BATTLEFIELD

INTRODUCTION

We're sure that the name itself reminds you of the popular game "Battlefield" on XBOX and PS. But aren't you bored of controlling animated characters on screen? Thus we came up with a game play which makes you use your self-made robots to get into the battlefield and win it for you. This robotic task would not only test your bot making abilities but also provide you an opportunity to upgrade your robotic horizons. Get ready to experience the real feel of a battle with your real steel.

PROBLEM STATEMENT

"To make a pair of robots that are capable of fighting a battle with another pair of robots. This war challenges the participants to make two robots. One is an assistant robot and the other is the fighter robot that fights the battle. The assistant robot, which must be autonomous, should carry the ammunition from the arsenal to the war field. The fighter robot, which is manually controlled ,will have to attack the enemy robot to gain points, while defending itself from the incoming attack. The team that scores the maximum points in the given time is the winner of the battle."

EVENT DESCRIPTION

This event challenges the teams to fight a battle against the opposite team using a pair of robots. The robots will attack the opponent using bombs (balls). Certain number of balls (ammunition) are placed in the arsenal. The balls will be given manually to the assistant robot by the participant and then it has to traverse through the bunkers, following the walls and deliver the ammunition to the war

field. Once the assistant robot reaches the war field, then it has to drop the ball in the specified zone. The fighter bot can now collect the balls from that region and attack the enemy robot by throwing balls at it. The fighter robot,while attacking the enemy, should also take care that it is not hit by the ball coming from the enemies.

ARENA

The arena consists of a battle field, with two halves. Each half has a bunker and a war zone. The helper robot is limited to travel through the bunkers only. The bunkers are nothing but 2 walls that run parallel to each other. On one side of the bunker is the arsenal, where the ammunition is stored and the other end of the bunker leads to the war zone. The war zone is where the battle takes place. The fighter robot can move around the war zone.

The actual arena will be displayed on the day of event.

RULES

- The game starts with all the robots at initial positions.
- The robots should not be loaded with any ammunition before the start of the event.
- The assistant robot must be autonomous and the fighter robot can be manually controlled (wired / wireless).
- Penalty will be issued if the assistant robot touches the walls.
- No human intervention is allowed after the ammunition is loaded into the assistant robot.
- Only when assistant robot has dropped the ball in a specified region, the fighter robot can collect the ball.

- If the fighter robot has a shield to protect itself from the attack of the enemy robot, the team must inform the organizers about the shield before the game starts.
- If the fighter robot successfully hits any part of the enemy fighter robot, except for the shield (if the enemy robot has any), it is considered as an attack and the team is awarded positive points.
- Points will also be awarded if the fighter robot defends the ball coming from enemy fighter robot.

ROBOT SPECIFICATIONS

- The Maximum dimensions of the assistant robot is 20cm × 20cm × 20cm and that of fighter robot is 40cm x 40cm x 40cm(l*b*h).
- Power supply to the robots should not exceed 12V.
- Power supply should be ON board. And different power supplies shall be used for two robots.
- There is no weight limit for robots.
- Tolerance of 5% on dimensions and power supply will be allowed.

CERTIFICATE POLICY

1. A certificate of participation will be awarded to all participating teams except for the disqualified teams.
2. A certificate of appreciation (or excellence) would be awarded to the winners.