Collect the Cups

The challenge: Two teams, each consisting of 3 members, try to return as many paper coffee cups as possible to their side of the ring (marked by a yellow line) in 2 minutes or as soon as all cups are removed from the playing field. The playing field is a square approximately 5' x 5'. The cups are set up with the bottom facing up so the base of each cup is wider at the bottom.
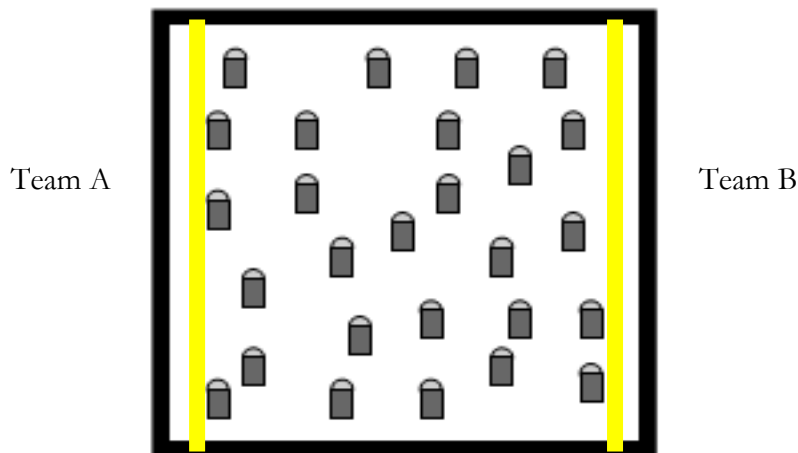
Time limit: Must complete the task within 2 minutes for each round. There will be three rounds in all.

How to recreate a practice course:

Course: square playing field of approximately 5'x 5'

Black Line Border: 1.5 inches

Obstacles: 27 white paper cups will be placed upside-down within the rectangle. Cups will be randomly placed a minimum of 5" apart from each other.

How it works:

Two players, one from each team are positioned on opposite sides of the playing field with their robot. When the game starts the two robots are started from the yellow line referred to as baseline, one on each opposite side, to get the cups. Once the robot returns to the baseline, the player can turn the robot around so that it can collect more cups.

The game does not stop until 2 minutes are up or until all cups are removed from the playing field. In each round, one robot from each team collects cups. There are three rounds per challenge.

If a robot stalls or goes out of bounds, the referee or player can pick it up but has to start it from its own team's baseline. If a robot pushes a cup out of bounds (the sidelines), the cup will either be returned to the playing field or else it is not counted for either team. If a robot pushes a cup over the opponent's baseline, that cup will count for the opponent and the player or a referee will have to retrieve the robot and start it from its own baseline again.

Rules:

1. Teams are not allowed to touch the cups until they are behind their team's boundary line, in which case they can move the cup to a receptacle for tallying.
2. The teams are not allowed to touch their robot unless it crosses one of the boundary lines.
3. The team that gathers the most cups in the allotted time wins the round.