3. FORMULA ZERO

For all those who have passion in Robotic so far Sports, RENAISSANCĖ'18 presents Formula zero. This competition is to show how good and swift robot of yours can be,by crossing the hurdles using it and scoring more points.

1. Event Rules and Specifications

1.1. Arena

The arena consists of the following:

1. Track filled with pebbles, sand, water, spikes, soil, etc.
2. Five ramps, with inclination of 20 degrees and 30 degrees.
3. Semi cylindrical shaped hurdle of diameter 500 mm.

Note:

1. **The dimensions of the arena will be accurate to within 5% or 20mm, whichever is less.**
2. **The diameter of the pipe may vary within +/- 10 mm.**
3. **THE TRACK WILL BE UPLOADED SOON.**
4. **The arena may be slightly different.**

1.2 Team Size

2. Students from different colleges can form team .A team may consist of at least 2 members and should not exceed more than 5 members.
3. The students must carry their valid student ID cards of their college which they will be required at the time of registration.
4. 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.

2. Eligibility

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

3.Rules

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 24V DC at all times during the run.

3. In case of off-board power supply, participants have to manage on their own.

4. Game play:

1. The Robot must start from the START line.
2. There are 10 Test Modules in the track.
3. Each Test Modules has specified points, viz.
   - Test Modules 1: 30 points.
   - Test Modules 2: 30 points.
   - Test Modules 3: 40 points.
   - Test Modules 4: 40 points.
   - Test Modules 5: 50 points.
   - Test Modules 6: 50 points.
   - Test Modules 7: 60 points.
   - Test Modules 8: 60 points.
   - Test Modules 9: 70 points.
   - Test Modules 10: 70 points.
4. The robot has to cross each level in the given order only.
5. If robot is not able to cross a particular level then it can skip that level.
6. Maximum number of skips allowed is **THREE**, failing which will result into disqualification.
7. Points of the skipped levels will not be counted.
8. It is a time based game, the timer will start when the robot starts running from the START point.
9. The timer will not stop while skipping process.
10. The timer will count till robot reaches the FINISH point.

5. General Rules:

1. The teams must adhere with the spirit of healthy competition.
2. Organizers reserve the right to disqualify any team indulging in misbehavior or violating any rules.
3. Any team that is not ready at the specified time will be disqualified from the competition automatically.
4. The time measured by the organizers will be final and will be used for scoring the teams.
5. Time measured by any contestant by any means will not be accepted for scoring.
6. In case of any disputes/discrepancies, the organizers' decision will be final and binding.
7. 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 announced before the gameplay.
8. Note that at any point of time, the latest information will be that which is given on the day of event. The information provided in the PDF downloaded earlier may not be the latest. However, registered participants will be informed before the game play.
9. All decisions taken by the organizing team will be final. No argue will be encouraged.

6. Game Rules:

1. The machine would be checked for its safety before the run and will be disqualified if found unsafe for other participants.
2. Only two team members are allowed to enter in the arena, however only one member is allowed to control the bot. Other team members are not allowed to enter the arena.
3. The bot will be liable for disqualification if it causes any kind of damage to the arena.
4. In case the bot gets stuck at any place and at any point of time for more than 10 sec, then the bot will be placed back to the initial start position of that Level .The timer won't be stopped during this process.
5. Maximum of 8 minutes will be given for each team for completing the track.

7. Scoring:

1. Points will be awarded for crossing individual levels as given above.
2. Total points for completing track will be 500 points without any skip.
3. In skip, equivalent point is added in the participant track completion time as penalty time.
4. Total score = Total points + Number of seconds left from 480 seconds (Number of seconds will be accounted only if the bot has crossed the FINISH line).
5. The team with maximum points will be the winner.

8. Specifications

1. The dimensions of the robot should be less than or equal to 300 mm X 250 mm X 250 mm (l*b*h), failing which the team will be disqualified from the competition.
2. The robot should be controlled manually.
3. Teams can use both wired as well as wireless control mechanisms. In case of wired bots, the length of wire should be minimum 2 meters so that the wire remains slack at any instant of time. If the participants use wireless mechanism then it is mandatory to use a dual frequency remote.
4. The dimensions of the remote are not included in the size constraint of the bot.
5. Robot can have an on-board or off-board power supply.
6. Irrespective of the mechanism used, only one person will be allowed to control the robot.

9. Certificate Policy:

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

10. Entry fee: 500/-(per Team)

11. Prize money:

1st prize ----- 5000+ Goodies

2nd prize ------ 3000+ Goodies

VENUE:

Date 27-03-2018

Time:11:00 AM to 3:00 PM

B- Block Fountain Area B Block fountain Area

11 faculty Coordinator

1. Mr. Ankur Gangwar
2. Mr. Neha Singh

12 Student Coordinators

1.Gaurav gupta

2. Jaya mittal

3. Anshul Dhaka

4.Anant

5.Sandeep

6. Naman