



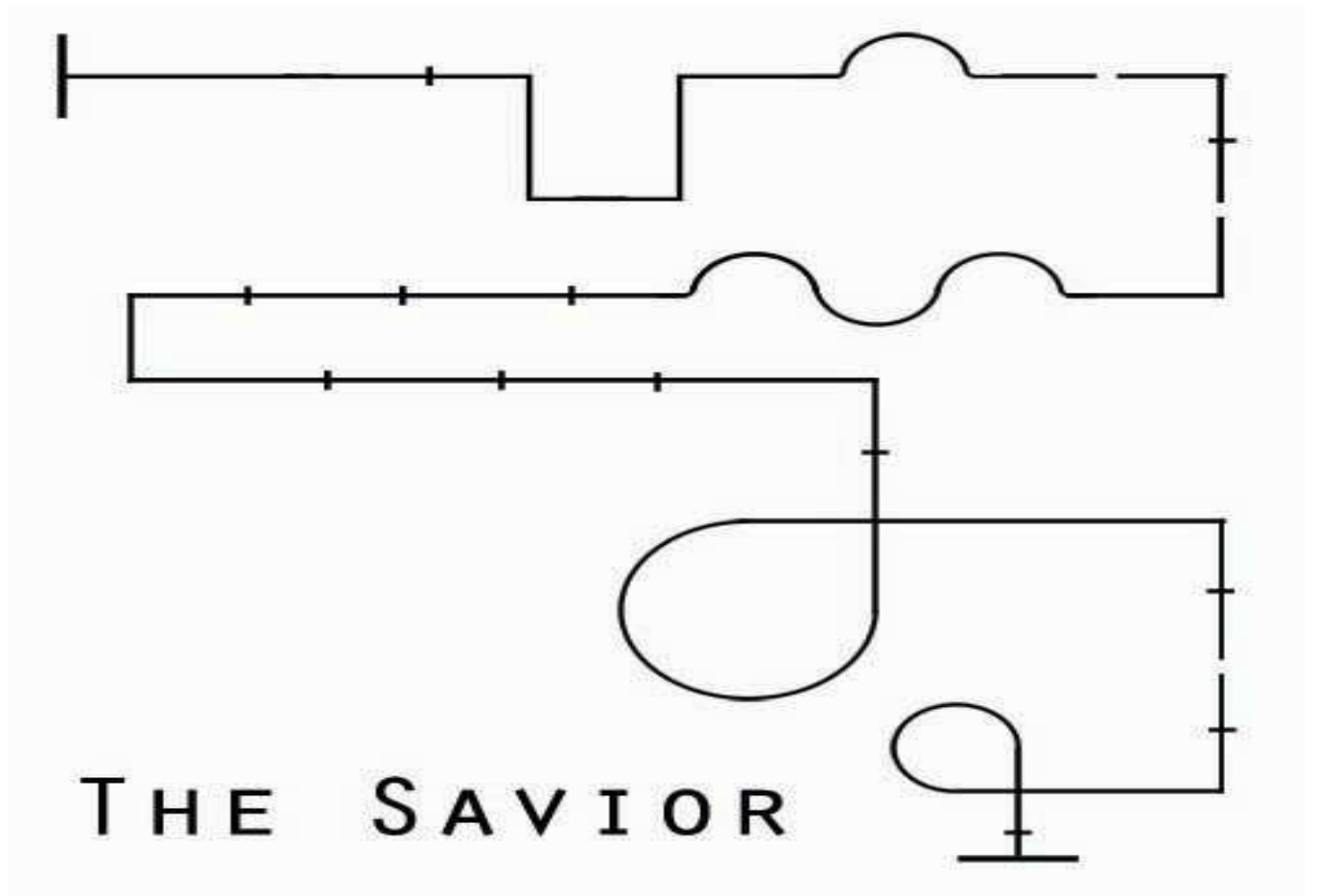
Note: The vertical strips and the “path breaks” shown will not be present in first round. It will be introduced in the second round.

### **Round 2:**

In this round, only minor changes in the game plan, here they are-

1. Black strips of dimension (2cm \* 10 cm) will be introduced perpendicular to path. The bot must be capable of judging the right path and reach its destination.
2. The path breaks, of length 8 cm, will also be introduced in the midst of path. Bot has to cross the ‘path breaks’ to reach the end point.
3. **The bot should stop automatically at end point.**

Fig.2:-



## ARENA SPECIFICATIONS:

1. Path is the **black strip** of **2 cm** width **on white surface**.
2. Length of path breaks extends to 8 cm(Round 2).
3. The perpendicular **black** strips introduced in “round 2” measures  $2*10\text{ cm}^2$ . (2cm along the path \* 10 cm perpendicular to path) (Round 2).
4. The starting point of “round 1” will now be the finish line for “round 2”. Similarly finishing line “of round 1” will be start point for “round 2”.

## IMPORTANT POINTS:

1. In case of restart, participants may have to take chance awarding some Penalty or may have to quit without disturbing earned points (Decided by Team ROBOTICS).
2. Each team will be given a trial run. After that, within 20 minutes they have to take final run else, they will be disqualified.

## General Guidelines:

1. The voltage difference between any two points on bot must **not** exceed 24 volts.
2. The bot must be **completely autonomous** with all powering and monitoring mechanism self-contained.
3. The robot can be powered on-board as well as off-board.
4. **Hard coding is strictly prohibited** and any team found using hard coding will be instantly disqualified.
5. Teams are allowed to use readymade microcontroller boards/ ready-made sensor kits. However teams are **not allowed to use ready-made Lego kits** and any such assemblies.
6. This competition is open for all the students. Registration can be done the spot before beginning of event.

## Score:

1st Round:

$$P = 180 - T - 20 * H - 40 * R$$

2nd Round:

$$P = 180 - T + 5 * B + 10 * W - 20 * H - 40 * R$$

Where,

Initial Point= 180

P=Total Points

T= Time taken in seconds

H= Hand touch

R=Each restart

B= Number of black strip detected

W= Number of white gap traversed.

### BOT SPECIFICATIOIS:

1. Robot can have maximum dimension of **25\*25\*25 cm3** (L\*B\*H) respectively.
2. No part/mechanism of/on the robot should exceed the given dimensions before the commencement of the event run. The robots can exceed their respective dimensions once the event commences.
3. The robots need to follow lines and traverse only along the given path.
4. Robots must not be controlled by a remotely kept computer.
5. **The bots should not harm the arena** in any way. If it does so, a penalty will be imposed on the team. The magnitude of the penalty will be decided by Team "ROBOTICS".

### TEAM SPECIFICATIONS:

1. **Maximum Four members are allowed** to form a team.
2. Students of different institutes may constitute a team.
3. Students must have the Identity card of their respective colleges, else their participation will not be validated.

### Rules and Regulations:

1. Time measured by the organizers will be final and is not subjected to change.
2. In case of any dispute, the decision of the organizers will be binding.
3. Bots found damaging the arena will be immediately disqualified without any further arguments and scope of discussion.
4. **Participants will have to bring their own programmers, cables and softwares.** No programmers will be supplied.
5. Violation of rules may force us to take strict decisions.
6. Organizers reserve the right to change any of the above mentioned rules that deems to be fit.

## **CONTACT**

### **Event Co-Coordinator:**

Kumar Prince

Mob- 8271540085

### **Organizer:**

Pankaj Kumar

Mob- 9097439539

Neha Singh

Mob- 7739250060