

# Primary Division Competition Details

## Requirement

Participating teams must complete both Round A and Round B competitions

# Round A: Toss Cubes Into Basket

Mission

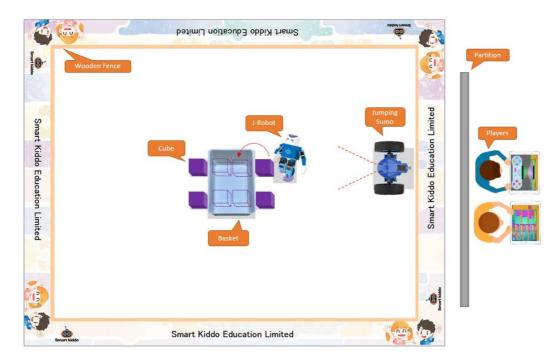
- Participating teams shall build programs with Google Blockly on "Kiddo Code" iPad app for one humanoid J-Robot to collaborate with one Jumping Sumo robot to pick up cubes on floor and then put them inside the basket.
- Team with maximum number of cubes put inside the basket in the shortest time will have the highest score.

### On The Competition Day

- Each participating team sends TWO team members for the Game.
- One team member uses virtual joypad on one iPad to control Jumping Sumo robot to follow J-Robot according to the real-time video shown on iPad, while another team member uses virtual joypad on another iPad to control J-robot to pick up cubes on the floor, carry and put them inside the basket according to the real-time video shown on Jumping Sumo robot's iPad.
- Both team members CANNOT look at the arena, and all members of the participating team are not allowed to touch the robot once the competition is started.
- Team with maximum number of cubes put inside the basket in shortest time has highest score.

The setup for this competition is shown below for reference only. The final setup of the arena may be different.

#### **PRIMARY - ROUND A**



#### Sample Programs

- Two sample Google Blockly programs are provided to the participating teams once the participation is confirmed.
- One program illustrates the basic function to control the Jumping Sumo robot movement by virtual joypad, and another program illustrates the basic function to control the J-Robot to walk and carry cubes by virtual joypad.
- Participating teams are encouraged to modify these programs in order to control the J-Robot and Jumping Sumo robot effectively to win the competition.

## Round B: Push Cubes VS

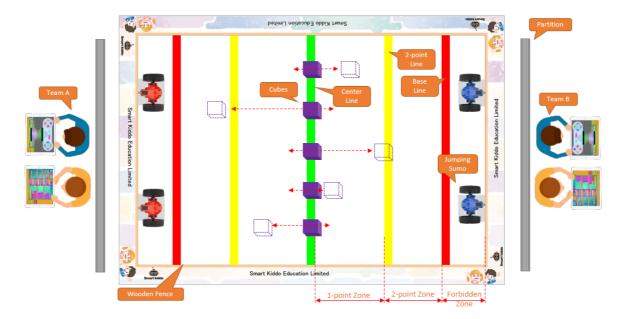
Mission

- Participating teams shall build programs with Google Blockly on "Kiddo Code" iPad app for one Jumping Sumo robot to collaborate with another Jumping Sumo robot to compete with another team to push the cubes to opponent's zone.
- Number of cubes remaining on the opponent's zone after the competition time will be the score of the team.

#### On The Competition Day

- Each participating team sends TWO team members to use virtual joypad on their own iPad to control two Jumping Sumo robots respectively to push the cubes to opponent's zone according to the real-time video shown on iPads.
- These team members CANNOT look at the arena. Students are not allowed to touch the robot once the match has started.
- Number of cubes remaining on the opponent's zone after the competition time will be the score of the team.

The setup for the competition is shown below for reference only. The final setup of the arena may be different.



#### PRIMARY - ROUND B

#### Sample Programs

- A sample Google Blockly program is provided to the participating teams once the participation is confirmed.
- The program illustrates the basic function to control the Jumping Sumo robot to push the cubes by virtual joypad.
- Participating teams are encouraged to modify the program in order to control the Jumping Sumo robot effectively to win the competition

## Final Score

- The final score is the score of Round A plus score of Round B.
- If multiple teams have same final scores, their rankings will be determined by the highest score among Round A and Round B
- The 3 teams that have highest final score win.

# Equipment

All equipment provided by the Co-organisers. Participating teams do not have to purchase or assemble any equipment on their own

## Kiddo Code Accounts

Once participation is confirmed, participating teams will be assigned with two student accounts for logging in to the Competition app "Kiddo Code".

## Learning Workshops

We provide free pre-Competition learning workshops (optional) for participating teams to join and learn more about Kiddo Code and the sample Google Blockly programs provided.

## Practice Workshops

Free practice workshops are available but optional. Participating teams should book time slot for practice. Since space and time slots are limited, we use the principle of fairness to all teams for reservations: Team has taken fewer practices before has a higher priority than the team taken more practices. The Co-organizers reserve the rights to refuse to provide practice in any space and time slots to a team.