## **PRODYOGIKI '19**

# **Capture The Flag**

Capture the Flag is a simple game where two teams have a flag and the objective is to capture the other team's flag, located at the team's base and bring it safely back to their own base. However the twist here is that there will be bots doing the match and you will be controlling them!

### **Event Description:**

- Capture the Flag will be played by two bots and there will be a one on one match in an arena.
- There will be two rounds:
  - Round 1 A short quiz will be conducted which will have questions related to Electronic components and from the quiz, top 8 participants will be shortlisted.
  - Round 2 A series of capture the flag knockout rounds will be conducted.
    - Two bots will be pit against each other in their respective bases. As the match begins, they will go to their opponents base and carry the flag using magnetic attachments on their bots. The flag has to be brought back to their base to the starting point.

#### **Rules:**

#### • Round 1:

- The quiz will contain 20 MCQs. The quiz must be attempted within 20 minutes.
- Any participant found using internet will be immediately disqualified.
- Top 8 participants will be shortlisted which will go in the next round.

#### Round 2:

- The bots used will be the same made by the participants in the Bot Workshop before the event. The bots will have a magnetic attachment in front which will attach the opponents flag (10 inches long) when the bot is in close proximity with the flag.
- The arena will have dimensions (L x B) with obstacles in between the path.
- Before the battle begins, the bots will be placed in there respective starting positions. As the battle begins, they will they will traverse the arena to their opponent's base and carry their flag back to their starting point. The first bot to complete the whole task wins. The time limit of completion of the task is 7 minutes
- Aggressive behaviour will lead to penalty of time. (-30 seconds).

# **PRODYOGIKI '19**

- If the flag falls off the bot while carrying it back, the flag will be sent back to the opponent's base and the bot has to bring it back.
- o Items
  - i. Gold Coin Adds additional points to the total score of the participant.
  - ii. Clock++ Adds additional 2 minutes to the maximum time limit of the participants
  - iii. Clock-- Subtracts 1 minute from the opponent's maximum time limit.

### Scoring:

The points have been divided as follows:

- Capturing the flag scores 10pts (can be scored only once)
- Carrying the flag back to starting point scores 10pts
- Collecting the Gold Coin in the arena scores 5pts
- If the whole task is done under the time limit, then the time difference left from the maximum time limit(in minutes) is directly added to the total score.

So let the battle begin, and become the last man standing!

#### Contact Us:

Mukul C. Mahadik: +91 8626866284

Yash Punia: +91 9873921954