

# ROBOSOCCER

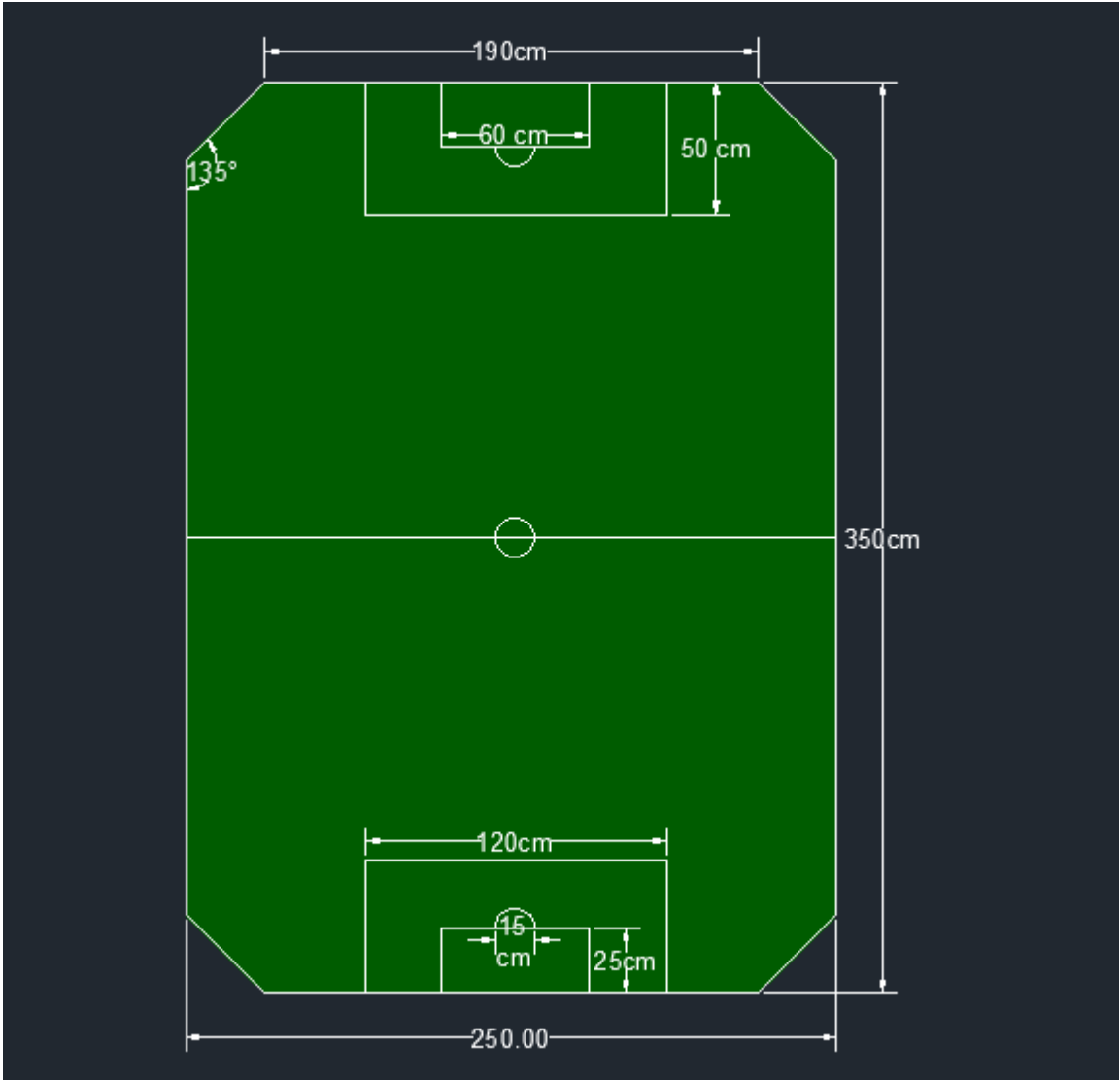
## PROBLEM STATEMENT

*Design a manually controlled mechanical bot, which can push or kick a medium sized ball. The prime motive of this game is to push or kick the ball in opponent's goalpost and avoid the ball from going into yours. The bot with more goals will win the game.*

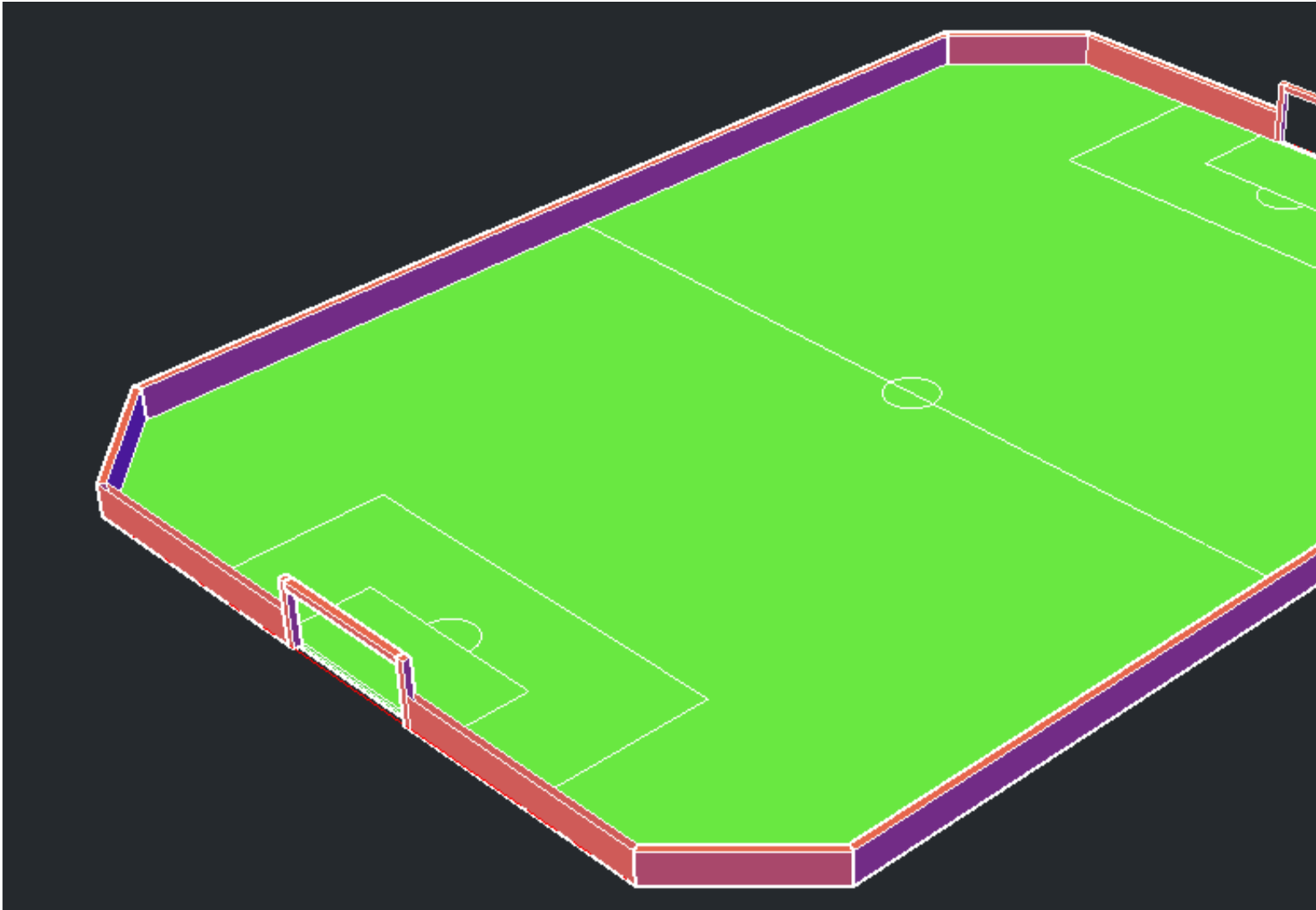
## Bot Specification

- The bot shall to be manually controlled and can be wired or wireless.
- The potential difference between any two points should not exceed 12V.
- Maximum size of the bot (at the starting) should not exceed 30cm X 30cm X 30cm.
- Expansion of the bot during the match is not allowed (size of the bot must remain same during the match).
- The bot should not have any mechanism which may harm the Arena, e.g. Fire, Harmful Chemicals, etc.
- The bot should not have any picking mechanism.

## Arena



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## Arena Specification

- Ball diameter: 6-7 cm.
- The ball may be of plastic or rubber.
- Arena will be of 350cm X 250cm(outer) in size with chamfering done at 45° from 30cm from corners and arena will be completely surrounded by walls of 10 cm height.
- There will be 2 goal posts, 1 on each side.
- Dimension of each goal post will be 40cm width and 20cm height.
- Arena will consist of two D's in each half whose longer sides will be along the goal line (250cm).
- There will be common D's (inner and outer) on each side surrounding goal posts.
- Outer D will be 120cm x 50cm
- Inner D will be 60cm X 25cm.
- Inner D consists of a penalty arc (outside it) with diameter of 15 cm.

## **SCORING RULES:**

### **ROUND 1 (NORMAL ROUND):**

There will be 1 goal post on each side.

Goals scored from outside of the outer D, outside the inner D and from the center half will be considered more valuable.

### **ROUND 2- (JUMBO ROUND):**

There will be some bonus points on each goal.