



Merdeka Day Challenge Handbook

1) What could I build?

- a. You can build any robot – if you're really at lost for ideas, you can refer to one of the existing mission manuals.

2) What is the size limit?

- a. You can now make your robot as large or small as you want. Just remember – keep it sensible!

3) How long do I have?

- a. You MUST submit your robot when the time limit of 1 ½ hours (including programming) is up – or risk disqualification.

4) What can I use?

- a. Once again – you can only use ONE RCX/NXT, TWO MOTORS and TWO short WIRES.

5) What about the flags?

- a. The more flags you have, the stronger your Merdeka Spirit is!

6) Can it be scary / gruesome?

- a. Your project MUST NOT have any trace of VIOLENCE or ILL WILL toward others – it must be in the LOVING Spirit of Merdeka!!!

7) Can I copy others' ideas?

- a. The more original and creative your design is, the better your chances of getting a prize!

8) Is there anything else?

- a. You MUST prepare a brief presentation that highlights your robot NAME, FUNCTIONION(S) and PROGRAM.

9) Why is everyone smiling (some - insanely...)?

- a. There is a special award called the Merdeka Smile Award. The bigger your smile, the better your chances of winning it!!!

What the Students have Built

Here are the fruits of your (the students) labor!!! A whole array of impressive, funny and useful robots for Malaysia!!! Malaysia BOLEH!!! You will find the following documentations: The student's name, the robot's name and the robot's function. All are souped-up versions of the students' words themselves.

- Chong Di Hang



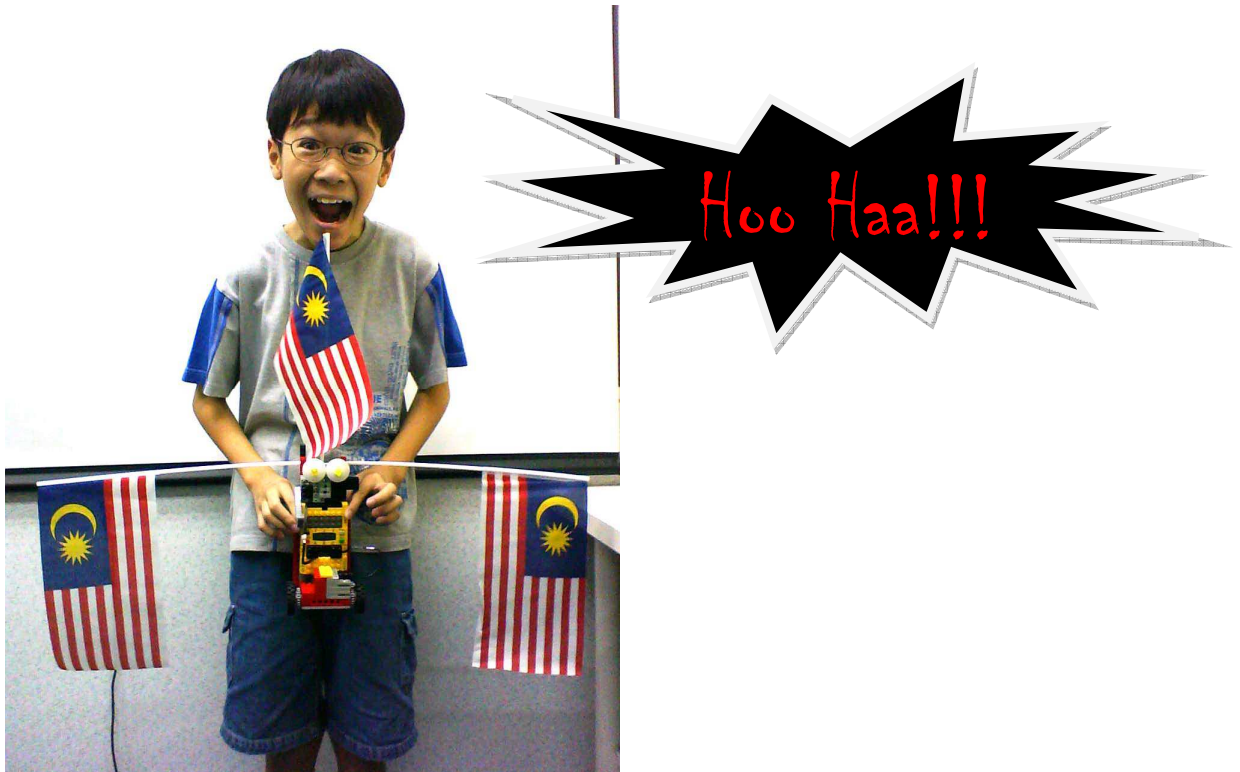
- Robot: Car Thingy
- Functionion: Robot for LEGAL racing (e.g. F1); to make Malaysia look good; Can prove that Malaysians know to drive properly!!!

- Chong Di Heng



- Robot: Giant Troll-E
- Functionion: Robot for legal street racing; to make Malaysia Look Good too; the robot can also can be used to flush out underground baddies.

- Bryan Phoon



- Robot: *One Hand Wall-E*
- Functionion: *Clean Malaysian Toilets; Sweep Floor; Serve coffee with one (sometimes spill the coffee); provide one-handed entertainment; is rubbish-powered and can turn trash into money!*

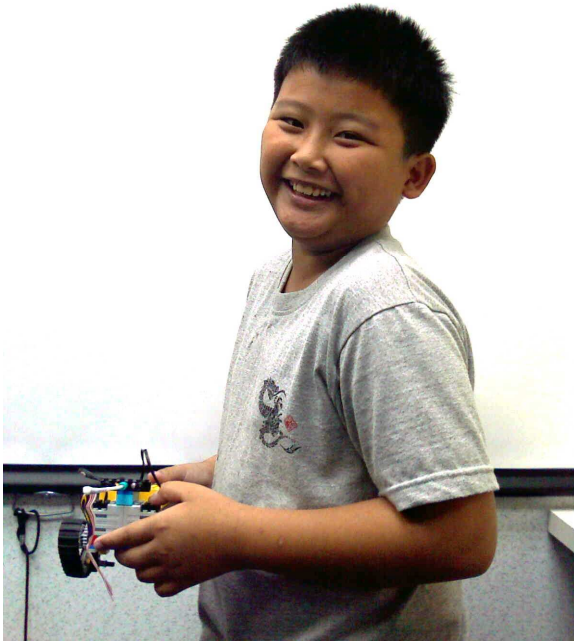
- Jeremiah Chan



CHEEZE!!!

- Robot: *Bubble Bee Car*
- Function: *Clean Air using Flag as filter (with a "zzz" sound);
Blow bad guys away; can be used to capture bad guys to blow them
straight into the prison!!!*

- *Jian Sheng*



- Robot: *Merdeka Tank*
- Function: *Can step on terrorists; fight in war for safety of human personal; Armored Car for troop transportation; unfortunately it uses an expensive type of petrol; has Metal Armor.*

- *Jian Yuan*



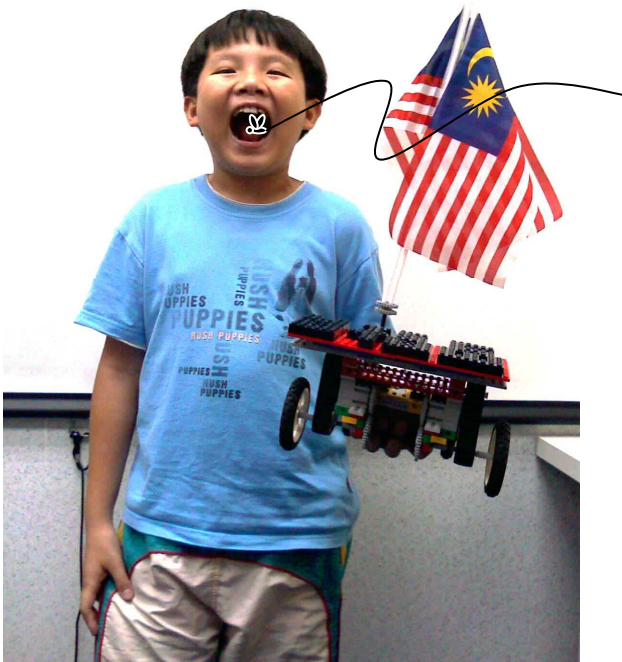
- Robot: *Amy Tank*
- Function: *Disable good and bad guys (very clumsy); use battery no petrol (very cheap), can climb Mount Everest in 4 sec and fall down (make Malaysia Proud), can demolish building fast.*

- *Isaac*



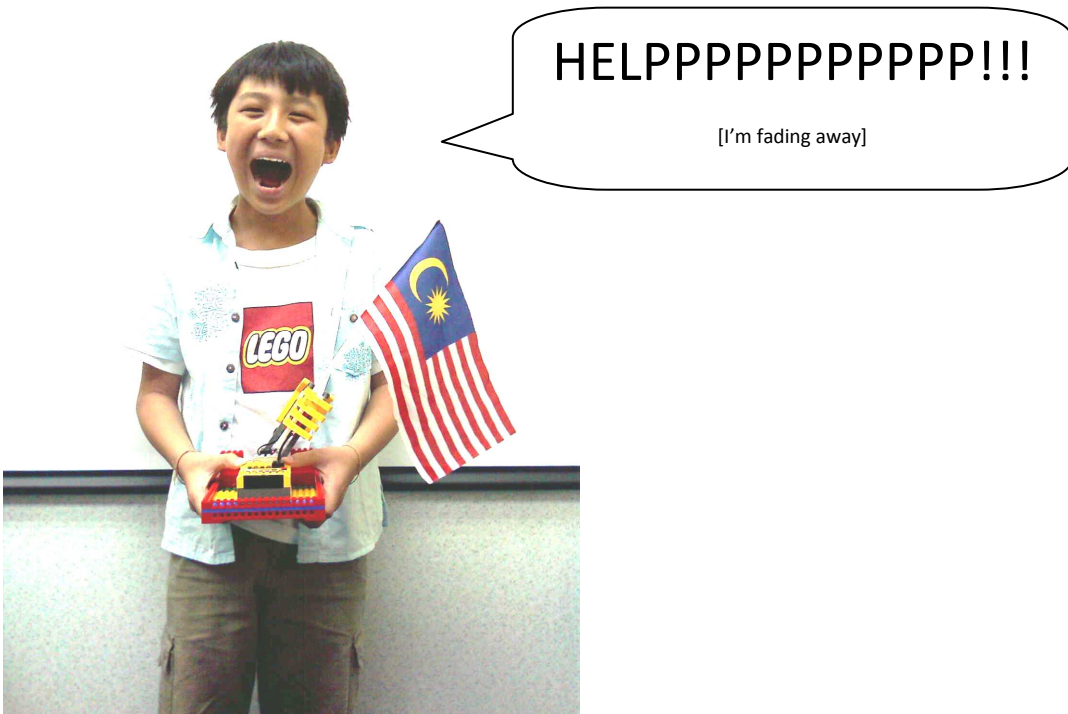
- Robot: X8
- Function: Go slow like a turtle to save energy; is solar powered (solar panels are embedded in the flags); can shoot bad guys with taser guns; turns rubbish into cash.

- Kai Sheng



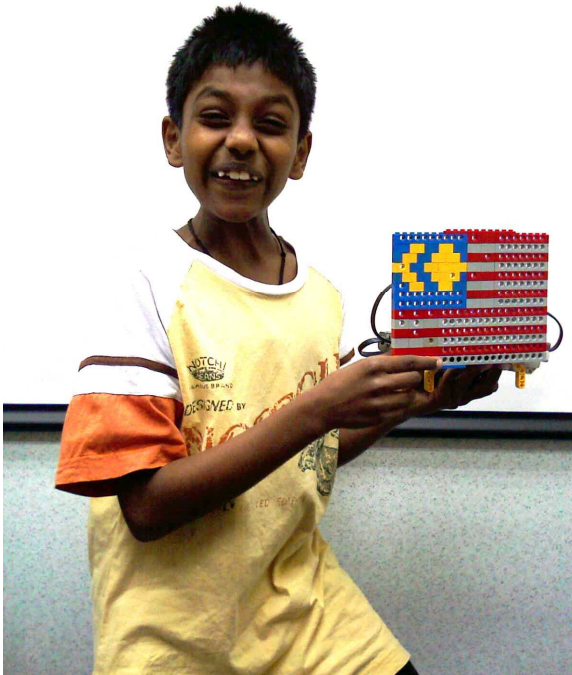
- Robot: MalaysiaBot
- Function: Clean Rubbish to make Malaysia a better place; solar powered; turns trash into cash (RM5 per trash); use big wheels to climb Everest in 5 seconds (can carry 50 people).

- Chun Yik



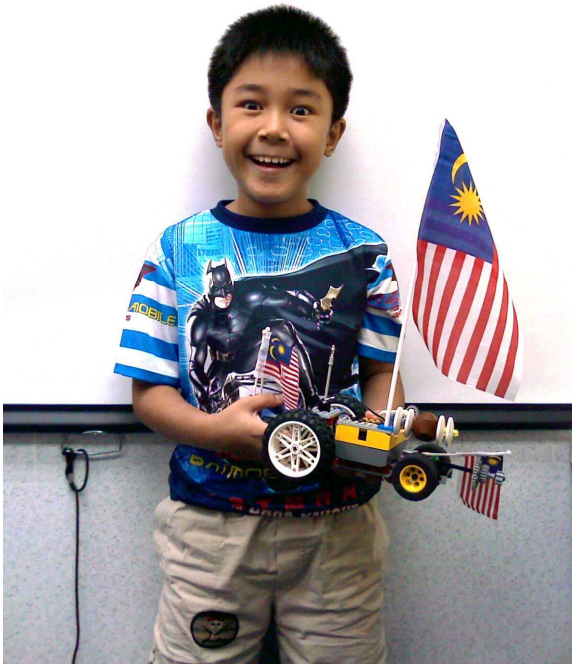
- Robot: Flag Waver 3000
- Function: Tirelessly wave the flag proudly without fear of terrorists, bombs, etc; Can arm wrestle with humans; he got idea in dream.
- Note: 100% functional

- Parvinh



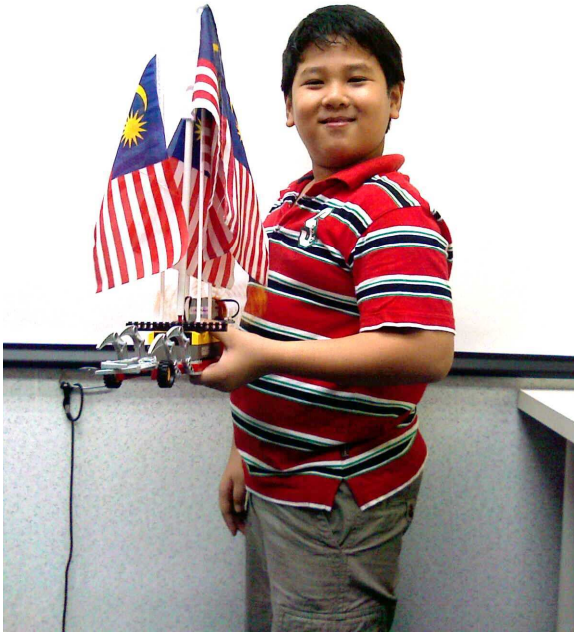
- Robot: Malaysian ShuffleBot (made in Malaysia)
- Function: acts as a human (robot) shield; teach how to dance the shuffle; make people dizzy by shuffling to its doom; concrete Malaysia flag to shield from nuclear disasters.

- *Raimi*



- Robot: *The Bestrodex (a.k.a. APC)*
- Function: *Scare bad guys with fake skull (death penalty); onboard weather controller to make it snow in Malaysia; Anti-terminator armament; reduce global warming; has self-destruct capabilities.*

- *Wei Ming*



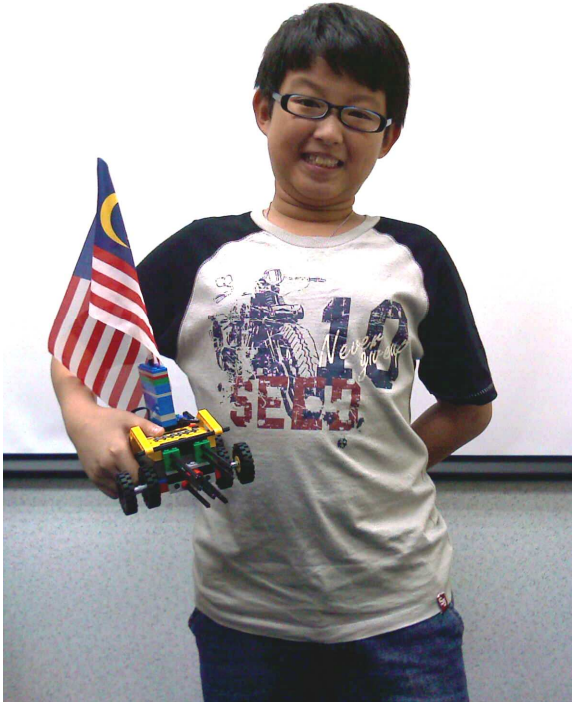
- *Robot: Malaysia Saver*
- *Function: Blow rubbish fly away into peoples' house; cool down the planet by blowing cool wind; utilizes electric power (lasts 5 mins using 6 AA batteries); only falls down Everest.*

- *Wei Jun*



- *Robot: Malaysia Lover*
- *Function: Wave the flag to distract enemies during battle; Sweep the floor (NOT USING FLAG!!!); the robot cannot tell lies; make Malaysia PROUD =>*

- HawJye



- Robot: Malaysia Spinner
- Function: Put not-so-good-guys to their demise; Legal F1 racing for Malaysia; use tires to do damage to other bad robots; can go skating down Everest in 10 seconds.

- Derrick



- Robot: Super Fireworks
- Function: Drive around (with a mind of its own); free fireworks for the people; use recycled material to make fireworks for Merdeka Celebration; can fix large wheels to climb Mount Everest and fire fireworks at the sky (err... won't that cause pollution).

- Faye



- Robot: Bunga Raya (Hibiscus) Mobile
- Function: Provide entertainment for audience; has real-life Malaysia National Flower, plant flowers INTO the ground using the wheels; Acts as a Merdeka float in the parade.
- Note: Sang the National Anthem.

- Khai



- Robot: Merdeka Ria 51st
- Function: Turn antenna (people can sit inside "antenna"); got "I Love Malaysia" sign; Has a Bunga Raya to filter the air; Nine (9) flags in various areas; uses electric power; very safe (but doesn't look so safe...), got PM cut-out standing on the robot.
- Note: Sang the National Anthem.

- *Sartchii*



- Robot: Malaysia Boat, Bat Humvee
- Function: Track (and disturb) evil enemies; acts as an Armored All Terrain Vehicle (ATV); it can fly using turbo boosters (not boosters), CAN SELFDESTRUCT TOO.
- Note: Sang the National Anthem.

- Tan Deren



- Robot: Merdeka Tank
- Function: To defend the country against *aliens* and terrorists; can defend against haze & pollution; can go underwater, climb mountains, deserts; Nuclear powered; Has 4 flags; also has a mind of its own (*possessed!!!*), cannot kill good guys (using Google to search for who is good and who is bad).

- Justin



- Robot: The Poker 3000
- Function: Poke "Popple"; has a built in nuclear powered telescope to take interplanetary photos; can sweep the floor; is capable of driving on the moon for 2000 sec; it also can fly; has a dancing program; has built in SELFDESTRUCT function.

- Wei Jeat



- Robot: Malaysia Boleh
- Function: Transport people for free (*limited time only, during Merdeka Period – otherwise cut-throat prices*); solar powered during the day, at night manual (human powered via pedal-power); big wheels – won't get splash by mud and water; can do KL Drift, can SELFDESTRUCT to protect its secrets from enemy governments.

- John



- Robot: Merdeka Rover
- Function: Can go to other planets; has built in Celcom, Digi, Maxis, Happy, TMNet, u mobile, etc...; ALL FLAT RATES. Also can receive Astro; the robot is Solar Powered; it can collect samples from other Planets to send to Earth.

- Michael



- Robot: Driver 30000
- Function: Fetch VIPs to Dataran Merdeka for the Merdeka Celebration; has SELFDESTRUCT capabilities; it also make VIPs happy (Free transportation); Got Lamp to see in the dark.

- *Huai Jin*



- Robot: *Speed Negara*
- Function: *To protect civilians from aliens, enemy and terrorist attacks; to defend Malaysia against alien invasions; is fully automatic (driverless); can carry 4 people; Flash bang to see in the dark (night vision).*
- Note: *sang the National Anthem.*

- Nazran



- Robot: Merdeka Patriotic Party House
- Function: hosts free VIP parties; TO display flag (jalur Gemilang); serves as the mobile house of the future; if got natural disaster such as earth quake & tornados, the house can just drive away; utilizes an infinity Nuclear battery; got WiFi, Astro & Streamyx; is 100% waterproof; has police DJ for mixing songs.
- Note: sang the National Anthem.

- Kim



- Robot: Lee Chong Wei
- Function: to play badminton with bare hands, dual NIKE tank treads; can also use the flags as racquets; potential to win TWO silver medals for Malaysia; got built in lights to play badminton in the dark; it is also equipped with flash bang; container on its butt can carry ONE BILLION shuttlecocks (1000000000).

- Gabriel



- Robot: Flower Robot,
- Function: can wave a flag; can spin flowers; light flashing action to please audiences; serves as an entertainment robot; can filter air (perhaps using flag); reduce global warming; got Flash Bang; automatic - not human operated;
- Note: Sang-along the National Anthem.

- Norman



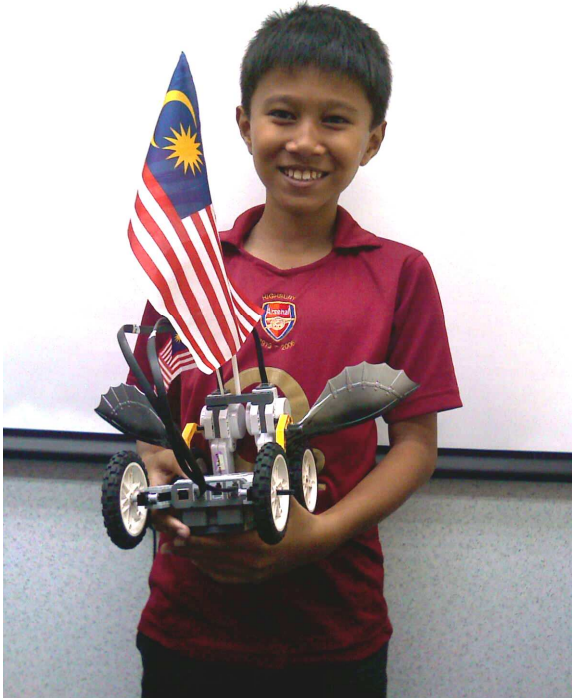
- Robot: Latest Malaysia Car (prototype -X)
- Function: utilizes solar panels to recharge itself; battery powered for environmental friendliness; has one electric engine; can carry 100 passengers; can go 1000 miles on a gallon of liquid fuel; got Astro for in-car entertainment.

- Natasya



- Robot: Funky Twin Tower
- Function: can perform in the Merdeka Parade; homemade Jalur Gemilang; is 30 stories high; has 2 revolving towers at the top; is powered by ancient magic spells (*Wingardium Leviosa*), automatic – no human operation, magic lasts one lifetime (about 70 years); has everything that a human need (for 100 years) – can be used as a zombie shelter.
- Note: sang the National Anthem.

- Mahesh



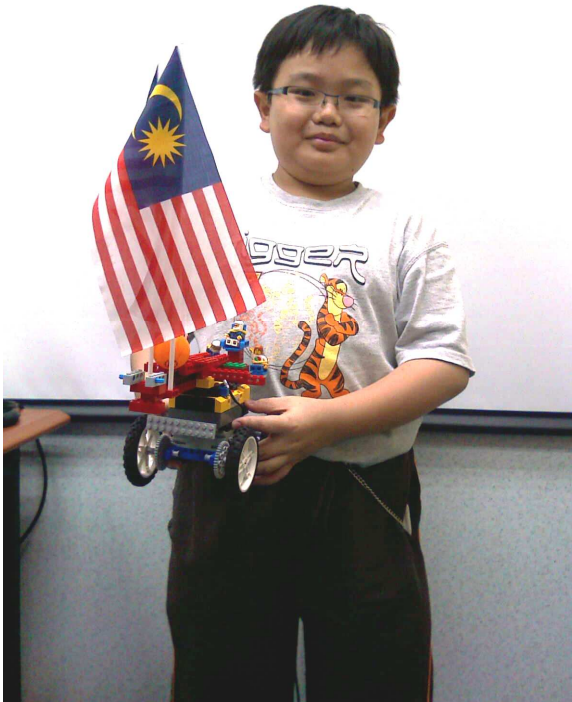
- Robot: Proton-Die
- Function: seats 20 persons; has 2 redundant electric engines; is solar powered; got wings to make it more aerodynamic; wings also block wind to induce friction at the same time (*err - self conflicting*); fully automatic, works without human intervention; 20 built in airbags; can go faster than turtles & raccoons.

- Zheng



- Robot: Malaysia Sport Car ("Merarri", not Ferrari)
- Function: F1 racing car; can drift using tank treads; can carry 50 people to go racing; has many air bags and safety belt; solar powered to save the environment; automatic racing car - races on its own without human intervention; 500 MPH TOP SPEED!!!

- Qi Hao



- - Robot: Super Boom
 - Function: functions as a heavy military troop transport; can transports mercenaries for Malaysia; can shoot big rockets (RPG class) at enemies; is solar powered for environmental friendliness; got safety belts - but unfortunately no armor - for personnel; slow and powerful gear system; also works as a sumo robot; can squish bad guys into the ground.
 - Note: sang the National Anthem.

- Xuan



- Robot: Driving KLCC
- Function: Send people to school for free (only during Merdeka Period); uses solar to power it; can transport 500 people per trip; it also promotes local fruits; advertises KLCC via a large 'banner'; it is computer controlled so that no human intervention is needed.

- Waris



- Robot: Special 2 in one Moon Shooter
- [SHOOTS PEOPLE TO THE MOON FOR FREE!!!]
- Function: Free transport to the moon; less than 1 minute to go to the moon; uses an array 200 solar panels; $\frac{1}{2}$ human and computer control; got parachute in case someone goes elsewhere; also acts as a garbage compacter; unfortunately, it took 100 years to construct the robot – to be completed in 2108!!!
- Note: sang the National Anthem halfway

- Chieng



- Robot: Graper
- Function: Grab objects that fell under the table (or hard-to-reach places); clean up the country by picking up trash; has a built in perfume factory; the robot also promotes papaya (a local fruit); the robot is electric powered; it has a top speed of 250 km/h; it is also remote controlled (RC) and automatic.
- Note: sang the National Anthem.

- *Aiman*



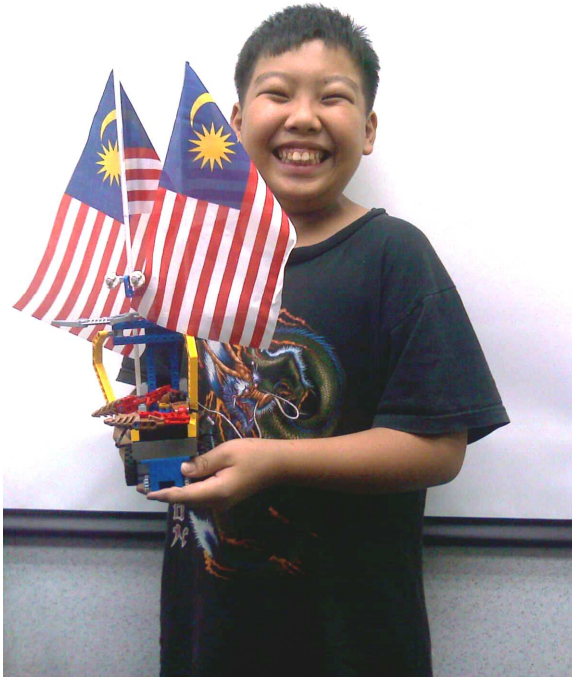
- Robot: *Super Merdeka (Trans Mobile Mini)*
- Function: *Wave the flags to promote Malaysia; the robot can pick up people (special offer only on Merdeka); the robot is solar powered in order to be environmentally friendly; 20 people can seat inside the robot; automatic driving - no driver!; made in Malaysia.*

- Ilyas



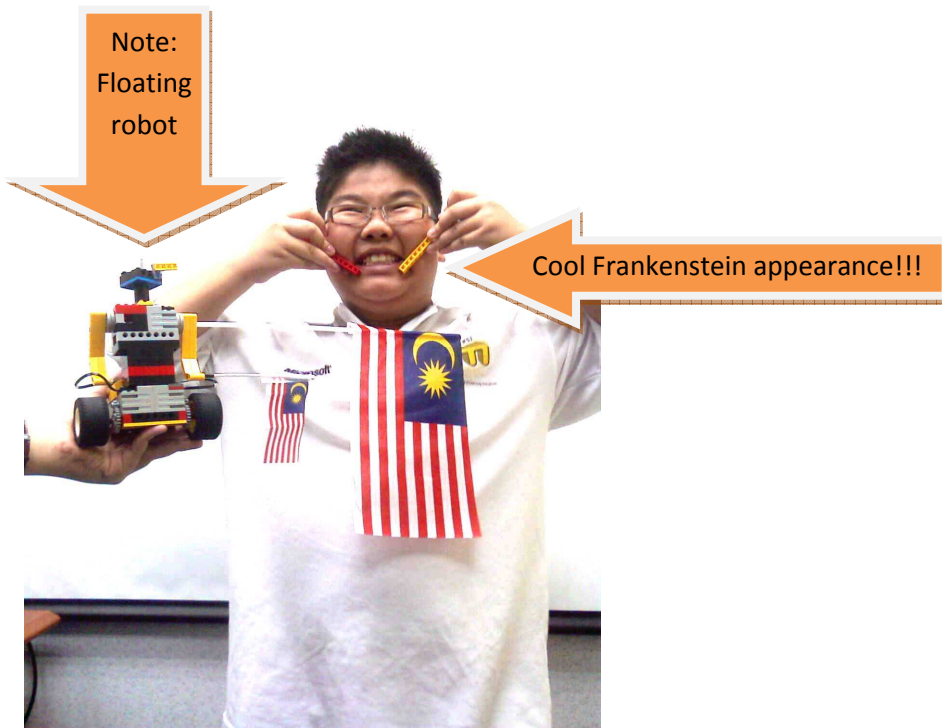
- Robot: Malaysia GP Racer
- Function: legal F1 racer; remote controlled so that human driver is not harmed; equipped with nitrous oxide; top speed of 500km/h; has a top speed of 3 engines; has one airbag inside; can go on rough terrain; can climb mount Everest (logically - 2 hours in actual - 2 sec); can also be driven in Merdeka Parades.

- Boon Han



- Robot: Crazy Twister
- Function: can twist and spin the flag at 30000 rpm (the flag will burn and turn to dust or vaporize); it is solar powered; can drill into the ground to catch underground people of the Mole; can create tornados to counter global warming (by cooling down the planet).

- Bryan Soh



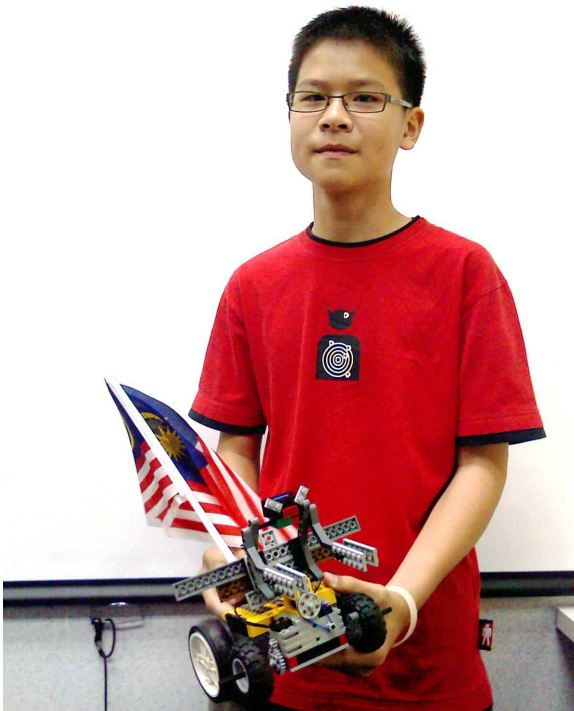
- Robot: Crazy Flag Waver
- Function: Has friendly/sad/scary expression; its right hand is used to shake hands with people (machine-human interaction); left hand is a rocket powered flag desolator (err... spinner); has 2 flags - one for backup in case the first one flies off; has built in internet access; utilizes 3 motors; if people badmouth Malaysia, the robot can teach them a *valuable* lesson; the head can turn 360; it is fully autonomous.

- Aaron



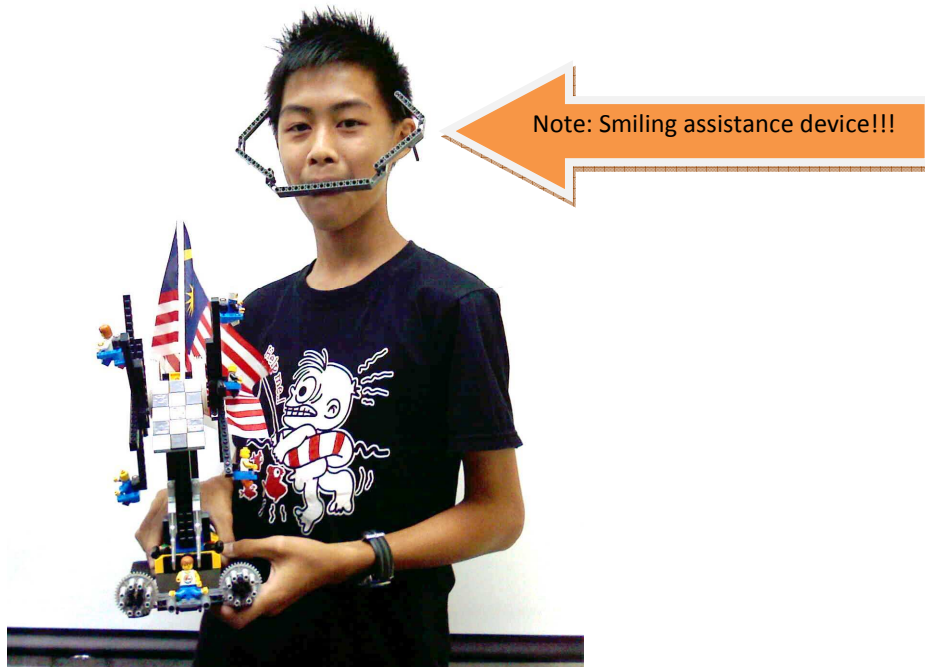
- Robot: Munero (Malaysian Juggernaut)
- Function: wave flag to promote bravery (shows that Malaysians DO have a backbone); can switch between flag & sword; can lead a parade; has a Jalur Gemilang Shield of Justice; can chop meat and cu-cum-ber (cucumber); can train the new Hang Warriors.

- Cheng Fang



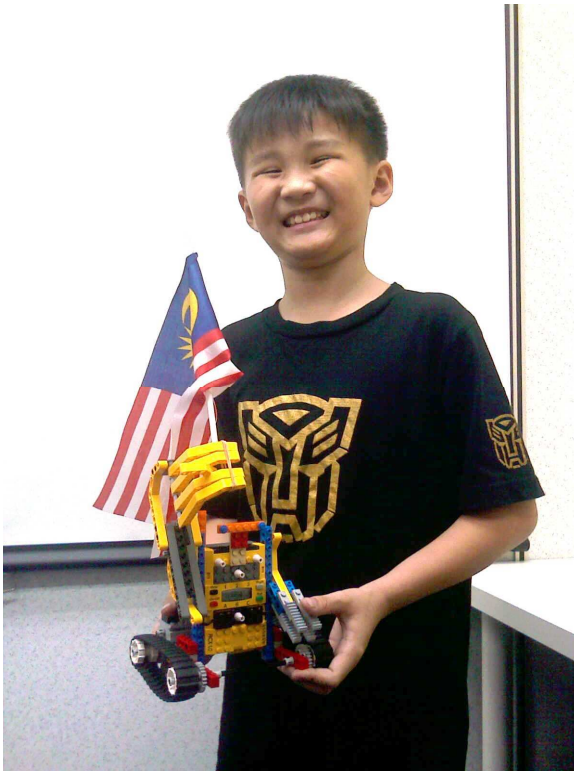
- Robot: Abdu-Tank (very patriotic)
- Function: To protect the Prime Minister from assassination (from other countries and aliens); provides shielding for prime Minister; provides free transportation for PM (very slow and steady); battery powered (rechargeable - recharge in 10 minutes, can last for 1 year); use big wheels to drive on rough terrain. Can transform in 9.5 seconds, can be used in Merdeka Parade;

- Cheng You



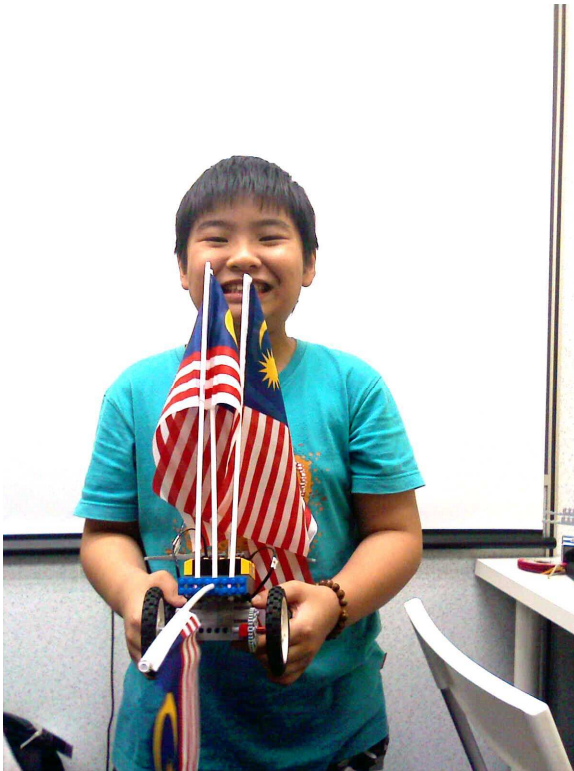
- Robot: Malaysia CST (Crazy Shooter Tank)
- Function: Protect Malaysia; using dual Gatling cannons; 12 people; solar powered; use bulldozer tracks for simplicity and to be strong; can work for entertainment; automatic; Provides SAFE entertainment (no people go flying).

- *Wei Shuen*



- Robot: Rescue Bot
- Function: Can locate survivors in natural disasters; claws can pick up debris to save victims; can walk at the frontline in war to save soldiers' lives; can turn tyres into rocket boosters to fly to Mars in 50 seconds (Hyper Boost); 10 onboard crew; hydrogen reactor powered; made of pure Titanium (everything-proof);

- Yen Khing



- Robot: *Fighter Merdeka*
- Function: *Go straight and go back; sweeping the floor; Drive over smaller cars for fun (squish old cars for recycling); got 5 flags; powered by biomass (human feces - the driver's seat is a toilet bowl); Can only fall down Mount Everest.*

- *Shane*



- *Robot: Monzter Truck*
 - *Function: Solar powered; Has 5 Flags; can go fwd and bwd forever (meant as a never-ending Malaysian joy ride); got strong power to squish small cars; can play robot football.*