

# TechCraze 2K16

## SAVE THE SOLDIER

*The life of the brave hero's lies in your codes.....*

It is an autonomous event where the robot will Travers around the plane for the rescue of the soldier. While crawling it has to detect the mines places at random places in the field. All this need to be done in a limited time.

### ARENA SPECIFICATION

The arena will be a black sheet with mines (small metal pieces) placed randomly underneath the black surface. The soldier will be wearing a white uniform. The arena dimension will be 172cm\*172cm

**The rescue mission is divided in two rounds.**

### RULES & REGULATION

- Every participating time must be punctual.
- A team should have a minimum of **3** members and a maximum of **5**.
- The bot must be completely autonomous.
- Each team will be allowed for one trial.
- One bot can only represent only one team.
- The bot dimension must be **20 x 15 x 15 (l x b x h) cm**.

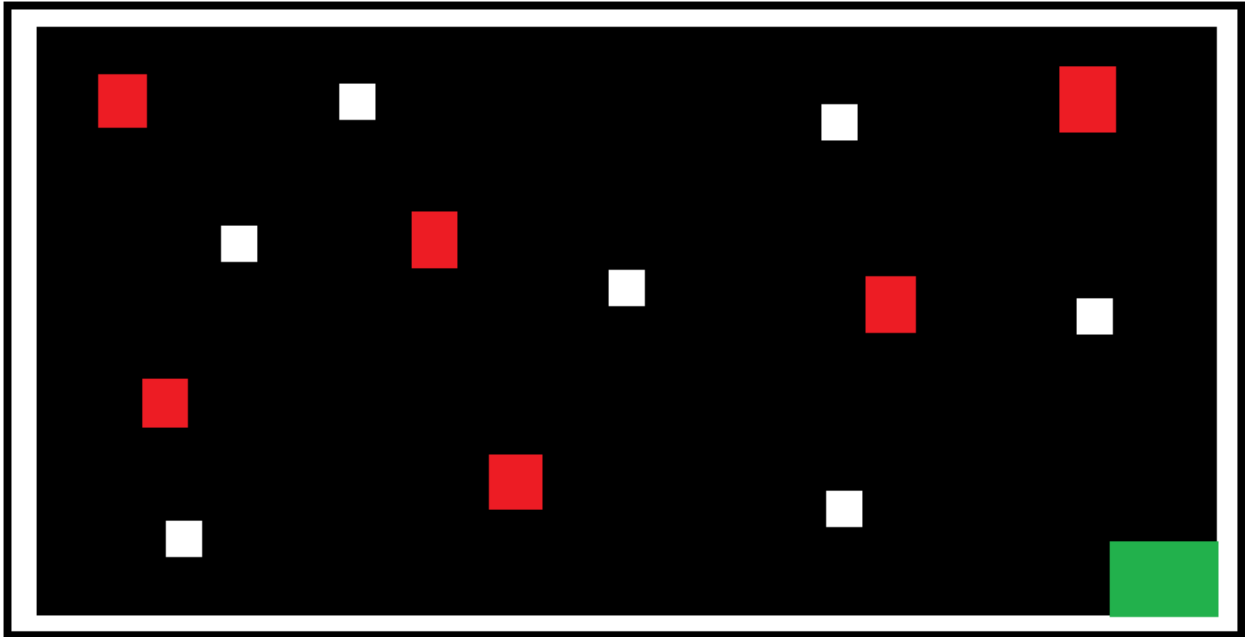
## ROUND 1

Round one is a simple rescue mission which consists only mines as a hurdle to save the soldier. The soldier will be of 5\*5\*5(L\*B\*H) cm. The boundary of white color will be of 5 cm

## RULES

- Each team will be given a fixed time for their rescue operation, failing to do so will lead to addition of 2x of the extra time to their entire stretch of time of completion.
- The robot need to show the presence of the mines by glowing a led.
- On detecting the soldier the robot will signal by turning on 2 led simultaneously.
- Teams must use different detection output (i.e, piezo buzzer or Different color LEDs) for mines and soldiers. And they have to declare the same before their run.
- The robot must not hit the soldier or it will add 10 seconds to their time.

# ARENA



[NOTE: The arena is a sample. The placements of soldiers and mines will not be exactly same. The white square represents soldiers and the red one resembles the mines.]

## ROUND 2

Details will be given after the end of round 1

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