- **Change of batteries and modifications to the code are allowed but the game play has to be restarted.**
- **Any damage caused to the arena at any point of time will lead to disqualification or penalty.**
- **If the robot is manually touched except at the start, then it will be considered as a violation and will lead to penalty.**
- **Any robot found damaging the arena will be disqualified from the event.**
- **Teams may skip a maximum of two checkpoints.**
- **The judgement is binding to the coordinators only. Any change in the arena will be notified to the participants via the website <www.vssutrobotics.in> or through calls.**

ARENA:

- **The arena will comprise of both Black and White lines, each coming at certain intervals.**
- **The thickness of the lines will be 3 cm at any point.**
- **The gaps after each checkpoint will be minimum 1cm.**
- **The acute angle between C7 and STOP will be of 45° .**
- **The START and STOP will be of 20 x 20 cm**



POINT DISTRIBUTION:

START → C1	:	5
C1 → C2	:	10 + 10
C2 → C3	:	10
C3 → C4	:	10
C4 → C5	:	5 + 10
C5 → C6	:	10
C6 → STOP	:	15 + 15

Players must stop at each checkpoint for 1 sec to gain an additional 5 points per checkpoint.

Players must stop at STOP to get 20 points.

Restart will cost a penalty of 10 points. Bot touch will cost a penalty of 5 points.

NOTE:- Problem statement for final will be disclosed on the spot only after the prelims matches are over

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