

"TIME-LINING"

FUN is the #1 priority; Winning is 2nd

Introduction:

Mankind took a huge leap in science and technology when it invented robots. Robots are always fascinating to them and are constantly evolving. “Time-Lining” brings you an opportunity of a lifetime to use this opus invention and prove your worth by making and controlling it. A multitude of exciting events awaits you that not only fulfils your appetite for imagination and application but also is a source of ultra-gratification when you bring your imaginative transformers into the real world. You will have to make a robot that meets given specifications and make your way to victory. So gear up, show your intellect and start ROBOTING!

TASK:

You are required to build a line follower robot, which is expected to traverse the whole track from "START" to "END" in least possible time i.e. complete the course as fast as possible.....the earlier "END" comes, the closer you will be to Victory.....

ELIGIBILITY:

- Students of any recognized college are eligible to participate. All participants should have their college ID cards with them.
- A team may consist of a maximum of 3 participants. These participants can be from same or different institutes.

ARENA:

- The exact shape and length of the track would be disclosed at the time of the event. **The line shall be a black, 2 cm wide line traversing the arena from end to end.** There shall be no crossovers (e.g. places where the line crosses itself). Switchbacks and hairpins are possible, but the adjacent sections of the line shall be no closer together than 30 cm when measured from the centre of each line.
- The line course shall have 1 or more sharp right-angles, but will mostly comprise of straight lines and arcs within the confines of the base-board. The track may have arcs with different curvatures linked continuously.
- **The finish line will be 4cm thick and 8cm in length. It will be perpendicular to the course line and the bot should automatically stop at this line.**
- The surface of the racetrack shall normally be level, however portions of the track may be inclined at a maximum of 5 degrees. Differences in level of up to 2 mm may exist at the joints between modules. Gaps of up to 2 mm may exist at the joints between modules.
- Complaints about the grip on the track surface will not be entertained.
- There might be branching in the arena as shown in the sample.

GAMEPLAY:

Complete the course as fast as possible. If there's a tie between the fastest, a run-off will determine the winner. If nobody finishes the run, the farthest one to run on tracks will win.

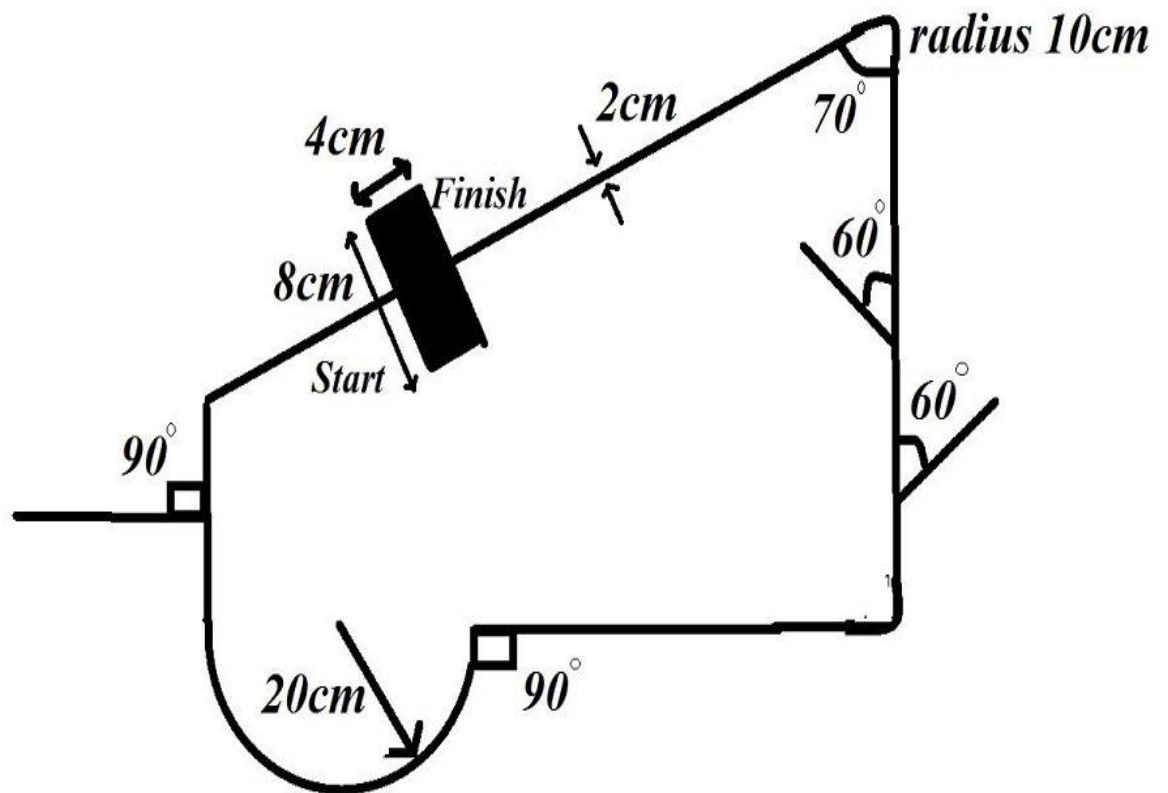
There are a maximum of 3 tries for each robots. The fastest run of the 3 will count. In each try, the participant can touch the bot maximum 5 times (with penalty for each touch)

RULES:

- Line Followers must be **self-contained and not externally operated** by wire or by remote radio control during the race.
- Except for the battery pack, the handler shall not make any addition, removal, replacement or change to the hardware of a Line Follower during a contest. It is however permissible to make minor repairs.
- **Size and Weight Limits:** dimensional and weight limits for robots shall be strictly enforced. Robots must have passed inspection prior to competing. A Line Follower shall not exceed 25 cm in overall length, 25 cm in overall width and 20 cm in overall height.
- **Course Time:** time is measured from the time the robot starts until the time it stops at the finish line. However if the bot is unable to stop at finish line, some penalty will be awarded.

- **Timekeeping:** time shall be measured by an electronic gate system or by a judge with a stopwatch, based on the availability of equipment. In either case the recorded time shall be final.
- **Autonomous Control:** Once a robot has crossed the starting line it must remain fully autonomous, touching a bot for any reason after it crosses the starting line will be penalized. (penalty to be disclosed at the time of event)
- Any robot that loses the line course must reacquire the line at the point where it was lost (either by itself, or by human help which would be penalised), or at any earlier (e.g. already traversed) point. . In a run, maximum of 5 touches are allowed (to bring the bot back on track if it goes off track or is looped etc.) but each touch will be penalised.
- **Power:** Gas and Li-Po battery are not allowed.
- **Power of Officials:** The organisers reserve the right to make changes to any of the above in the interest of fair play and sportsmanship, and to ensure that all competitors have an enjoyable competition. The decisions of all officials regarding these rules and the conduct of the event shall be final. In the event of ambiguity, the organisers' interpretation of any clauses of the rules shall prevail.
- **Liability:** Participating teams are always responsible for the safety of their robots and are liable for any accidents caused by their team members or their robots. Zeitgeist, IIT Ropar and the organizing team members will never be held responsible nor liable for any incidents and / or accidents caused by participating teams or their equipment.

SAMPLE ARENA:



Note : This is just a sample, to show all the features. The actual length and shape of arena will be disclosed at the start of event only...

CONTACT US:

For any further queries, drop an e-mail at support@zeitgeist.org.in.