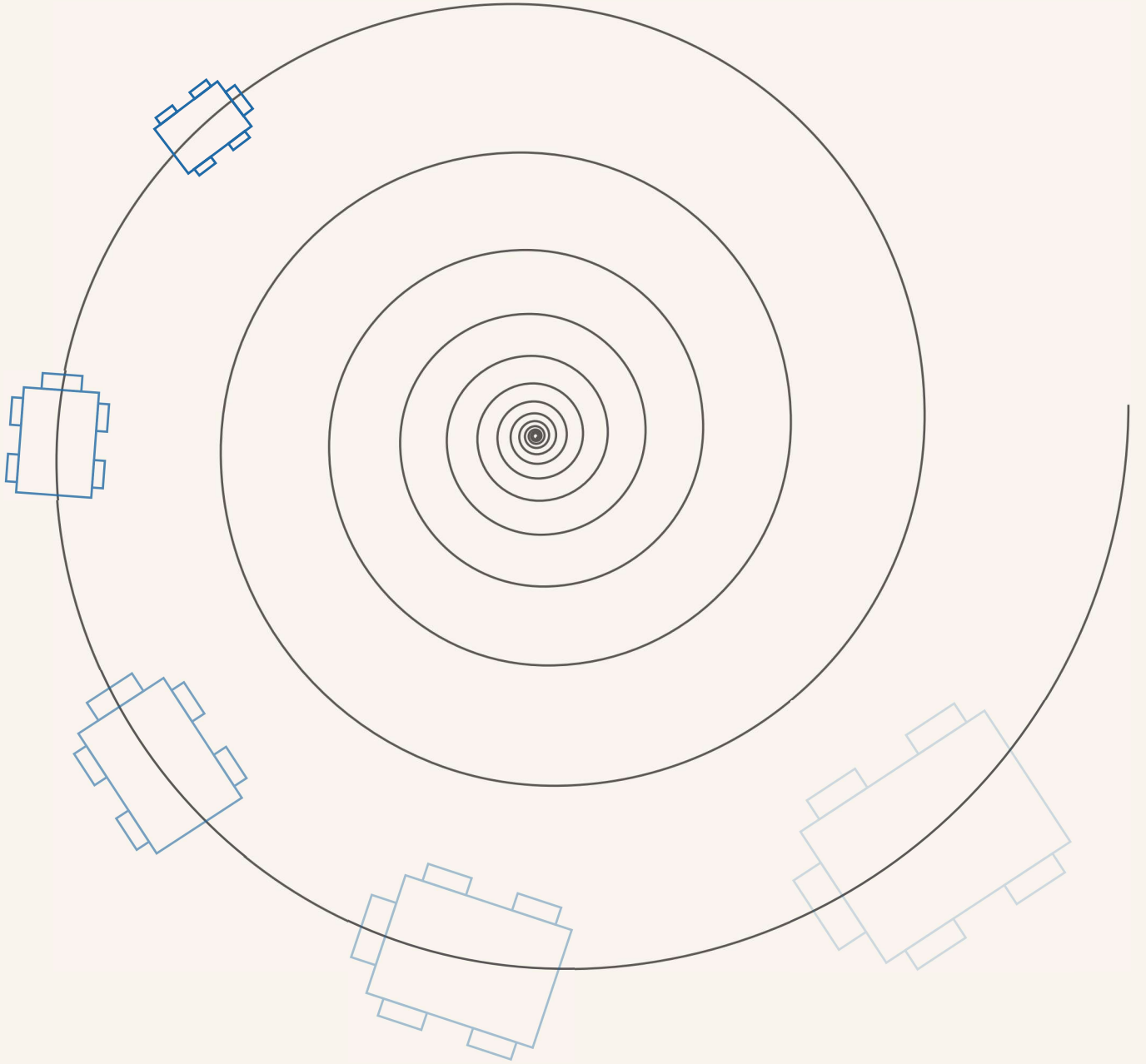


LINE FOLLOWING





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Line Follower Category Rules

Task Description

- 1. In this category, robots attempt to reach the finish line by following lines on the track from the starting point.

Success Criteria

- 2. The success criterion in this category is the robot's ability to reach the finish line.

Robot Features

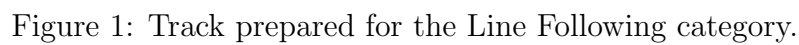
- 3. The robot's width should not exceed 20 cm, its length should not exceed 30 cm, and its height should not exceed 25 cm.
- 4. There is no weight limitation for the robot.
- 5. The robot must be autonomous and cannot be controlled externally.








Track Features

- 6. The track is made by drawing lines on a white-colored tarp.
- 7. The path the robot must follow consists of a black line on a white surface or a white line on a black surface. The robot must follow the line.
- 8. The track is 4 meters wide and 2.8 meters long.
- 9. The thickness of the line on the path is 18 mm.
- 10. Contestants are not allowed to step on the track except for the designated areas.
- 11. Figure 1 shows the track prepared for this category.

Competition

- 12. Each robot competes in turn.
- 13. The contestant whose turn it is takes their robot from the referee's table and places it behind the control point in the starting area.






-  14. The contestant may place their robot anywhere behind the control point in the starting area. The robot starts the race on the referee's command. The robot's time starts when it passes the control point in the starting area.
-  15. If the robot goes off the line, it receives 1 foul. The contestant is eliminated on the 4th foul.
-  16. Robots that go off the line are restarted by the contestant from the last passed task point.
-  17. Robots that go off the line before reaching the first task point restart the race from the starting point.
-  18. At turn 1, the robot can choose either path at the fork.
-  19. At the second fork, if the robot chooses the wrong path and goes off the line, it receives 1 foul. In this case, the robot is restarted by the contestant from the last passed task point.
-  20. If the contestant intervenes with the robot without it going off the line, they are







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disqualified.

-  21. Robots choosing the semicircular path after the second fork receive a +10 second time penalty.
-  22. If the robot takes a shortcut at pentagon 4, it restarts from the last checkpoint.
-  23. The time stops when the robot crosses the finish line.

Scoring

-  24. The ranking is done from the robot that finishes in the shortest time to the one that finishes in the longest time.
-  25. Robots that cannot complete the track are eliminated and not evaluated.
-  26. The penalty times specified in the rules are added to the completion time once the robot finishes the track.
-  27. There is a limit of 3 foul points. The contestant is eliminated on the 4th foul point.