## **Event Structure**

#### Round 1 - Qualifying Round

- A chance to show how your bot is hovering and capable enough to participate in the next round.
- Each team will have to race their bots on the provided track for one lap and the lap time will be taken into consideration.
- 1 or 2 bots (as per requirements) will move at a time from different starting point and their individual lap time will be noted.
- Top 12 teams on the basis of minimum lap time will qualify for the second round.
- All the teams will be assigned a team name on the basis of their performance in the qualifying round.
  e.g.: (<u>Team 1</u> team having best time, <u>Team 2</u> team having second best time and so on).

#### Round 2 - Hurdle/Obstacle Round

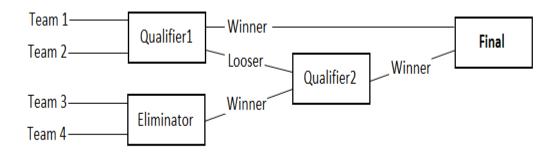
- Top 12 teams will be for round 2.
- These teams will be further divided into 4 groups accordingly:

Group A	Group B	Group C	Group D
Team 1	Team 2	Team 3	Team 4
Team 5	Team 6	Team 7	Team 8
Team 9	Team 10	Team 11	Team 12

- This round will be a League Round, where each team will race against every team in its group.
- There will be race having 2 laps. The team which completes both the laps first will win the race.
- 3 points will be awarded to the winning team where as to the loosing team, no points will be awarded. If there is a tie between the two teams, one point is awarded to both the teams.
- The overall winners of each group (team having the maximum points) will move ahead to the Round 3.
- Total time of all races in round 2 will be taken into account in case there is a tie of position between two or more teams.

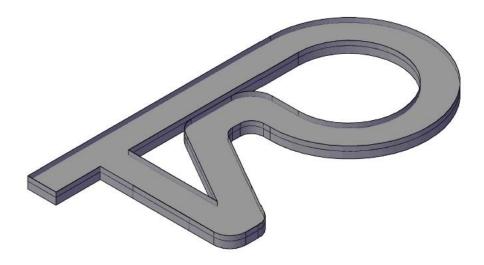
#### **Round 3 - Final Round**

- For this Round, we are having four teams. (Winners from each group).
- These four teams will again be assigned positions according to their total time in round 2. e.g.: (Team 1 team having best time, Team 2 team having second best time and so on).
- Qualifier 1: The first two teams (i.e. Team 1 and Team 2) will race against each other and the winner will get direct entry to the final race.
- <u>Eliminator</u>: The rest of the two teams (i.e. Team 3 and Team 4) will race against each other. The losing team will be eliminated and the winner will get entry to qualifier-2.
- Qualifier 2: The losing team of qualifier-1 and the winner of eliminator will race against each other, to qualify for the final race.
- Finale: It will be the final battle between winners of qualifier1 and qualifier2.



# <u>Arena</u>

### ROUND 1:



- Width of the track is 1.25m.
- Radius of inner circle is 1.75m.
- Radius of outer circle is 3m.

## ROUND 2:

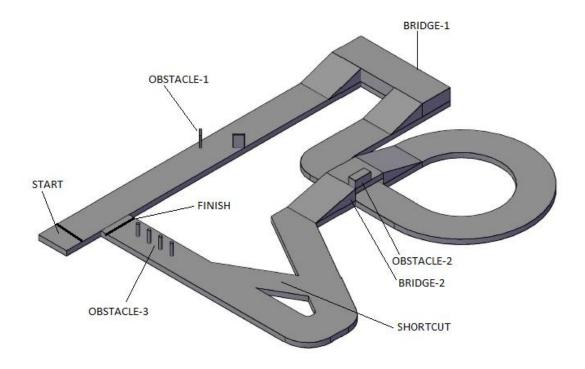


Fig 2.

- The width of track is 1.25m.
- The width of the shortcut is 1m.

#### • Circular Track:

- Radius of inner circle is 2.2m.
- Radius of outer circle is 3.5m.

#### • Bridge 1:

- The height of the bridge is 70 cm.
- The width of the bridge is 1.25m.
- The length of both the slants is 2.30m.

#### • Bridge 2:

- The height of the bridge is 70 cm.
- The width of the bridge is 1.25m.
- The length of both the slants is 2.30m.

#### • Obstacle 1:

- Two boards at 45 degree angle, as shown in the figure 2.
- Both the boards are coming out upto 50 cm and the height of them will be 70 cm.

#### • Obstacle 2:

- Block with dimensions 62.5cm x 80cm (longer side is along the track).
- It is placed on flat surface of bridge 2.

#### • Obstacle 3:

- Four cylindrical objects of diameter 5-10 cm.
- The separation between two consecutive objects is 0.5m.

#### • Shortcut:

The shortcut track has width 1m.

#### **ROUND 3:**

• The arena will remain same as Round 2 but without obstacles and shortcut.

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