

Brief Description:

The Skynet AI system is in trouble as we have destroyed most of its bots ... But still few bots are left which has been given the task to create autonomous bots and to secure their AI system from us. Your team has to infiltrate the last base of Skynet AI system left and get the intel about their next mission. We have given you an Exo – suit to outsmart their AI system but since they test every new bot added, your team has to establish credibility by making some simple autonomous bots for them. You will be tested through two phases:

- 1. First phase will be to test if your autonomous "line follower bot" can traverse a simple track in the specified time.
 - a. A team whose bot cannot complete the course in the allotted time shall be disqualified and you will be sent back for the rewiring of your brains by the Skynet AI system.
- 2. Second phase will test your autonomous bot to a more rigorous track and your bot has to cross through more hurdles.
 - a. Skynet send only best of its bots to the mission, only top 3 teams are selected to be the part of their system.

BOT SPECIFICATION: 250 X 250 X 250 dimensions in mm.

Team specifications

- Teams can be formed from members of any college, branch or year.
- Team size: Maximum 4 members.
- You can also take participation individually.
- A team may consist of members from different educational institutes.

Power Supply and Propulsions

- Machine must be completely self-contained and should receive no outside assistance. It should not use an energy source employing a combustion process.
- Machine should have an on-board power supply. No external power supply is allowed.
- Voltage on the machine at any point should not exceed 15V DC.

GameRules:

- The bot control should be Autonomous
- Each contesting team will be given 10 minutes to make any adjustments to the sensors on test arena.
- Once match is started only one member of each team i.e. the operator will be allowed to enter the arena after permission from organizers.
- Time is measured from crossing the start line until the robot crosses the finish line.
- A robot is deemed to have crossed the line when the forward most part of the robot contacts or crosses over the line. The specified time shall be disclosed at the moment before the round first.



- Any bot that loses the line course will have to start from recently traversed checkpoints. Each reattempt will cost you a time penalty.
- Also, if your team realize that your bot can't pass a certain part of the track you can skip that part.(Of course, again with some time penalties)

Arena and track description:

Dimensions of boxes: height x width x length = $20 \text{cm} \times 10 \text{cm}$ $\times 10 \text{cm}$

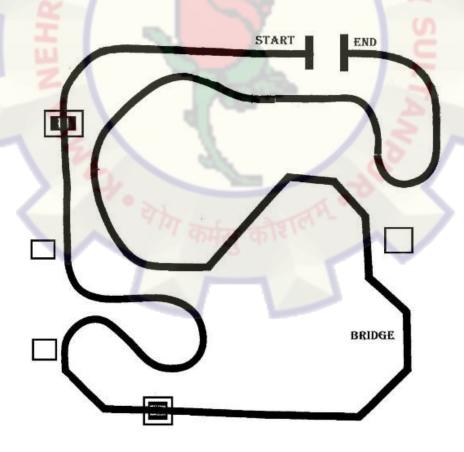
Note:

- This is a representation only. There may be minor differences in the actual arena.
- The hurdles positions and number may be changed

LINE FOLLOWER - ARENA #1

NOTE: The hurdels positions and number may be changed.

Task: Their will be two types of boxes BLACK (Terrorist), WHITE (Hostages). The task is to remove terrorists from the path and count the hostages.





Arena and track description:

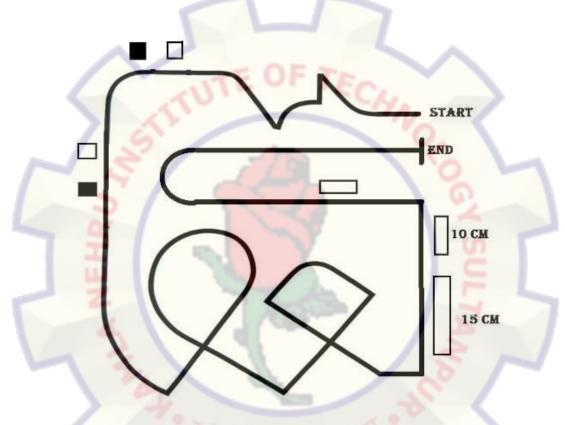
Note: This is a representation only. There may be minor differences in the actual arena.

LINE FOLLOWER - ARENA #2

NOTE: The hurdels positions and number may be changed.

TASK: Besides the hostages and terrorists there will also be buses(10 cm) and tanks(15 cm)

.You have to count them all individually.



General Rules

- Any team that is not ready at the time specified will be disqualified from the competition automatically.
- The bot will be checked for its safety before the race and will be discarded if found unsafe for other participants and spectators.
- Participants are not allowed to keep anything inside the arena other than its autonomous robot.
- Laptops/personal computers are not allowed near the arena. Other Wi-Fi, Bluetooth, etc. devices must be switched off. The organizers hold the right to check for these devices and their usage.
- The score and time measured by the organizers will be final and will be used for scoring the teams. Time measured by any contestant by any other means is not acceptable for scoring.



- The lead person of a team can present objections to the Committee, before the match is over, if there are any doubts in the exercising of these rules. If there are no Committee members present, the objection can be presented to the judge before the match is over.
- In case of any disputes/discrepancies, the organizers' decision will be final and binding. The organizers reserve the rights to change any or all of the above rules as they deem fit.
- Change in rules, if any will be highlighted on the website and notified to the registered teams.

Note:

- We will strictly not allow any kits that come preprogrammed like Pololu, Lego etc.
- Please make sure you adhere to this.
- All rules are subject to change without notice.

Penalties:

- Each contact made by you to the bot after the round started will cost you as a 20 sec time penalty to your overall time.
- Every part you skipped between checkpoints will cost you as a 60 sec time penalty to your overall time.
- You will be disqualified immediately if your bot found scratching, damaging or destroying the track or accompanying parts of arena.
- Even if a participant takes a hand touch, the clock will keep running and will not be reset as the robot starts again from the previous restart point.

QUERRY/HELP

Event Co-ordinators:-

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