For centuries, artistic treasures have been taken away from the lands that created them. The civilizations believe that these treasures will bring back the ancient death grip they brought to their owners.

Now rivals, the race to the treasure begins. Two of the stalwart rivals send their congruously trained bots to the most precious treasure of all times. The treasure is locked beneath a stem of pipe, encased in which is a mechanism to unlock the

treasure. A mysterious gate guards the land where treasure belongs. To enter into the land, you need to unlock the gate using two magical keys. yeah rite!!, the keys are magical, they act as a shield to the bot they belong. No folks! not over yet.. :). The dapper guardians of the treasure have put dodgy hurdles over the course.

Moreover, getting the keys is not that facile, as you will see. And hey!! Getting them is not the end of it. The other bot can hit you to take them. Hmm, sounds interesting!!, isn't it? Man!! do I need to tell you, the bots have a limited life? Bingo!! you can take the whole life of your opponent and obtain the pleasure of completing entire task without any hindrance :P. Bullets are provided in appropriate numbers over the whole course. There is a secret "POWER BULLLET" as well somewhere along the course.

WHOA!! I am sure, the bots will have lots of fun, fighting for the treasure.



Each treasure bot is a explorer and fighter bot capable of moving on solid ground in any direction. Besides it has two more mechanisms, SHOOTING and GRABBING.

SHOOTING – Requires a full-fletched mechanical scheme that can shoot ping pong balls.

GRABBING – Can grab a ping pong ball, and a cylinder(dimensions will be released soon)

KEY GRABBING MECHANISM – Based on key specifications.

NOTE: Speed is the key.

### TASKS TO BE PERFORMED:

- 1. Diffuse Mines by dropping a Ball into the mine area. (10 points)
- 2. Grab Key 1 (Virtual Key). (20 points)
- 3. Grab the cylinder to unlock the key2. (10 points)
- 4. Fix the cylinder at given place to unlock key 2. (10 points)
- 5. Grab key 2. (30 points)
- 6. Place the wedge to climb up the altar. (50 points)
- 7. Unlock the treasure. (75 points)

### **BUZZINGA!! YOU HAVE DONE IT. GO PARTY!**

#### **NOTE:**

- 1. Shooting ordinary balls Each ball reduces 10% life.
- 2. Shooting special black ball reduces 25% of life.
- 3. Entering mines without diffusing me reduces 10% of life.
- 4. Damaging arena will reduce points.(can lead to elimination).

### **GAMEPLAY:**

**Pre-Game Setup:** Participants will get 10 min of setup time for calibration and testing prior to the competition. During setup, teams are not allowed to put their bot in the arena.

**Timeouts:** You are provided with maximum 3 timeouts of 2 minutes each during the game. You can demand them any time during the game. You are not allowed to touch your bot at any other time after placing it in arena.

### **GAME PROCEDURE:**

There will be two rounds -

**ROUND 1 : Elimination Round** – Criteria will be decided on the spot.

**ROUND 2: Final Battle -** Teams qualified in the elimination round will fight here in pairs.

**ARENA:** 

Download the google sketchup file.

### **SPECIFICATIONS:**

**Ball Specifications:** All balls in the game are standard ping pong balls.

## **Bot Specifications:**

- 1. The robot must be manually controlled wired robot, no wireless remote controlled robot will be entertained.
- 2.Use of lego kits are not allowed.
- 3. Maximum operating power supply must not exceeds 24Vdc.
- 4. The robot must get fit into a box of 30cm x 30cm x30cm (lxbxh)
- (\*size consideration is mandatory as it will be one of criteria for elimination round ).
- 5. The power supply may or may not be provided on the arena.
- 6. You can store as many ball as you want.

### **STEPS IN GAME:**

- 1. Initially the robot of each team will be placed at their respective starting zones as shown in arena.
- 2. To grab Key 1, one has to place the bot in KEY ZONE 1 which is inside the mine zone. To diffuse the mines, one has to drop a shooting ball inside the MINE ZONE each time one has to enter.
- 3. To unlock Key 2, place the cylinders to their respective slots.
- 4. To grab Key 2, place the bot in KEY ZONE 2.
- 5. Enter Treasure Land.
- 6. Each bot has to pick their respective color ball to unlock the treasure.

NOTE: The organizers reserve the right to change any or all of the above rules as they deem fit. Change in rules, if any, will be highlighted on the website and notified to the registered participants.

## **Team Specification:**

A team may consist of a maximum of 4 members. Students from different educational institutes can form a team.

NOTE: The problem is open to all. Any team must not contain any Final Years.

## **Contacts:**

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