

# RENAISSANCE'18

## Line follower

### 1. Introduction

For all those who have passion in Robotics or Sports, RENAISSANCE'18 presents Formula zero. This competition is to show how good and swift robot of yours can be by following a line using it and scoring more points.

### 2. Problem Statement

The competition platform has been designed with a white line on a black surface. The bot will have to move on this line. The line width will be 3.0 cm. Note: Track will be uploaded soon.

## 3. Specifications

### 3.1. Arena

### 3.2. Team Size

1. Students from different colleges can form a team. A team may consist of at least 2 members and should not exceed more than 5 members.
2. The students must carry their valid student ID cards of their college which they will be required at the time of registration.

3. Teams should participate with wired or wireless robots. Only one team member can control the robot. Participants shall not be allowed to be a part of more than one team.

## 4. Eligibility

Any student from a recognized institute/college can participate in this event.

## 5. Rules

1. The robot would be checked for their safety before the run and would be discarded if found unsafe for other participants and spectators.
2. Participants should not dismantle their robots before the completion of the whole competition as the robots might need to be verified by the judges at a later stage to ensure that the participants have not violated any of the rules.
3. Judges' decision shall be treated as final and binding on all.
4. The organizers reserve the right 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 participants.

#### **Power Supply:**

1. The participants can use an on-board or off-board electric power supply. However the power source must be non-polluting and must satisfy the safety constraints determined by the organizers.
2. The voltage between any two points should be less than or equal to 12V DC at all times during the run.
3. In case of off-board power supply, participants have to manage on their own.

#### **Scoring:**

Complete task in minimum time with clearing all the checkpoints.

## **6. Specifications**

1. Each team is allowed to have only one bot.
2. The bot must fit into a cube of dimensions 25cm \* 25cm \* 25cm.
3. The max voltage difference between any two points must not exceed 12V
4. The bot must be fully autonomous with all powering and motoring

mechanisms self-contained.

5. Any manual (by switch) or wireless input is not allowed after turning on the power supply.
6. Human operators are not permitted to enter any information into the bot during the event.

## 7. Certificate Policy:

1. Top two teams will be rewarded and given prizes.
2. Certificate of participation will be given to all the teams.

## 8. Entry fee: 400/- (per Team)

## 9. Contacts

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