# Robo Carrom

#### ABOUT:

Carrom, one of the most beautiful and exhilarant games is truly a sensation to play. Can your bot replicate the feat? Participate in KARMATEK 2k19 and show your opponents what's a pro robo carrom player.

## TASK:

The bot has to play carrom in the specified arena. Dragging or flicking mechanism used to direct the carrom pieces to the holes.

#### **ARENA DETAILS:**

The arena will be SQUARE.

The two bots will enter the arena from an inclined platform.

### **GENERAL RULES:**

- 1. Maximum members per team are 2.
- 2. Wire pulling by any member of the participating team is not allowed.
- 3. Hand touch will lead to penalties.
- 4. Grabbing the carrom is strictly prohibited.
- 5. Degree of freedom of the arm should be 2.
- 6. Point system and additional rules will be disclosed on the day of the event.
- 7. Intentional attack on your opponent's bot will lead to penalty.
- 8. Damage to the arena will lead to disqualification.
- 9. The teams are expected to be on the time and each team is supposed to be ready with their bots near the arena, failing which the team will be disqualified.

#### **BOT SPECIFICATIONS:**

- 1. The dimension of the bot must not exceed 25cm x 25cm x 25cm (length x breadth x height). A 10% allowance will be given to the participants.
- 2. The weight of the bot must not exceed 5 kg. A 10% allowance will be given to the participants.
- 3. The external wired control used to control the machine manually is not included in this size constraint.
- 4. If the machine uses an externally placed power supply, the dimensions of the power supply are not included in the size constraint. However, in case of an on-board power supply, the machine along with the power supply should follow the rule mentioned in clause 1 and clause 2.

The judges hold the right to subjectively determine if the machine violates any clause.

# POWER SUPPLY AND CONTROL MECHANISM:

- 1. The machine can use an externally placed or on-board electric or non-electric power supply.
- 2. In case of an electric power supply, the voltage at any point on the machine must be lower than or equal to 24V at any point of time during the game.
- 3. The organizer will provide 230V, 50 Hz AC power supply. Any extension cords, adaptors or battery box etc. required will have to be arranged by participants themselves.
- 4. The machine must be controlled by some wired control mechanism at all stages of the game.
- 5. In case of wired mechanism, the wire must be slack for the duration of the game. The participants have the right to ensure that the wire does not get entangled with their machine during the game.