Indonesia Youth Robotic Association
IYRA INDONESIA

Kemenag
Kab. Cilacap

2023
CRF
CILACAP ROBOTIC FESTIVAL

CILACAP ROBOTIC FESTIVAL

CRF CILACAP

WEBINAR | WORKSHOP | COMPETITION | Expo

Memperebutkan Piala Kepala Kemenag Cilacap

GAME CATEGORY

- ANIMATION ROBOTIC (ONLINE)
- CODING MISSION (OFFLINE)

Level : SD/MI | SMP/Mts | SMA/MA

Aula MAN 2 Cilacap

Bit.ly/PendaftaranCRF2023

s.id/ZoomRacerRobotIndonesia

TIME FRAME BRF

WEBINAR
Sabtu, 21 Januari 2023
PraWorkshop Online 1
Sabtu, 28 Januari 2023
PraWorkshop Online 2
Rabu, 1 Februari 2023
Technical Meeting & Online Competition
Sabtu, 4 Februari 2023
Workshop Offline
Minggu, 5 Februari 2023
Pameran robotic & Fun Competition Robotic
Minggu, 5 Februari 2023

ROAD TO THE WORLD IYRC Korea 2023
인터내셔널 유스로봇 경진대회

Organize By:

ROF

RACER ROBOTIC
ROBOTIC & DRONE CODING ACADEMY

GARANSI MENGIKUTI LOMBA

TIDAK MENGUASAI ILMU ROBOT MAKA DIBERIKAN PELATIHAN 3X, (2X ONLINE) (1X OFFLINE).

TIDAK MEMILIKI ROBOT MAKA AKAN DIPINJAMKAN PANITIA FREE.

REGISITRASI

125K/SISWA
1 ONLINE & 1 OFFLINE
Rekening Bank Muamalat
a.n. PT Racer Robot Indonesia
No. 328 000 92 01

Nara Hubung:
0895-3342-34403 (Ms. Lila)
0858-7516-2690 (Ms. Eli)

Support by:
RACER ROBOTIC
ROBOTIC & DRONE CODING ACADEMY
KAMPUNG ROBOT

GENERAL RULES

1. the competition was held online and offline, broadcast on the Racer Robotic Official Youtube channel.
2. The copyright of the works remains the property of the participants. While the organizer has the right to duplicate, publish and distribute the selected videos.
3. If the participant is less than 10 teams then the committee has the right to change the level of the category to open level or eliminate the category uniliterally.
4. Participants who take part in CRF 2023 are deemed to have agreed to all the decisionsand regulations that have been established without exception.
5. Participants are required to prepare equipment and or applications needed to support activities during the CRF 2023 activities.
6. Participants who violate the rules and commit fraud willbe sanctioned or even disqualified.
7. Match results will be announced on February 5, 2023
8. The decision of the jury is final and cannot be contested

ESTIMATE RUNDOWN

Saturday, February 4 2023	**Activity**	**Location**
13.00 – 15.00	Animation Scratch	Online
Sunday, February 5 2023	**Activity**	**Location**
07.30 – 08.00	Opening CRF 2023	Offline
08.00 – 11.00	Coding Mission	Offline
11.00 – 11.30	Award Announcement	Offline

GAME LEVELS

Levels		
Junior	A	1-2 SD/MI / Primary
	B	3-6 SD/MI / Primary
Senior	SMP/MTs – SMA/SMK/MA / Secondary	

GAME CATEGORIES

Category	Junior A	Junior B	Senior
Animation Scratch	✓	✓	✓
Coding Mission	-	✓	✓

List of Awards

Award @ Games

1. **Gold Medal:** Voucher MRT Robot
2. **Silver Medal:** Voucher MRT Robot
3. **Bronze Medal :** Voucher MRT Robot

**exclude Humanoid, Drone Coding,Brick Speed

Term Voucher AJR: Not Accumulate,Refund money, valid until 1 March 2023

Robots Types

1. MRT Robot.
2. OPEN Robot.

Animation Scratch

Level	- Junior A - Junior B - Senior
Team	Individual
Software	MRT Scratch
Mission	Make animation for expressing the given theme
Game Method	Mission completion and Time record
Competition	ONLINE

1.0. Objective

Participants make animation works, presentations, stories, videos or music on the computer,then work to make them able to interact, act or respond to the physical world outside the computer using various sensors, so that the work becomes alive and able to interact between the computer and the physical environment.

2.0. Theme grid

All Level : **Smart City**

3.0. Animation creation limitations

1.Participants can use the MRT Scratch software (download on following link : https://s.id/MRTScratch)

2. Participants must submit a work plan to be made and details of the story, the tools used.

3. If necessary, participants can create their own stage, with their own background.

4. Project must be collected at 12.00 WIB (Participants are given up to 12.10 WIB, if it exceeds at that time the participant cannot upload files to Google Classroom)

5. Design files (.sb2 format) and presentation Live (via Zoom) are saved in Full Name Format andSchool (example: Andriana Bayhaqi_MIN3 Tangsel) at 13.00 WIB.

6. Participants collect the design by writing (name and school) in Private comments on GoogleClassroom

7. Using MRT hardware and components will be an added value.

4.0. Deciding the Winner

Determination of the winner will be judged from several points which will be later accumulate to Total Points. Following are the points of assessment:

Logic to solve the problem	Relation to the theme	Content	Prototype design	Interactive	Program	Property and background	Creativity and uniqueness	Presentation skill
10	20	10	10	10	10	10	10	10

Coding Mission

Level	- Junior - Senior
Team	Team (max 2 person)
Robot	MRT 3 Kit / MRT Huna Kit / MRT X
Mission	Program maze solving robot that make correct decision at junctions to find shortest route and gain all the points.
Game Method	Mission completion and Time record

1.0 Objective

This game required participant to construct and program a Maze Solving Robot that will move by following the line track and make decision at each of the junctions to reach more points. The robot is considered completing the task when the robot successfully reaches the END point.

2.0 Robot Dimension and Weight

1. The size of the robot at the starting box shall not exceed **20cm (H) x 20cm (W) x 20cm (L).**
2. Each robot must fully comply with size restriction, even after all the appendages have been fully expanded.

3.0 Restriction on Robot Design

1. Robots shall not damage any part of the field or obstacles deliberately.
2. Robots are **not allowed** to have any power supply above **9V DC** (Volt of Direct Current).
3. Robots shall not cause any danger to the arena and surroundings in anyway whatsoever.
4. Robots will need to protect their sensors if necessary from any outside interferences.

4.0 Game Rules

4.1 Length of a Match

1. Programming, trial, and match session will be given for **3 hour**.
   a. Programming and Trial : **1 hours**.
   b. Match: **2 hours.**
   c. When match session, each team have only **5 minutes** to run their robot.
2. In the following cases, a match will end even before 5 minutes.
   a. When the task is achieved and robot stop at the END point.
   b. In the event of disqualification.
   c. When the referees judge that continuation of the match is impossible.

4.2 Building of Robot

1. Prebuilt.

4.3 Starting the Robot

1. Whistle will be blown as a sign of start of the match.
2. Participant is allowed to start (SWITCH ON) the robot using single switch operation.
3. After the switch is 'ON', the robot should move autonomously and no communication allowed between the robot and team member (no assistance of remote control or similar) until it crosses the finish line.
4. If the robot run out of the track or crosses the finish line while match, then the jury will stop timing and recorded as end of match.
5. The participant who performs the starting operation shall keep distance with the game field area without touching or disturbing the game field.
6. The participant who are touching or disturbing the game field will be disqualified from the match.

4.4 Competition Tasks

1. Each team have to program their own robot when the jury showing up the game track first.
2. Time will be given 1 hour for programming.
3. When programming, each team member have to use software, robots that are not programmed through software will be **disqualified.**
4. **In Trial Session** there's **2 times attempts** and **2 times re-try** will be given to each team.
5. In match session there's **1 times attempts** and **3 times re-try** will be given to each team.
6. There will be a trial sequence, if the team who first completed in programming the robot, then that team gets first order in the trial stage.
7. Once the match has begun, each robot shall complete the tasks as below:

a. Following the line track.
b. Make decision at each junction to complete the task.

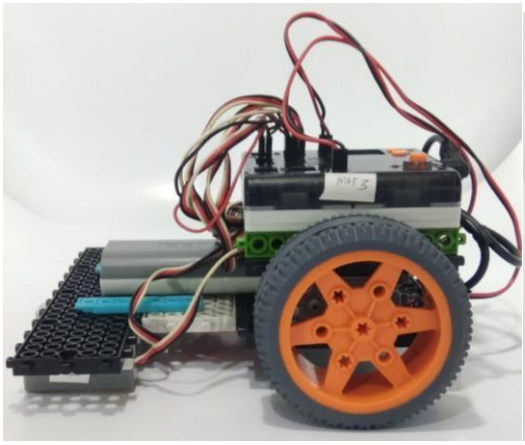
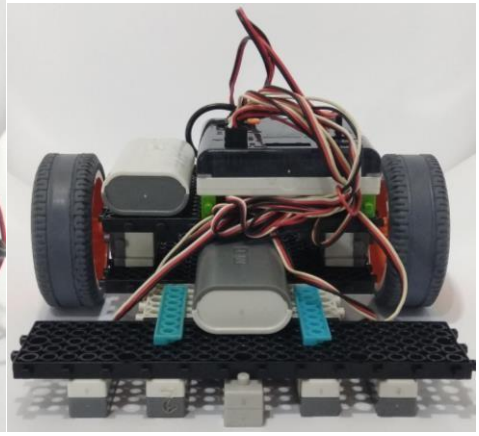
8. All robots **MUST** stop at the **END POINT** in order to get **10 points**.
9. Timing will begin when the referee whistles at the Start line.
10. Timing will stop once the robot stop at the Finish Line or the robot run out of the track and the time taken to complete the route will be recorded.
11. Robots can deploy any tactics as long as it does not constitute a foul.
12. The parts which are fallen or broken from the robots cannot be fixed back into the robots during the match.

4.5 Deciding the Winner

1. Each robot will be given 1 times attempts include 3 times re-try to complete the whole course and the best score will be taken as the final score. The score priority consists of:
   a. **Points** (after the robot has following each obstacle).
   b. **Time**.
2. In the event of a draw, or there are 2 or more participants gain the same points, the winner will be decide based on the fastest time.

4.6 Disqualification

A team shall be disqualified if it commits any of the following during the match :

a. Team member touches the robot without referee's approval.
b. If Robot is unable to move off 5 seconds after whistle blow.
c. Robot does not comply with the size restrictions.
d. A robot is stopped for more than 10 seconds.
e. A robot is moved outside of the play field for 10 seconds.
f. Participants are not programmed their robot through software.

5.0 Sample Robot