



# MOTOR ZUNDUNG 007

## DEATH RALLY

Ernst Stavro Blofeld, the archenemy of James Bond, has outwitted 007 this time and has been successful in his evil plan of capturing Bond and brutally tormenting him, in his specially designed detainment centre for Mr. Bond. And while Ernst left him there he said, "Goodbye, Mr. Bond".

But our hero has not succumbed to the evil yet. He has an assistant in the form of Asphalt (a robot), who is on the lookout for him and now stands on the Gates of Blofeld's arduous prison. Asphalt has found that the prison becomes ineffective once its power station is taken down. It is now headed to take down the power station before Blofeld's security registers a threat by it. Asphalt has set upon to conquer all tricky traps and dangerous terrains ahead of it.....

Will Asphalt rescue Bond from this ordeal? Be there with your best bots to know....

### PROBLEM STATEMENT

Design a manually controlled 4-wheeler Robot that can traverse the given off-terrain arena and overcome the hurdles in least possible time.

### EVENT SPECIFICATIONS

#### ROUND-I: (Qualifying Round)

- Single-lap run, where each driver has to run a single lap alone within the time provided.
- Teams will be selected for the next round on the basis of their scores, calculated on the basis of time and penalties.

#### ROUND-II

- Two Robots will race simultaneously and winner of each race will advance closer to the ultimate prize.
- In this round the robots are allowed to push each other in order to overtake, without fetching any penalties.

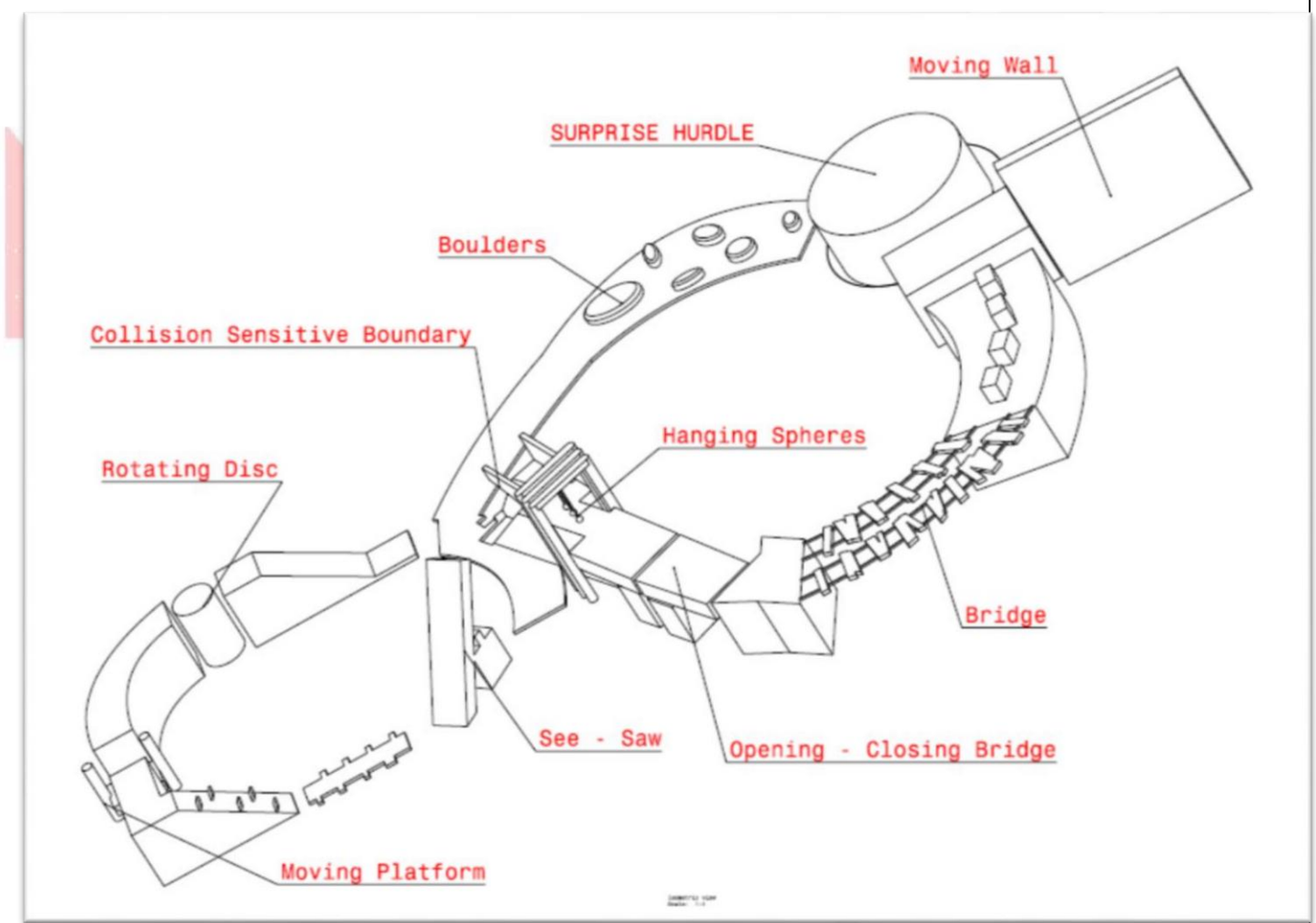
### ARENA SPECIFICATIONS

- Arena size: 2000cm X 50cm (tentative)

- Obstacles would be put up in any order in the arena with appropriate distance between the sides.
- Size of parking box: 30cm X 30cm.

### **USEFUL TIPS:**

- ✓ This event requires a simple 4 wheeler robot. The simpler the robot, the better are your chances.
- ✓ The driving skills are on a test in this event, so practice hard to have absolute command over your robot.



### **ROBOT SPECIFICATIONS**

- Robot size: 25cm X 25cm X 20cm (length X breadth X height).
- Robot may be wireless or wired remote controlled.
- Use of readymade kits (LEGO Kits) is not allowed.

- The power supply used can be a maximum of 12V DC and 2A rated throughout the competition.
- Contestants using battery are required to bring batteries on their own.
- Power of 220V max will be supplied for charging for on board power supply.
- Use of AC supply for the bot is strictly prohibited.

## **JUDGING CRITERIA**

- The basic criterion is the total points scored at the end of the round, depending on time and penalties.
- In case of any dispute judges' decision will be final and binding. The judges also hold the right to disqualify any team in case any of violation of any rules.

## **GENERAL RULES**

- Open for all years.
- A team may comprise of not more than 3 members.
- Students from different institutions can form a team.
- At the beginning, the team has to place their bots at the starting point. The game coordinator will inform when to start the robot.
- No direct human interference to the robot would be entertained after starting of the event and may lead to disqualification.
- Intentional damaging of arena will also lead to disqualification.
- Candidates can register to the event online (recommended)/ on the spot.
- The organizers reserve all rights to change any or all of the above rules as the need arises.
- The architecture of the robot cannot be changed after or during any of the rounds, unless it sustains any serious damage.

## **Contact:**

*Piyush Agarwal* : 9874058679

*Mohit Jajoo* : 9331658799

*Avinish* : 8967978892

\*\*\*The problem statements can be downloaded from the website\*\*\*

[www.motorzungdung.in](http://www.motorzungdung.in)