



HUMANOID ROBOT



Group Members : Low Han Jun
Ting Hou Joe

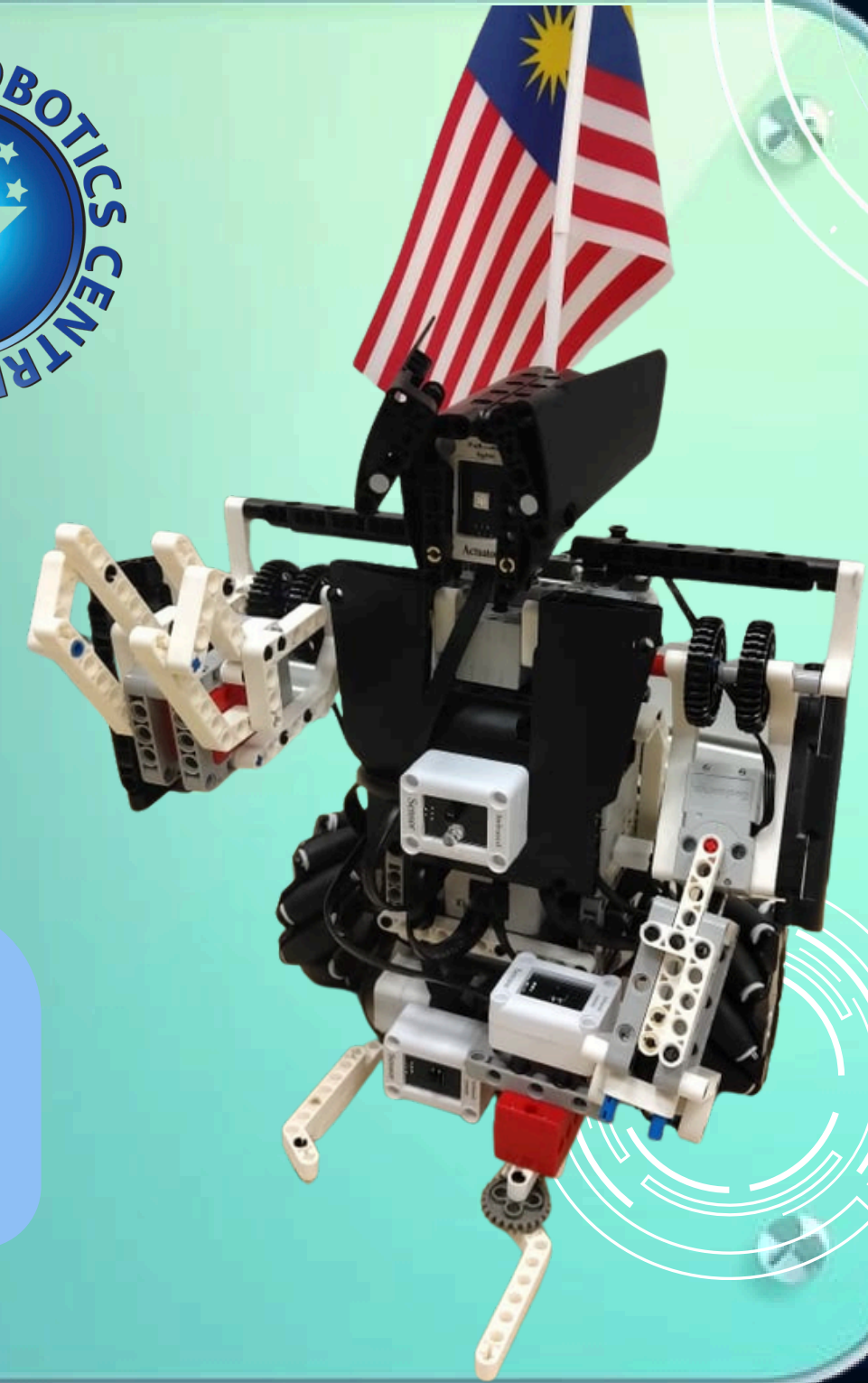


Table Of Contents

What have we learned?

① Group members and team division

② Idea Inspiration

③ Problems and Ideas

④ Robot Features

⑤ Problems faced and overcame

⑥ Progress of building and Program

⑦ Video demonstration and parts list

⑧ Q/A session and Appreciation

NOTORIETY ROBOTS GROUP

BUILDER AND PROGRAMMER



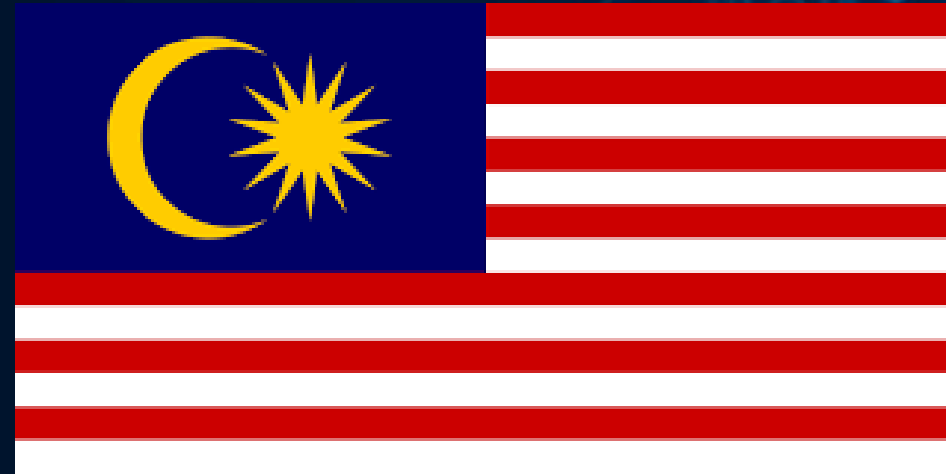
Low Han Jun

BUILDER AND TECHNICIAN



Ting Hou Joe

Inspiration



Nowadays, sweeping has become a must in our daily lives

The thing is, constant sweeping causes back problems such as: Musculoskeletal Disorders, Sprains and Strains, Lower Back Pain (LBP) and many more.

Us, Notoriety Robots are inspired by the modern day sweeping robot, and base on that, we created a humanoid robot that can solve this problem to help humans gain an easier life.

REAL LIFE PROBLEM & SOLUTION

Problem: Nowadays people being so busy on their work, they have no enough time to clean the house everyday. While everyone is busy on their work, those elderly people are staying at home and unaccompanied.

Solution: This robot is invented not to only sweep the floor as usual everyday, but also always at home with elderly people so they will not feel boring since no one talk with them. This robot always holding a Malaysia National Flag (Jalur Gemilang), this will remind the younger generation about our spirit of patriotisme and our unique culture.

IDEAS: WHAT ROBOTS CAN HELP HUMANS DO

Clean floors and maintain hygiene at homes, offices, and public spaces. Robots can operate continuously to keep environments spotless and sanitary.

CULTURAL REMINDER TO PEOPLE

Would be used in events to remind people of their countries culture by holding Malaysia National flags (Jalur Gemilang) . Would be perfect for national day

ASSIST ELDERLY PEOPLE

Provide reminders, help with daily tasks, and offer companionship. Robots can support independent living and improve quality of life for seniors.

CLEAN UP MACHINE

As it has a rotating brush to push in dust and waste into a storage area beneath

FEATURES OF OUR ROBOT



Infrared
Detects obstacles around, which can help elderly people to move around in the dark or limited spaces. The elderly people only have to follow the robot and it will automatically avoid the obstacles and safely bring the elderly people to their destination



Artificial Alarm System
Help to alert the surrounding. It can detect obstacles around and the robot will beep to alert the elderly people around which needs the robot's help to walk around.



Modular Design
Flexible attachment system enables multiple functions including cleaning tools and our national flag. One robot platform serves many purposes across different industries.



Energy-Efficient Battery
High-capacity battery system with fast recharge capability ensures extended operation periods. Smart power management optimizes energy use for maximum efficiency and minimal downtime.

WHAT WE LEARNED

AI robots significantly boost efficiency and safety in various task

USER-FRIENDLY DESIGN

Designing intuitive, user-friendly interfaces is crucial for successful adoption of robot technology by humans of all ages.

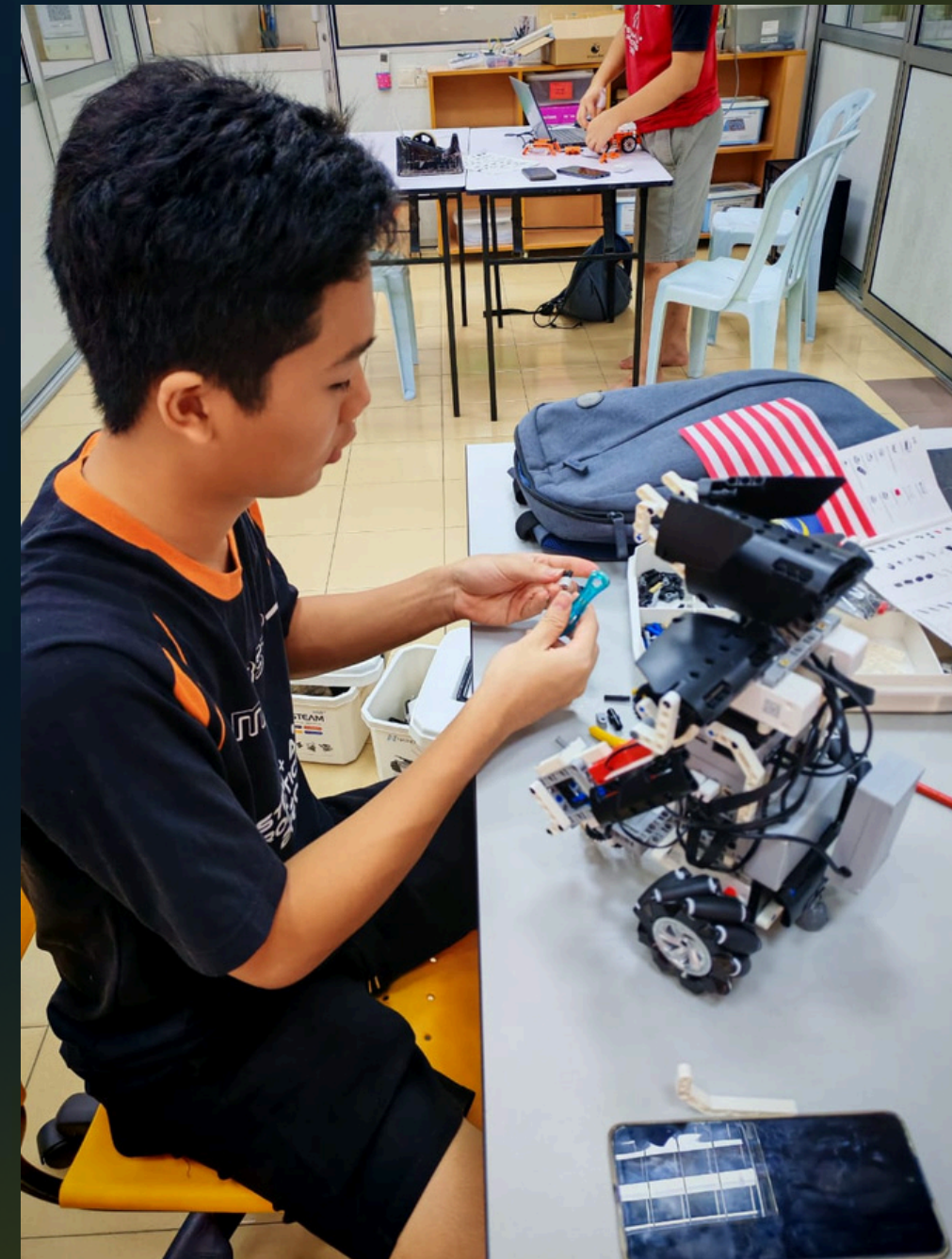
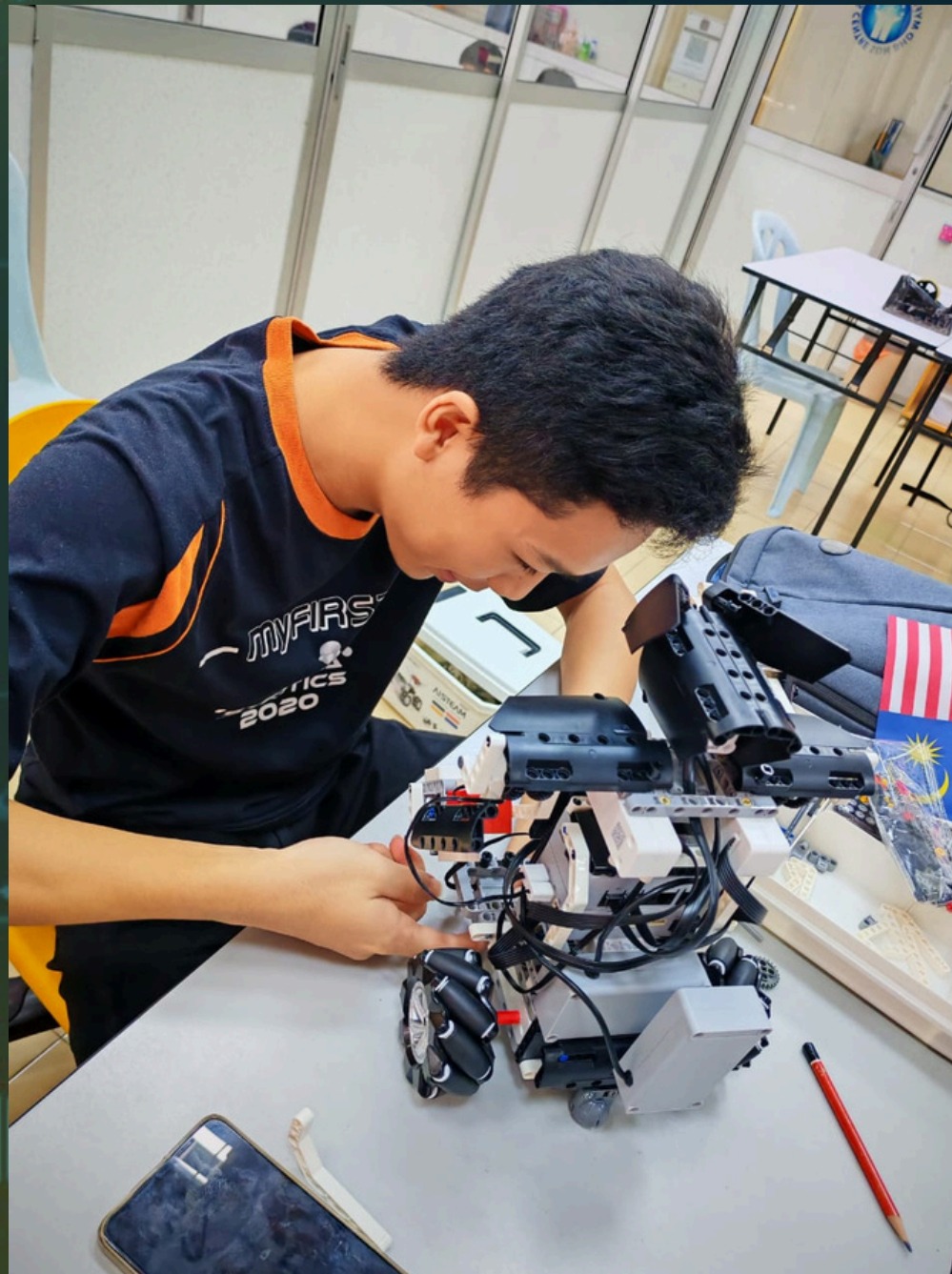
HUMAN-ROBOT COLLABORATION

Effective collaboration between humans and robots enhances overall productivity and creates better outcomes than either working alone.

CONTINUOUS IMPROVEMENT

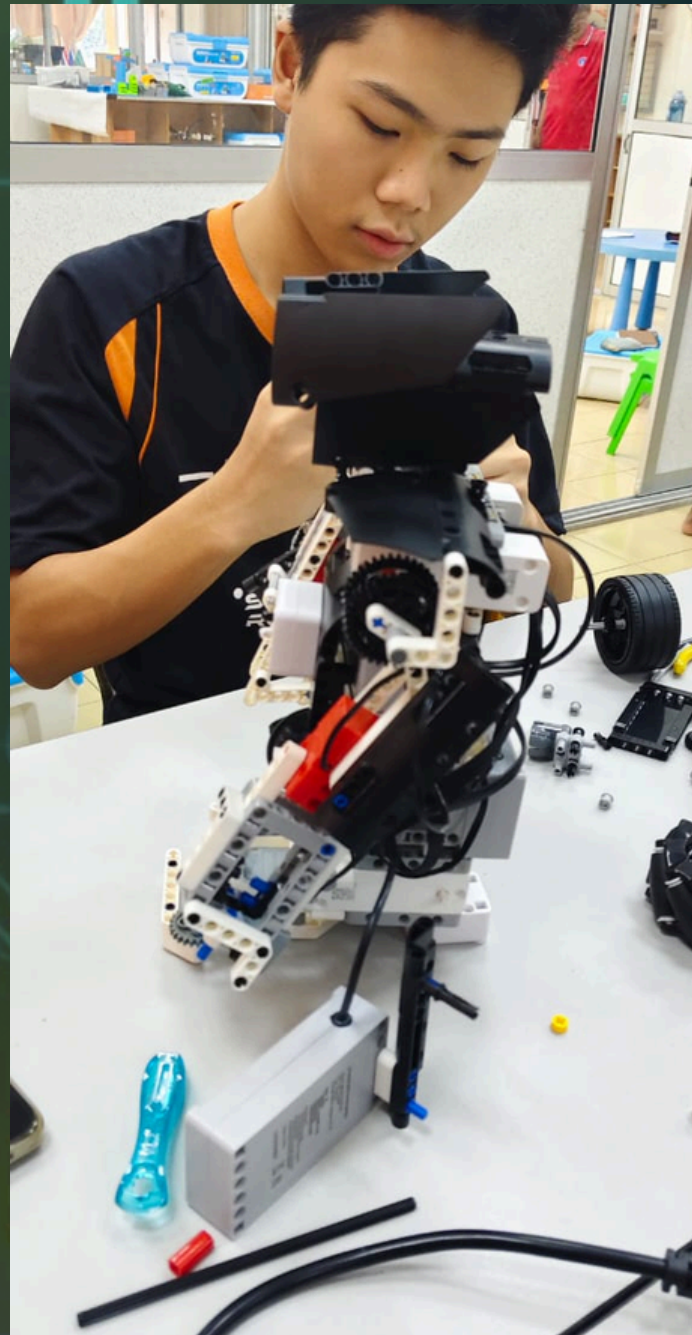
Ongoing testing and incorporating user feedback are essential for improving robot performance and reliability over time.

Manufacturing And Programing





Manufacturing And Programing



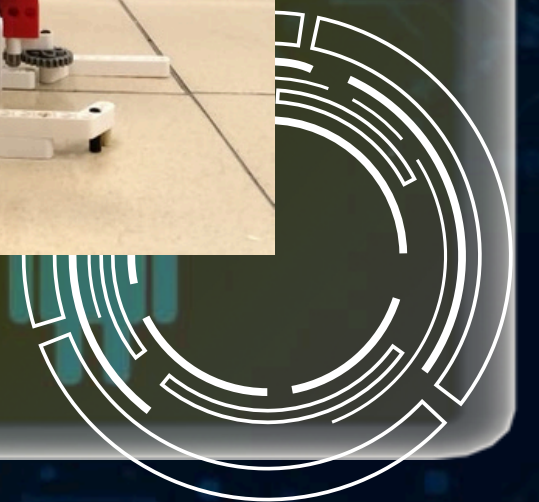
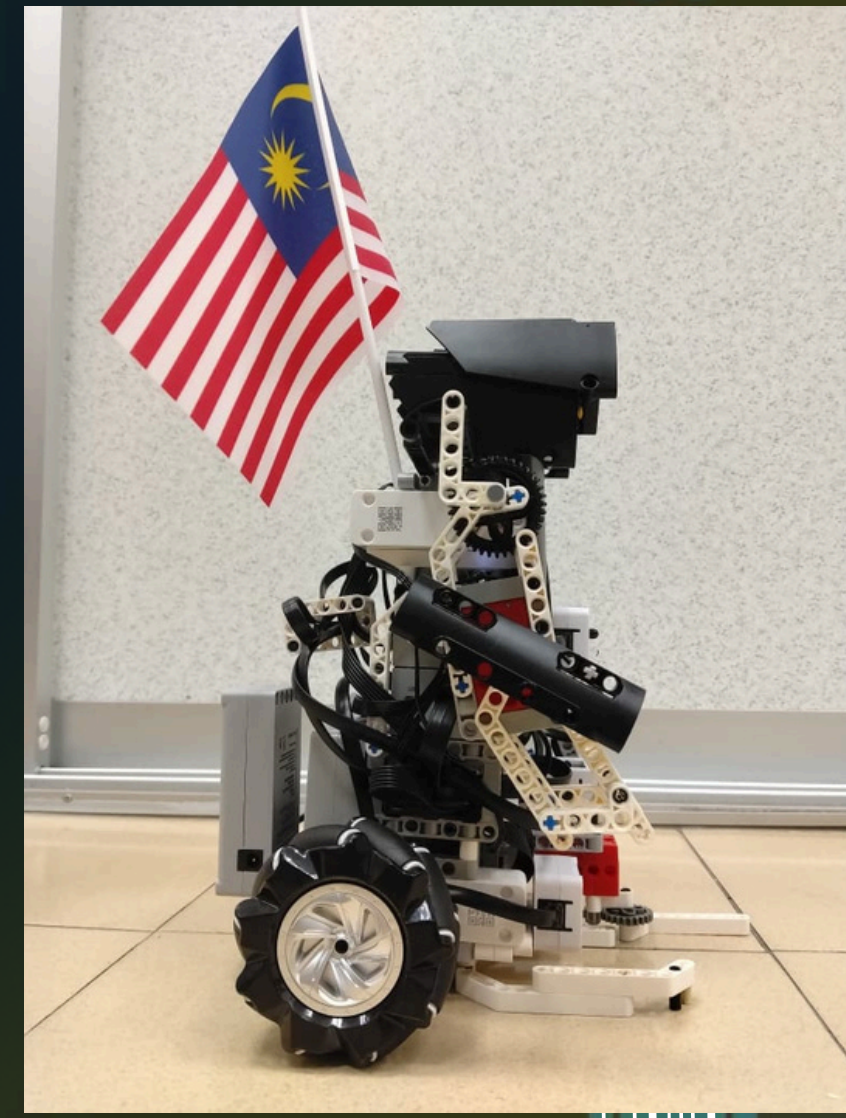
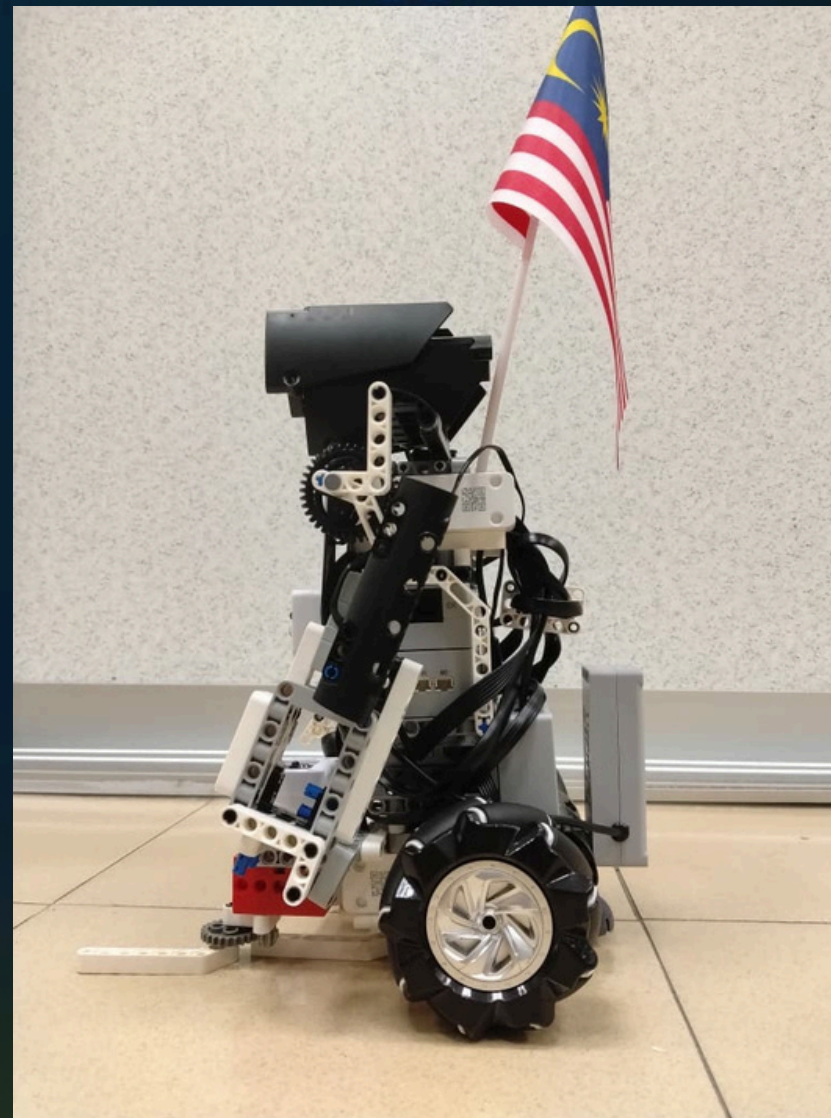
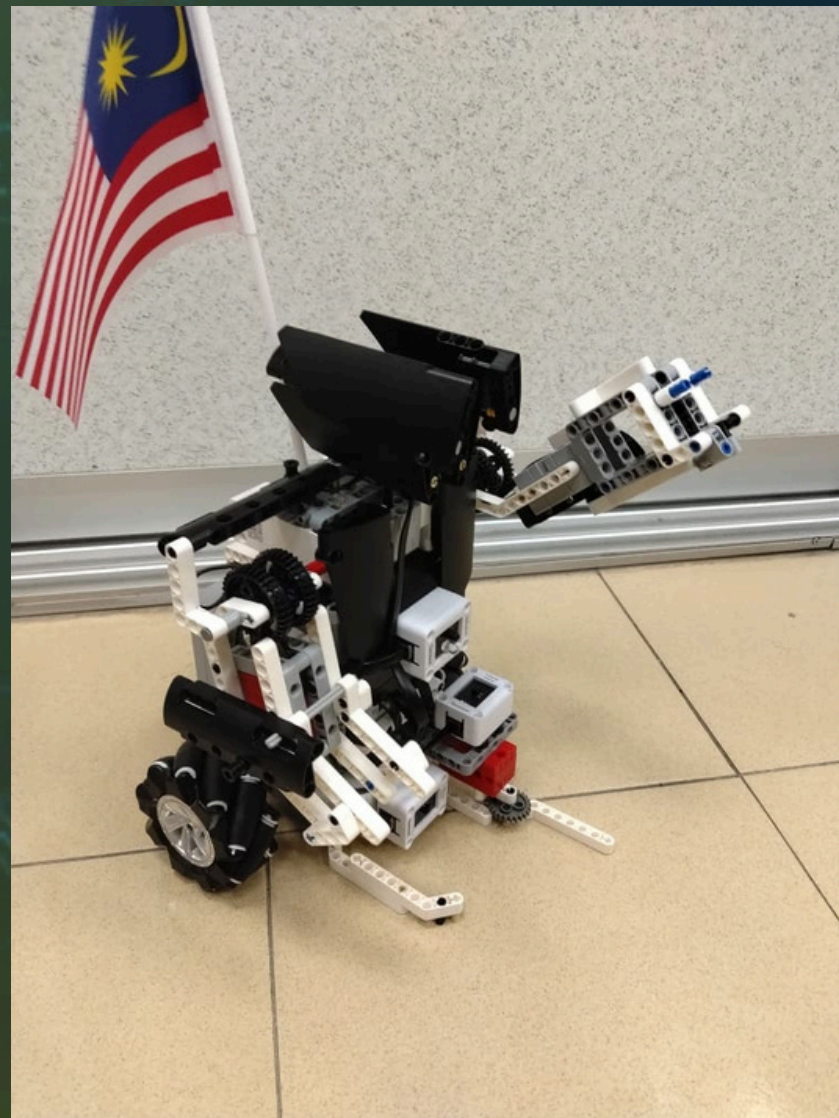


Manufacturing And Programing

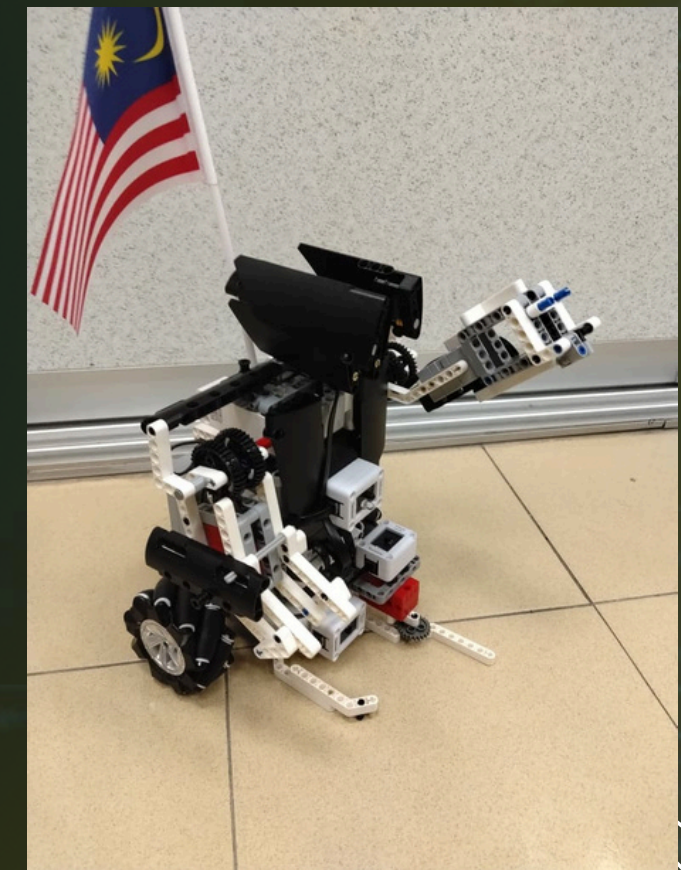
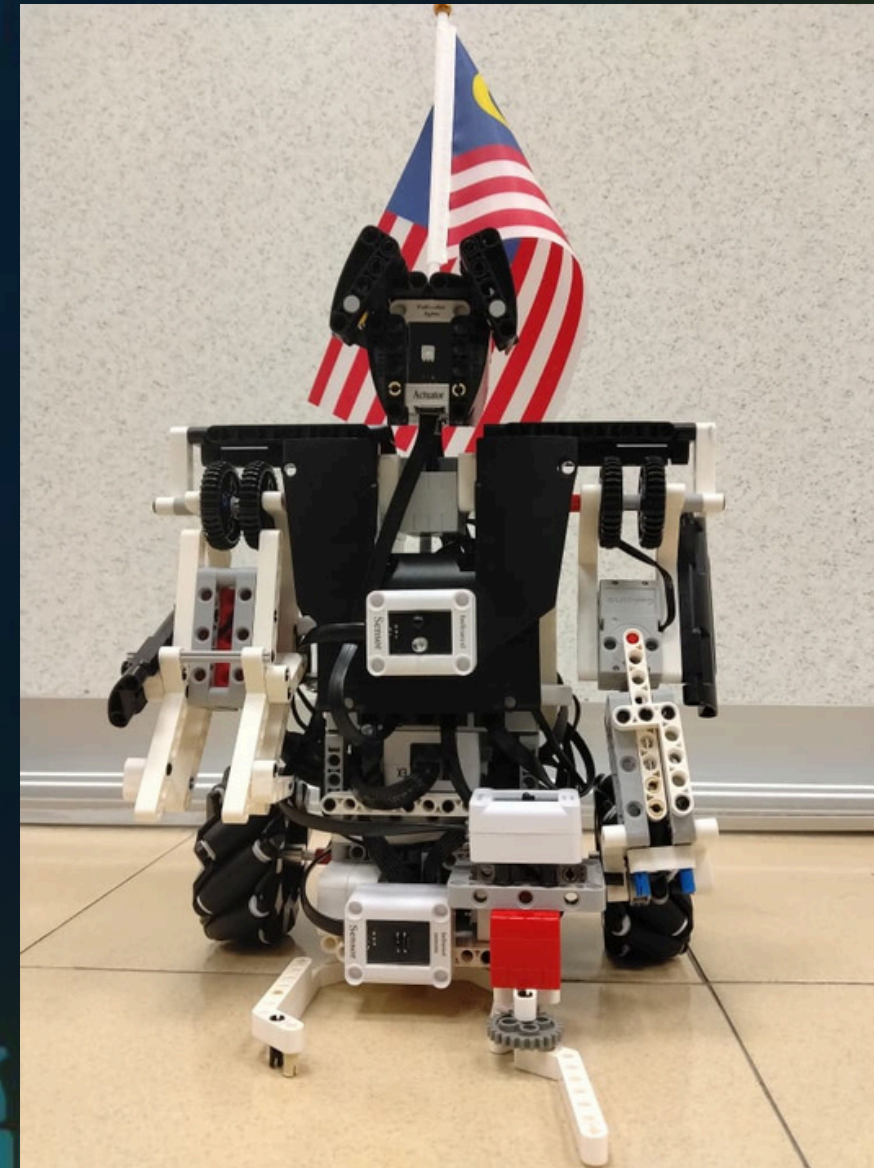
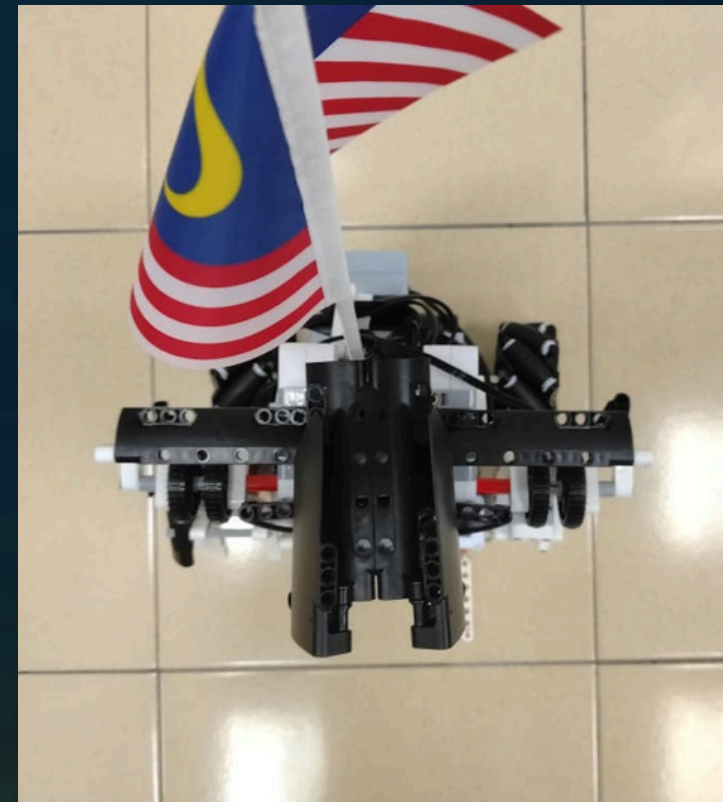
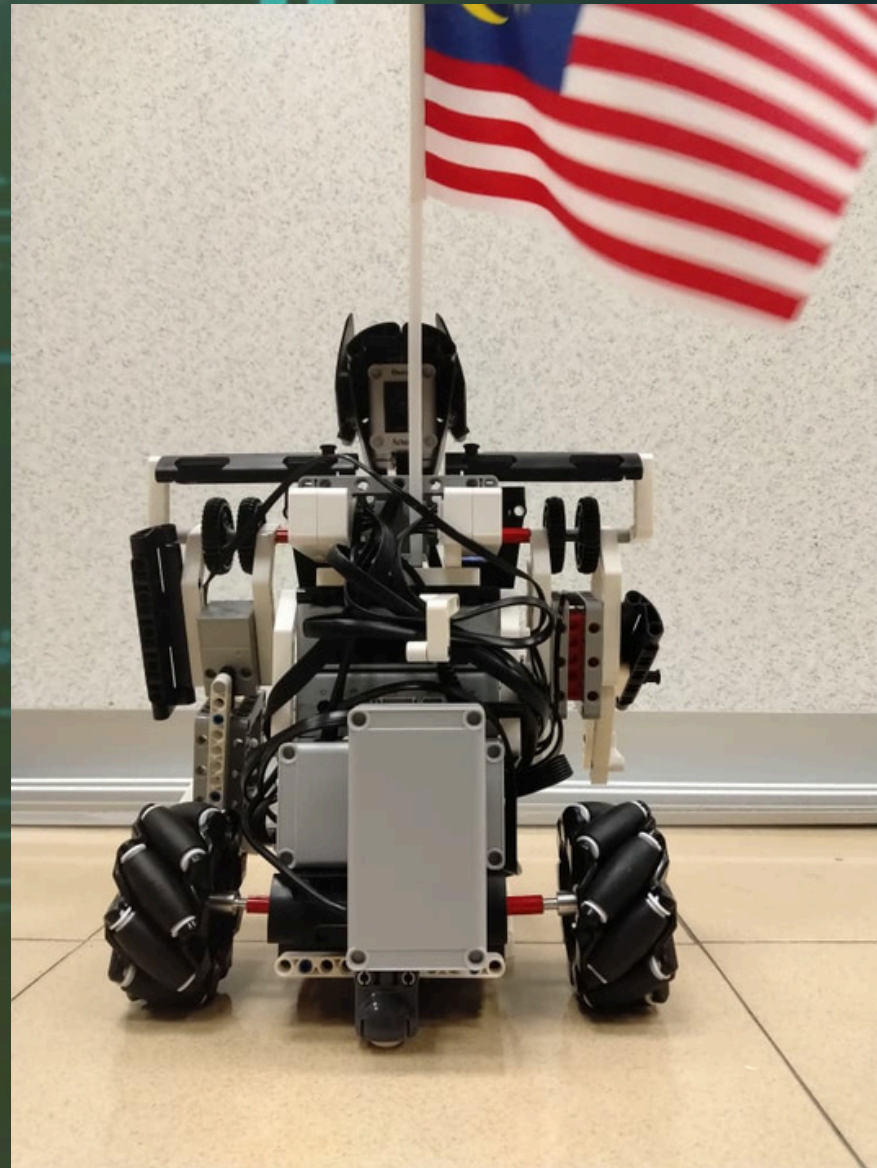




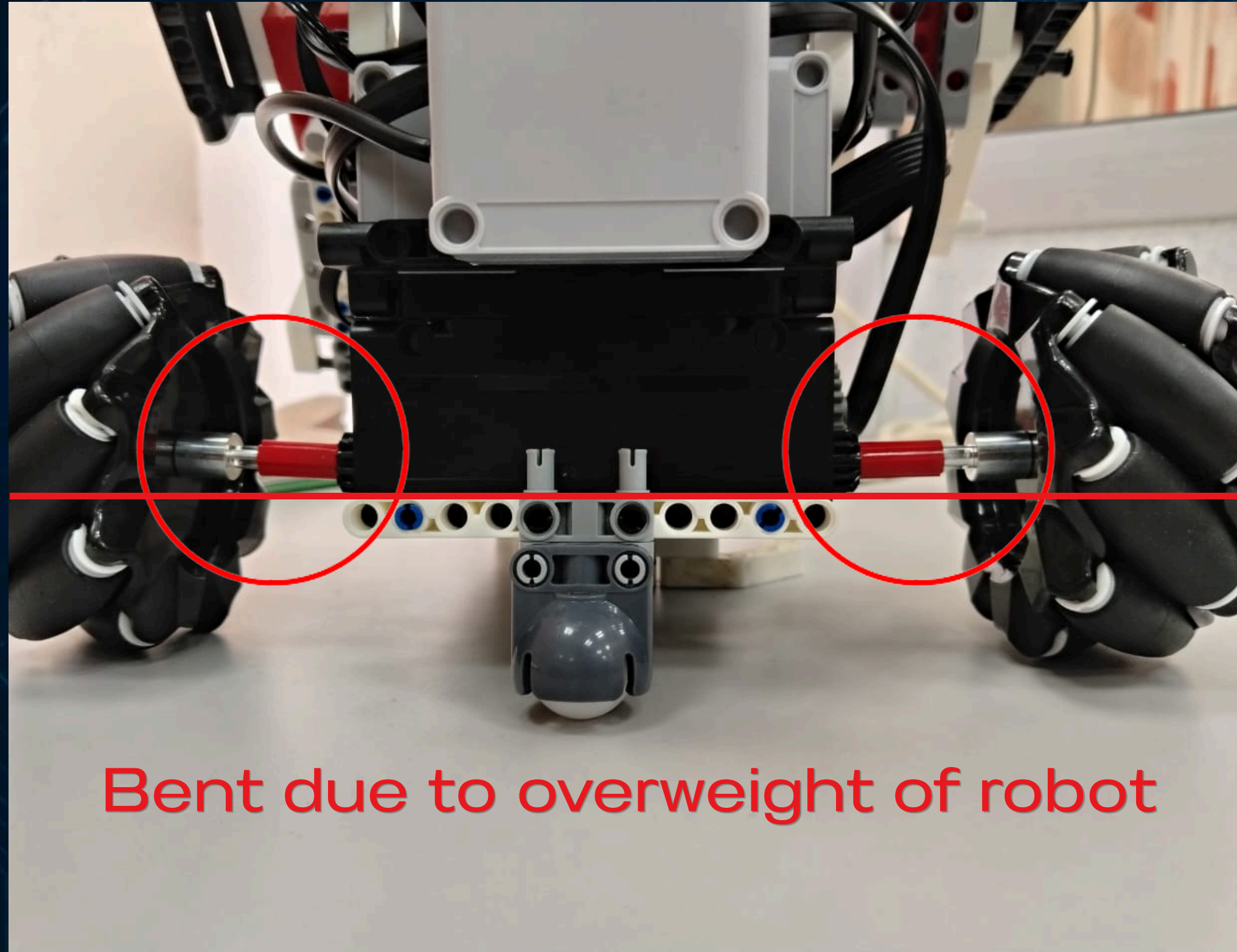
Manufacturing And Programing



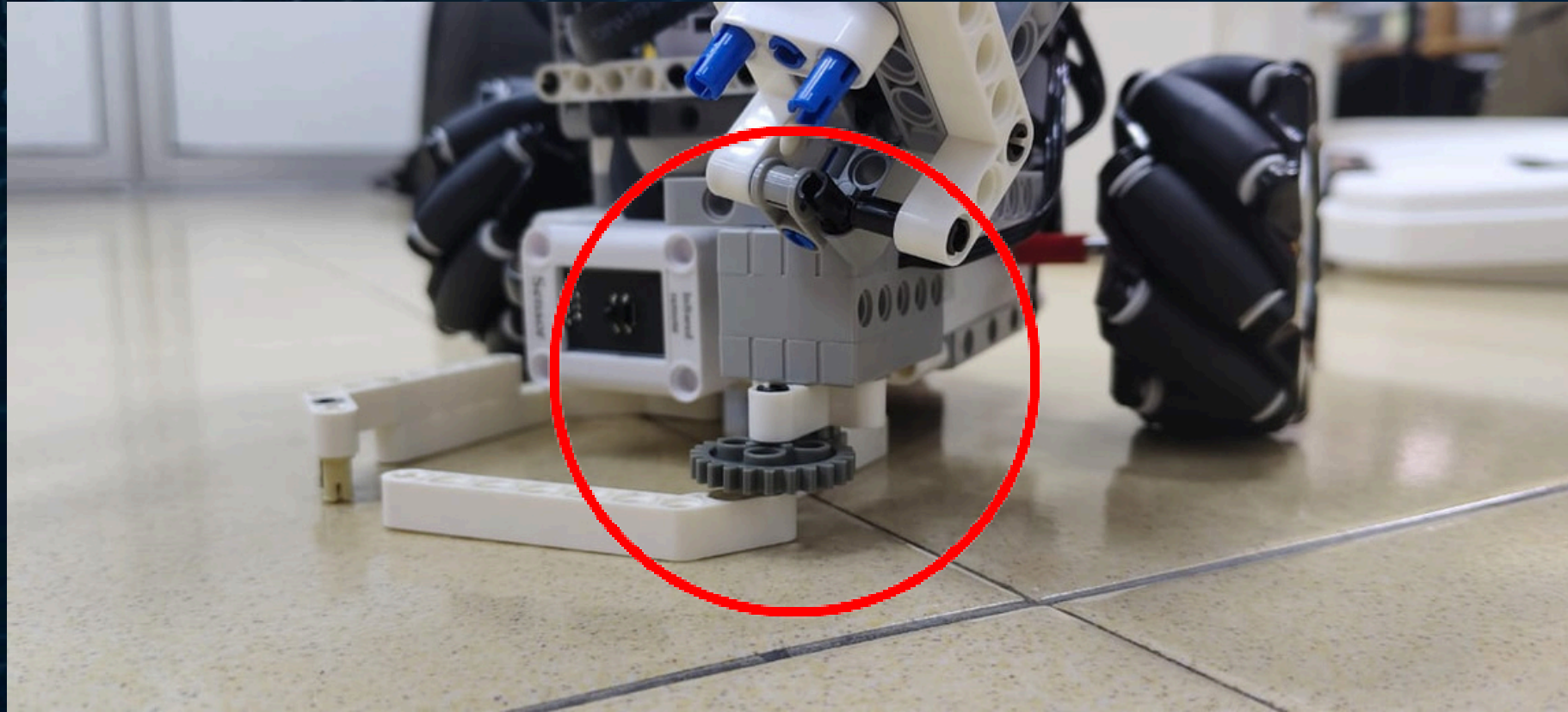
Manufacturing And Programing



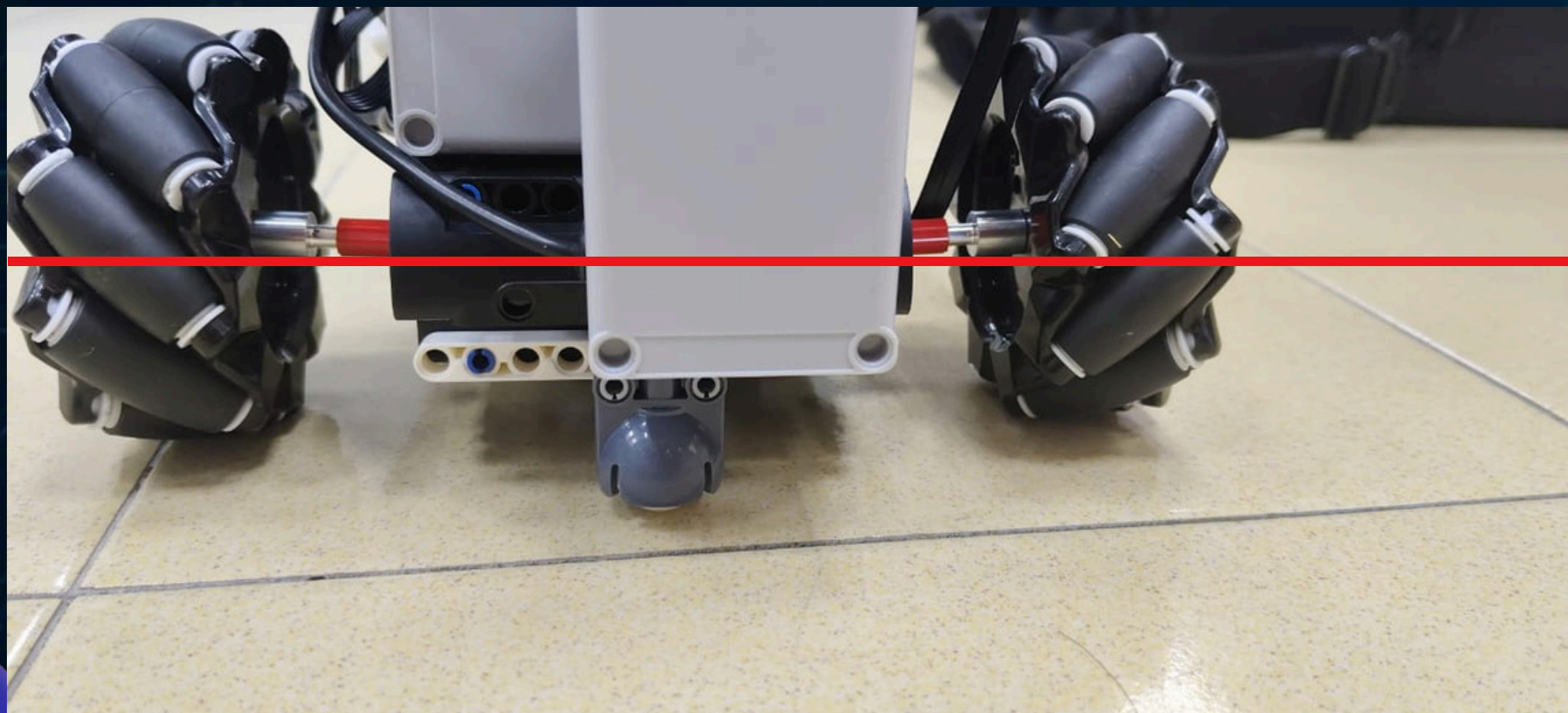
PROBLEMS FACED



PROBLEMS OVERCAME

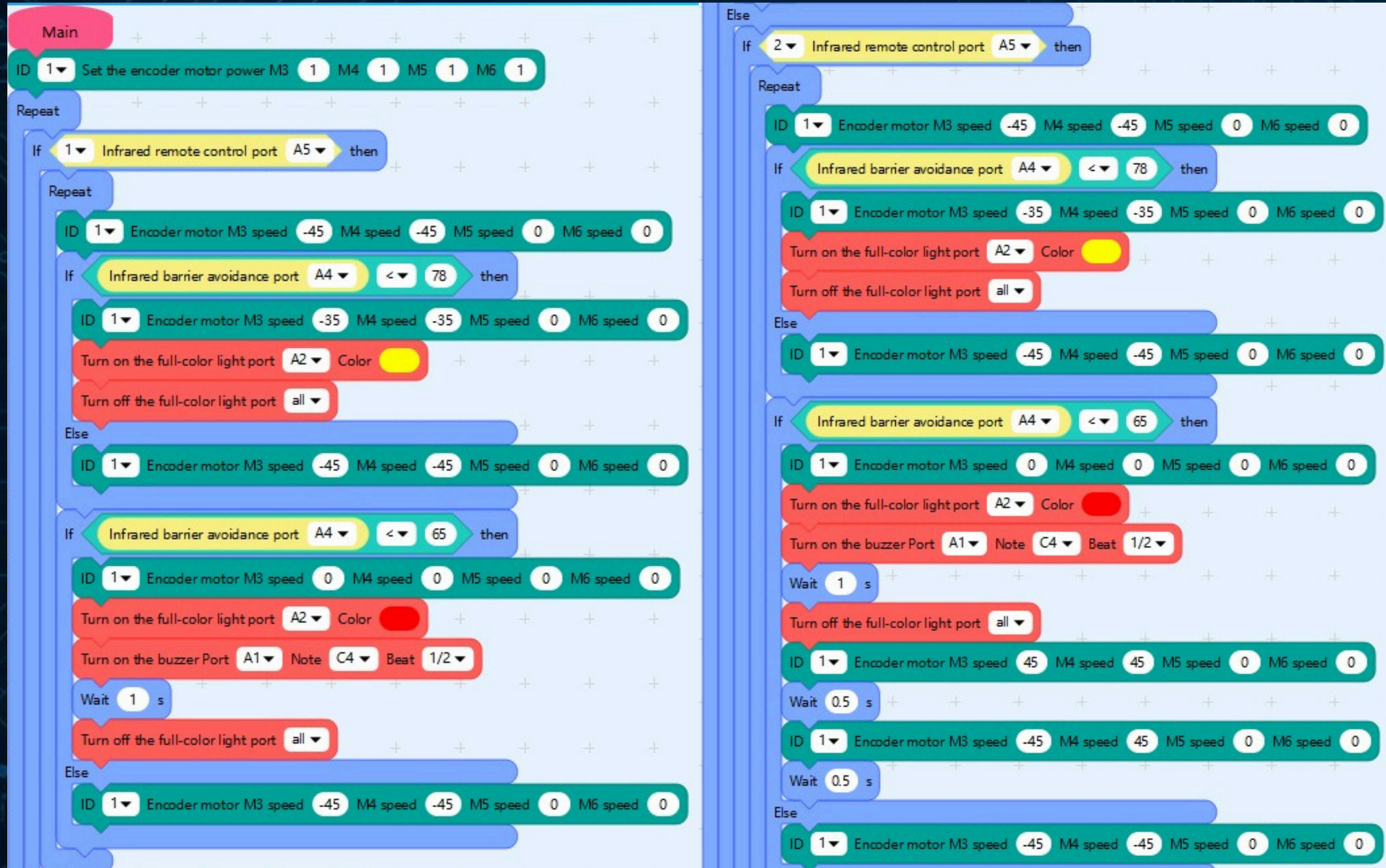


Weight reduction has
been done to robot and
balancing has been
added

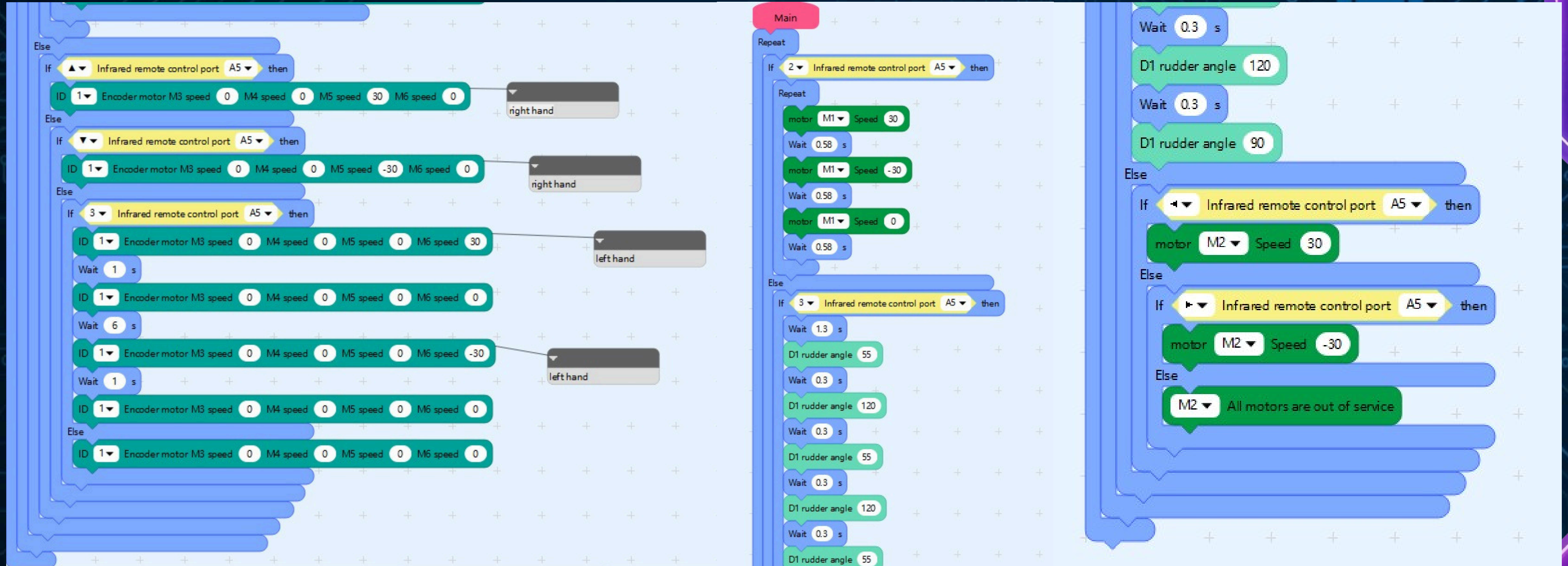


More better than
before

PROGRAM



PROGRAM



Video Demonstration

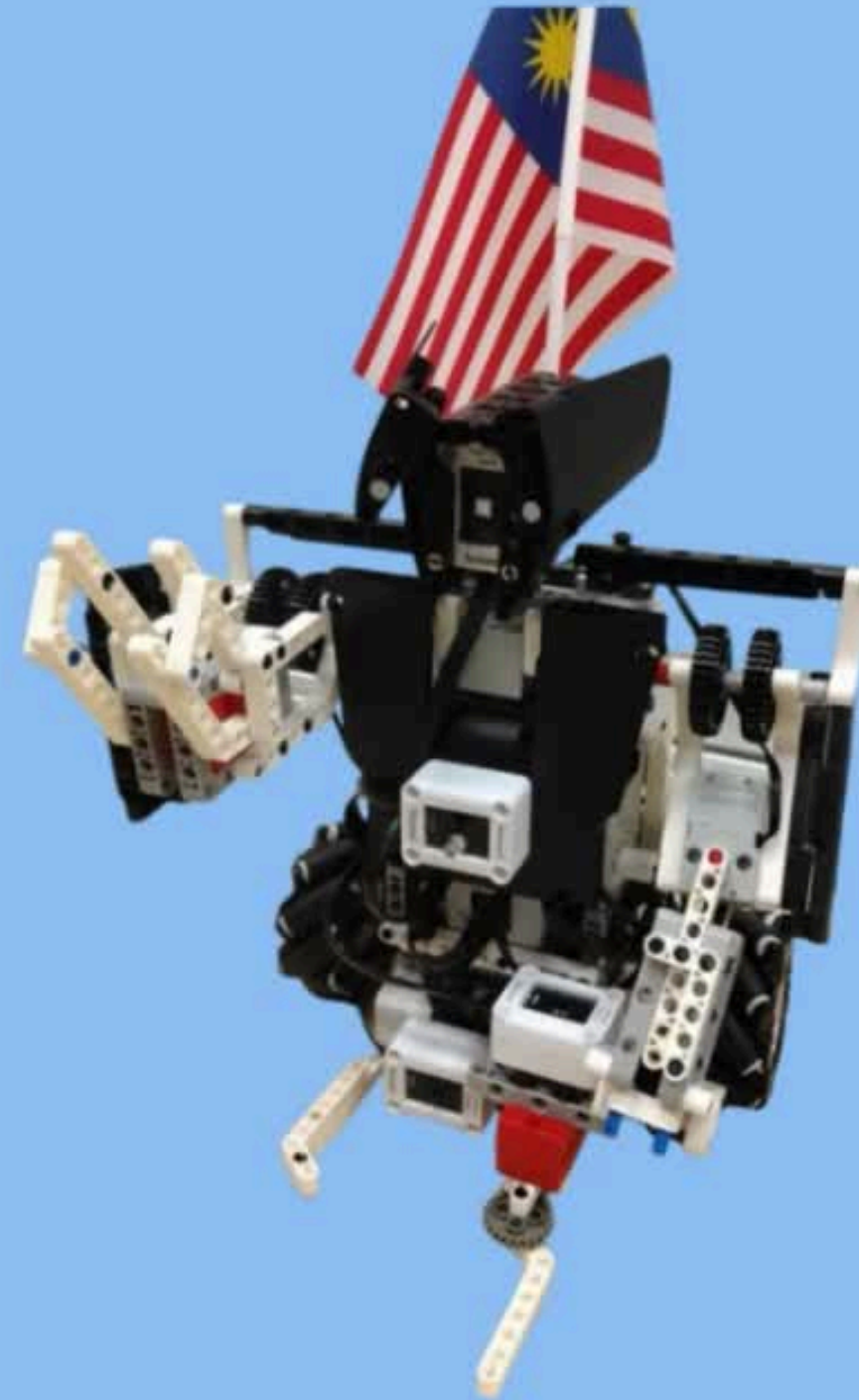
Notoriety Robots



LOW HAN JUN



TING HOU JOE



ROBOT PARTS LIST

No.	Electronic Component Name	Image	AISTEAM 101S		Quantity Used in Your Work
			1 Kit	2 Kits	
1	Controller		1	2	2
2	Lithium Battery		1	2	2
3	Motor Expansion Module		1	2	1
4	Encoder Motor		4	8	4
5	Servo Motor		1	2	2
6	Ordinary Motor		1	2	
7	Infrared Sensor		1	2	1
8	Single-line Follower Sensor		3	6	0
9	Infrared Remote Control Module		1	2	2
10	Full Color Light		2	4	1
11	Buzzer Module		1	2	1
12	Integrated 5-Grayscale Sensor	 or	1	2	0
13	Display Screen		1	2	0
Total Quantity of Electronic Components			19	38	18



GAR 2026 International

Online Invention Challenge Contest

No.	Building Block Name	Image	AISTEAM 101S		Quantity Used in Your Work
			1 Kit	2 Kits	
1	Bush For Cross Axle		4	8	8
2	Bolt and Shaft Connector		4	8	2
3	1x2 Cross Axle Connector		4	8	4
4	2# Cross Axle Connector		4	8	0
5	6# Cross Axle Connector		4	8	0
6	1/2 Bush		8	16	16
7	Half Cross Axle Half Bolt (Sliding)		10	20	8
8	Axle and Bolt Connector		4	8	0
9	Axle and Bolt Connector with hole		4	8	0
10	Beam 3 M. W/4 Snaps		4	8	6
11	Bolt Connector		4	8	4
12	Cross Axle Cross Connector		4	8	0
13	Power Joint		1	2	1
14	Steel Ball		1	2	1
15	1x3 Cross Axle With End Stop		6	12	3
16	1x8 Cross Axle With End Stop		2	4	2
17	1+2 Cross Axle		4	8	0
18	Long Double-ended Bolt		10	20	0
19	Standard Bolt Friction Pin		70	140	97
20	Standard Bolt		10	20	0
21	3/4 Bolt		28	56	32
22	Long Friction Pin, Bolts at Both Ends		40	80	26
23	Half Cross Axle Half Bolt		10	20	16



GAR 2026 International

Online Invention Challenge Contest

24	Cross Axle Long Bolt		10	20	9
25	1x3 Connector Axle and Bolt		4	8	2
26	1x3 Long Cross Axle Bolt		8	16	6
27	1x5x11 Panel		4	8	3
28	11x3 Panel with 10 Holes		4	8	8
29	5x11_#18 Panel		2	4	3
30	5x11_#17 Panel		2	4	3
31	3X5 L Beam		10	20	10
32	2X4 L Beam (Thick)		6	12	4
33	3X3 T Beam		2	4	2
34	3X7 Technic Angular Beam		4	8	4
35	11.5 Double Angular Beam		8	16	8
36	Cross Axle and Bolt Connector		6	12	0
37	1x1 Bolt Connector		4	8	2
38	U Beam		1	2	0
39	1x2 Cross Axle		4	8	4
40	Beam R. Frame 5X11		2	4	1
41	Beam Frame 5X7		8	16	14
42	Gear Wheel 24		2	4	1
43	Gear Wheel 20, Black		2	4	0
44	Gear Wheel 12, Black		2	4	0
45	Gear Wheel 16		2	4	1
46	Gear Wheel 12, Yellow		2	4	0
47	Gear Wheel 20, Yellow		2	4	0
48	Gear Wheel 40		2	4	0
49	Gear Wheel 36		2	4	4
50	Gear Wheel 16		2	4	0
51	1x3 Technic Beam (Thick)		6	12	8
52	1x5 Technic Beam		4	8	2
53	1x7 Technic Beam		4	8	4
54	1x9 Technic Beam (Thick)		8	16	13
55	1x11 Technic Beam		6	12	5
56	1x13 Technic Beam		2	4	2
57	1x15 Technic Beam		2	4	0
58	1x3 Cross Axle		4	8	0
59	1x4 Cross Axle		4	8	1
60	1x5 Cross Axle		4	8	0
61	1x7 Cross Axle		4	8	1
62	1x9 Cross Axle		4	8	0
63	16 Axle		2	4	0
64	Drive Wheel		2	4	0
65	Mecanum Wheel-L		2	4	1
66	Mecanum Wheel-R		2	4	1
Total Quantity of Building Blocks			407	814	353

THANK YOU!

**ANY QUESTIONS? LET'S
COLLABORATE!**