

NEWSLETTER

FLL **FIRST® LEGO® League MALAYSIA 2014**

UCSI University Kuala Lumpur 25th to 27th April 2014



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fll.sasbadi.com



What is *FIRST*®?

FIRST® (For Inspiration and Recognition of Science and Technology) is a not-for-profit organisation devoted to helping young people discover and develop a passion for science, technology, engineering, and math (STEM).

Vision

To transform our culture by creating a world where science and technology are celebrated and where young people dream of becoming science and technology leaders.

Mission

To inspire young people to be science and technology leaders, by engaging them in exciting mentor-based programmes that build science, engineering, and technology skills, inspire innovation, and foster well-rounded life capabilities including self-confidence, communication, and leadership.



FLL®



FIRST® LEGO® League® (FLL®) is a project-based programme teaching students ages 9 through 16 about science, technology, and collaborative working. FLL is a partnership between the non-profit organisation *FIRST*® and the LEGO Group. It had its first season in 1998. Now, over 230,000 students from 80 countries take part.

“We want to change the culture by celebrating the mind. We need to show kids that it’s more fun to design and create a video game than it is to play one.” (Dean Kamen, Founder of *FIRST*)

“FLL encourages children to design, construct, and programme their own intelligent inventions. This allows them not only to understand technology, but to become masters of it.”

(Kjeld Kirk Kristiansen, Owner and Deputy Chairman of the LEGO Group)



“The top priority of disaster response is to save lives. The better tools we have, the more lives we can save. This Challenge can help develop future emergency response engineers.”

James Hazlett

Planning, Exercise,
International Services
Manager

American Red Cross

“Through the NATURE’S FURY Challenge, the teams can appreciate the impact of disasters on people in different parts of the world, so they’ll have more empathy and become more inclined to help create better devices to help deal with natural disasters.”

David Campbell

Founder and Executive
Director

All Hands Volunteers

“Kids will learn different ways to prepare, adapt, and respond to a natural disaster. It never hurts to know what comes next.”

Dave Gallo

Director of Special
Projects

Woods Hole
Oceanographic Institution



Can FIRST® LEGO® League (FLL®) teams help us master natural disasters? In the 2013 NATURE’S FURY™ Challenge, more than 228,000 children, ages 9 to 16*, from over 80 countries, explored the awe-inspiring storms, quakes, waves, and more that we call natural disasters. Teams discovered what can be done when intense natural events meet the places people live, work, and play.

*9-14 in the US, Canada, and Mexico

NATURE’S FURY Missions Include:

- Position an evacuation sign
- Clear an airplane’s runway from debris
- Land a cargo plane safely on a runway
- Relocate structures
- Distribute water to people in need
- Deliver supplies



FLL teams:

- Choose a community to research.
- Learn about the natural event that could cause a natural disaster in that community.
- Research obstacles and then create an innovative solution to help keep people and property safe before, during, or after a natural disaster.
- Share their problem and solution with others.
- Build, test, and program autonomous robot using LEGO® MINDSTORMS® to solve a set of missions on an obstacle course.

HOW IT WORKS

FIRST® LEGO® League (FLL®) created through a partnership between FIRST® (For Inspiration and Recognition of Science and Technology) and The LEGO Group, inspires future scientists and engineers.

FLL Children:

- Learn teamwork skills
- Build self-confidence, knowledge, and life skills
- Research challenges facing today's scientists
- Design, build, and program autonomous robots
- Use LEGO® MINDSTORMS® technologies
- Engage with their community
- Compete in tournaments and present their solutions to a panel of judges

How FLL Works:

- Teams of up to 10 children, ages 9-16
- Adult coaches and mentors
- Schools, home schools, churches, civic groups, neighborhood groups
- Parents, teachers, community volunteers
- Corporate sponsors
- New real-world game challenge each year
- Sports-like tournaments with judges and awards

What FLL Offers:

- Discovery of the fun in science and technology
- Real-world application of science and math concepts
- Hands-on problem solving
- Programming experience
- Research presentation project
- Adult role models
- Team activities guided by FLL Core Values
- Self-esteem and confidence

2013/14 FACTS:

- 228,400 children worldwide
- 22,840 teams
- 80+ countries
- NATURE'S FURYSM Challenge
- 8-week design, build, and research period
- 70,000+ Volunteers
- 1,000+ Sponsors
- 939 Qualifying Tournaments
- 124+ Championship Tournaments
- 1 World Festival



TEAMS

FIRST® LEGO® League (FLL®) puts children in charge. Teams mix curiosity and imagination with LEGO® bricks, sensors, motors, and gears to invent unique, autonomous robots capable of completing various missions and find solutions to real-world problem

FLL Teams:

- Investigate, strategize, design, build, program, and test their robotic inventions
- Search the web, talk to scientists, visit the library, and develop compelling research presentations which relate to a problem or opportunity facing the world today
- Develop employment and life skills including critical thinking, time management, collaboration, and communication while becoming more self-confident
- Compete with peers in high energy sport-like tournaments

Getting Started:

- Team registration can be done by filling up the registration form requested, and sending it back to Sasbadi before 31 January 2015
- The annual Challenge is revealed in early September

Who can form a team:

- A school classroom, after-school program, extracurricular group, learning centre, home school, neighborhood group, club or civic organization
- Up to 10 children, ages 9-16, and at least one adult coach

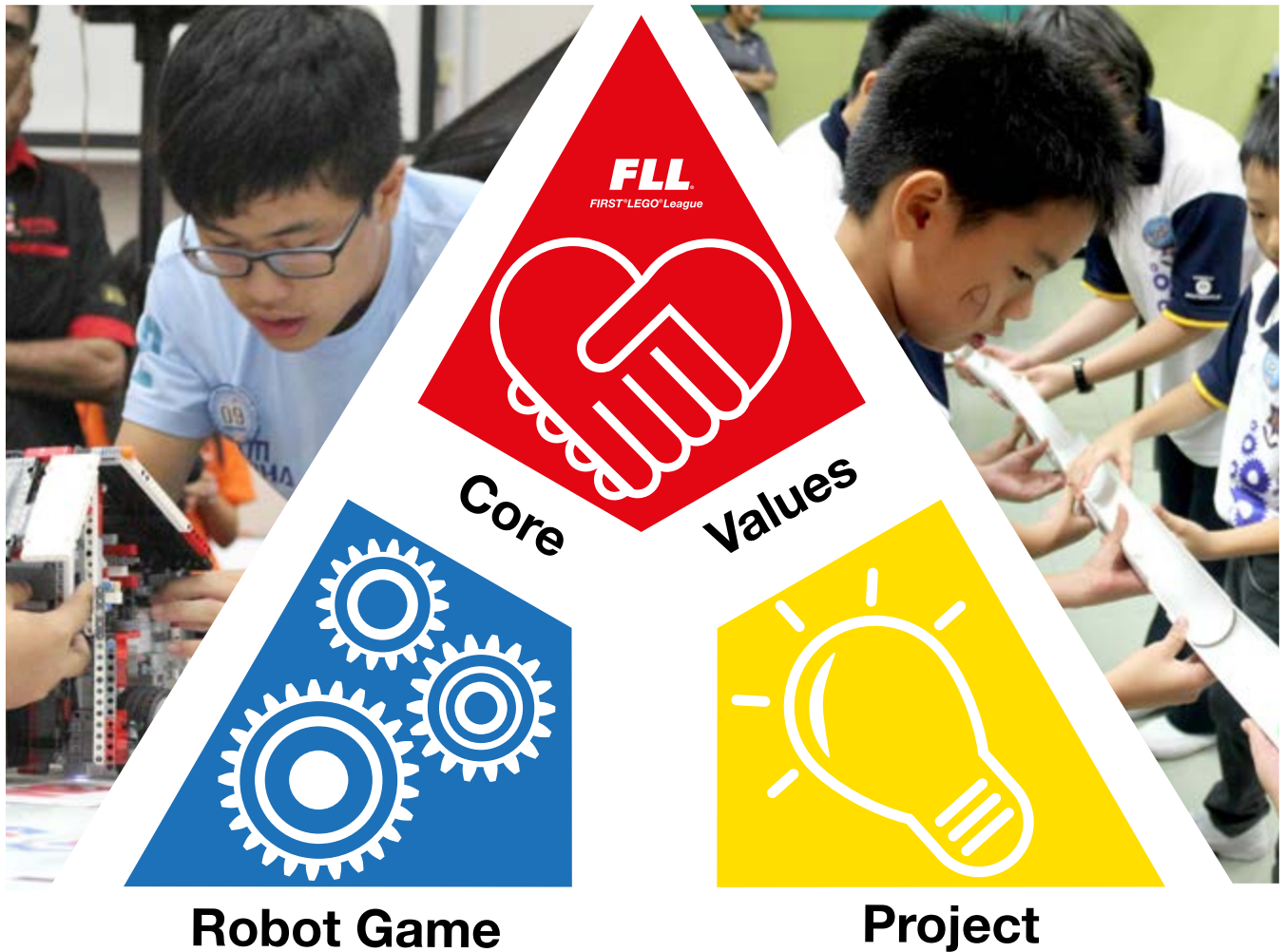


TEAM ACTIVITIES

- Build autonomous robot
- Program robot
- Research real-world challenge
- Deliver presentation project
- Compete at sports-like tournament



Three Essential Parts



A FIRST® LEGO® League Challenge consists of three parts:

- A research assignment called '**The Project**' where students research and come up with innovative ideas for solving a defined, real-world challenge.
- A '**Robot Game**' where students design and program a LEGO® MINDSTORMS® robot to solve missions on a special obstacle course. They are also required to explain their robot design to Judges.
- '**Core Values**', the work process the students go through to obtain important life skills such as problem solving, critical thinking, creativity, and team-work.

2013

Exploring natural disasters
22,840 TEAMS

2012

Quality of life for seniors
20,430 TEAMS

2011

Keeping food safe
18,323 TEAMS

2010

Explore cutting-edge world
of biomedical engineering
16,762 TEAMS

2009

Transforming transportation
14,725 TEAMS

2008

Study and research
of the climate
13,705 TEAMS

2007

Energy management
and conservation
10,941 TEAMS

2006

Science at the molecular level
8,847 TEAMS

2005

Health, diversity, and productivity
of the world's oceans
7,501 TEAMS

2004

Address the needs of individuals
with disabilities
5,859 TEAMS

2003

Visit and explore the Red Planet
4,331 TEAMS

2002

Challenges of urban planning
3,001 TEAMS

2001

Impact of global climate change
1,902 TEAMS

2000

Predict the timing and nature
of volcano eruptions
1,540 TEAMS

1999

Visit the International
Space Station
960 TEAMS

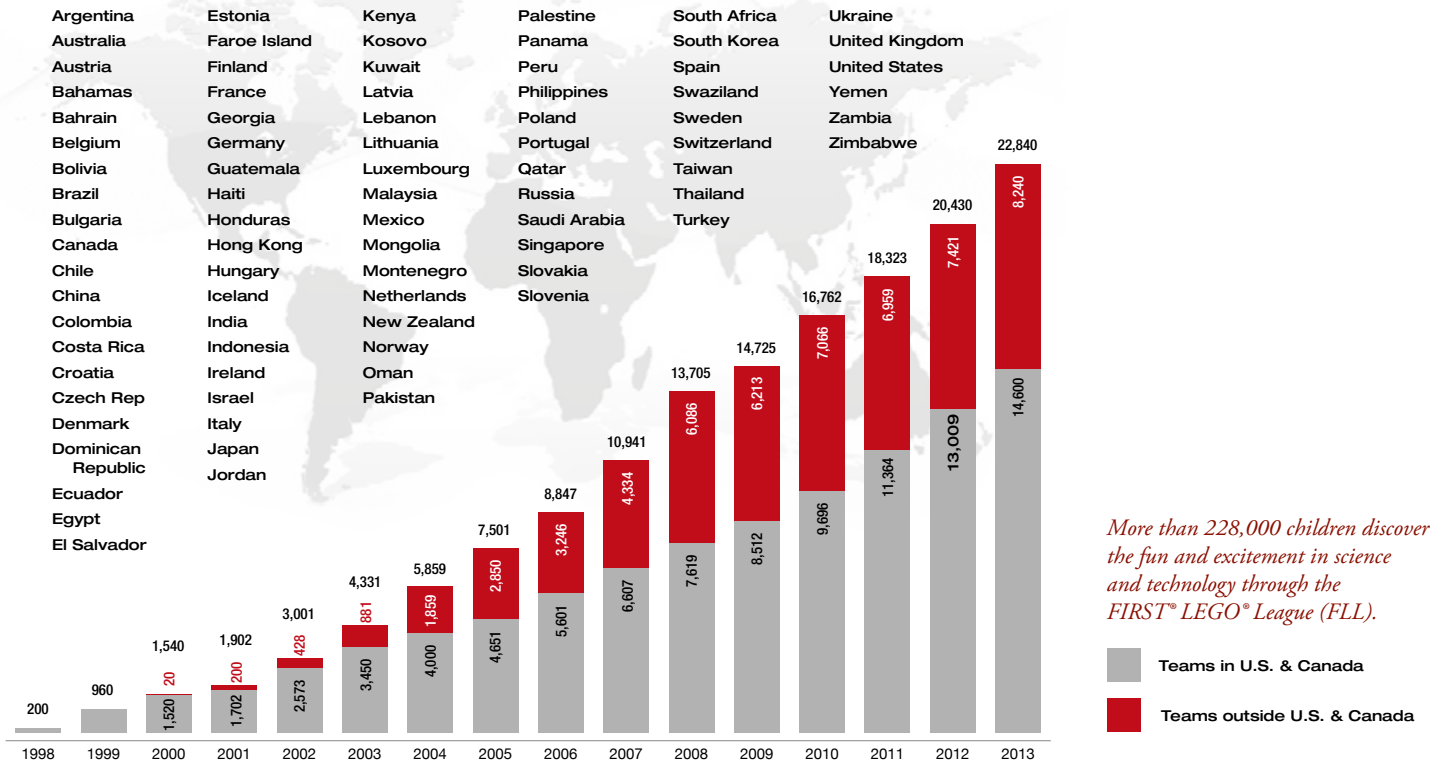
1998 Pilot**RACE AGAINST TIME**

Robots race through mazes
200 TEAMS

FLL IN THE WORLD

IMPACT: Growth

FIRST® LEGO® League (FLL) is a worldwide programme with teams in more than 80 countries.



FLL FIRST® LEGO® LEAGUE WORLD FESTIVAL 2014



Winner of the Strategy & Innovation Award
(1st Runner-Up)

JS Flawless

SMJK JIT SIN, BUKIT MERTAJAM, PENANG

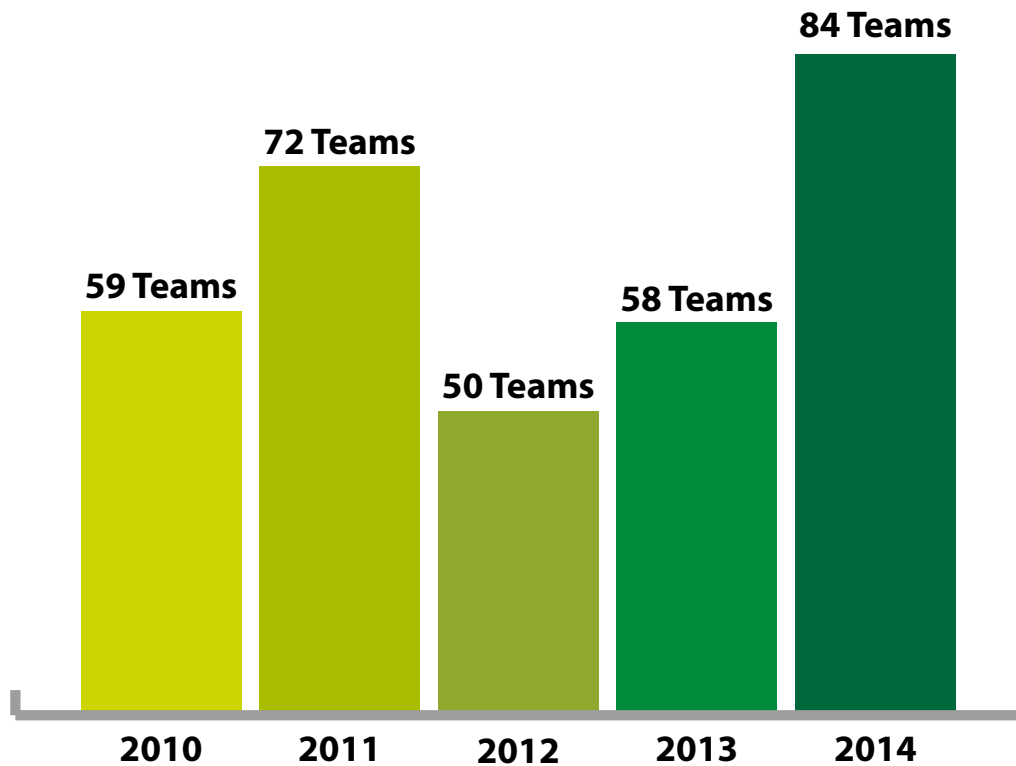
Venue : Missouri,
United States of America

Date : 21.4.2014 – 30.4.2014

"The success of our team depended on the students' team work, commitment, time management, and problem solving skills. The success of a team is not only in gaining an award but also in the learning process experienced by the students. At the FLL World Festival in the USA, I was really proud and glad to see the students have a chance to compete with other teams from other countries whereby their knowledge has increased tremendously. Other than that, they also learnt cooperative, collaborative and communicative skills. They have acquired patience on top of passion, allowing them to persist until they have obtained satisfactory results through trial and error. I believe that this competition is definitely a stepping stone for students to be successful in their future career."

(Ms. Wong Pei Funn, Coach for team JS Flawless, SMJK Jit Sin)

FLL IN MALAYSIA



FLL OPEN EUROPEAN CHAMPIONSHIP 2012 WORLD CHAMPION

World Champion
BINTULU HAWKS
 SMK BINTULU, BINTULU, SARAWAK

Venue : Mannheim, Germany
 Date: 6.6.2012 – 9.6.2012



"Judges around the world were caught by surprise with our outstanding achievement despite our first appearance in FLL international competition. I would like to take this opportunity to encourage and urge all students to participate in FLL Championship and hope our students will share their success stories to their peers. Winning this competition proves our Malaysian education system is on the right track towards a developed nation. Besides, we learned that the American education system emphasizes on the learning process throughout the competition instead of focusing only on the final result. I believe our students have earned a lot of experiences over here and I am confident that the knowledge they gained will definitely aid them to success in their future career."

**(Mr. Anathan A/I Subramaniam,
 Principle, SMK Bintulu)**

FLL MALAYSIA 2014 AWARD WINNERS



**CHAMPION'S
AWARD (GOLD)**

**PHANTOM ASSASSIN
(CR8 PENANG, PULAU PINANG)**



**SILENCE ASSASSIN
(CR8 PENANG, PULAU PINANG)**

**CHAMPION'S
AWARD (SILVER)**



**PRECISION PHOENIX 2.0
(CREATIVE MINDS, KUALA LUMPUR)**

**CHAMPION'S
AWARD (BRONZE)**





**BEST CORE
VALUES AWARD**

YOLO BROS
(SMK SEAFIELD, SELANGOR)



**INSPIRATION
AWARD**

CAPTAIN PLANET
(ROBOWIS, SELANGOR)



**TEAMWORK
AWARD**

SJI ROBOTICS
(CREATIVE MINDS, KUALA LUMPUR)



**GRACIOUS PROFESSIONALISM™
AWARD**

NATURE KIDS
(SJKC YUK CHAI, SELANGOR)



**BEST ROBOT PERFORMANCE AWARD
(CHAMPION)**

SILENCE ASSASSIN
(CR8 PENANG, PULAU PINANG)



**BEST ROBOT PERFORMANCE AWARD
(1ST RUNNER-UP)**

VICTORY
(TECHTRONIC, PAHANG)



**BEST ROBOT PERFORMANCE AWARD
(2ND RUNNER-UP)**

PRECISION PHOENIX 2.0
(CREATIVE MINDS, KUALA LUMPUR)



**BEST PROJECT
AWARD**

MBS PENANG
(METHODIST BOYS' SCHOOL PENANG, PULAU PINANG)



**RESEARCH
AWARD**

WISSENSCHAFT
(HIN HUA HIGH SCHOOL, SELANGOR)



**INNOVATIVE
SOLUTION AWARD**

TEAM QUASAR
(SMJK KEAT HWA, KEDAH)



**PRESENTATION
AWARD**

AMAZING 10
(SJKC MIN SIN, PULAU PINANG)



**BEST ROBOT
AWARD**

LABYRINTHS
(SMK TINGGI BATU PAHAT, JOHOR)



**MECHANICAL
DESIGN AWARD**

THE LONE RANGER
(CREATIVE MINDS, KUALA LUMPUR)



**STRATEGY &
INNOVATION AWARD**

SEMERBAK EVOLUTION
(SMK SERI GOMBAK, SELANGOR)



**PROGRAMMING
AWARD**

LEGO VENERO
(THE MALAY COLLEGE KUALA KANGSAR, PERAK)



**RISING STAR
AWARD**

RESCUE911
(CRB PENANG, PULAU PINANG)



**AGAINST ALL
ODDS AWARD**

ROBOCOM
(ROBOCOM SOLUTION, MELAKA)

CONGRATULATIONS TO 2014

FLL MALAYSIA GRADUATES

1. FEDERAL ROBOTICS UNIT (MRSM JOHOR BAHRU)
2. ROBODES 2 (SMJK CHUNG LING BUTTERWORTH)
3. SUKAMAJU JUNIOR (SK PERMATANG TOK MAHAT)
4. LIGHT FUSION (REAL SCHOOL CAHAYA CAMPUS)
5. ERGOBOTS (SEKOLAH TAMAN TUN DR. ISMAIL 1)
6. CONVENT JB (SMK IJ CONVENT JOHOR BAHRU)
7. ROBODES (SMJK CHUNG LING BUTTERWORTH)
8. VENCEDORA (KOLEJ YAYASAN SAAD MELAKA)
9. SMK SIMPANG EMPAT (SMK SIMPANG EMPAT)
10. ROAD RUNNERS (SMI VENTURES PARTNER)
11. MAXIMUS 2.0 (SM SAINS HULU SELANGOR)
12. BU3 (SMK BANDAR UTAMA DAMANSARA 3)
13. WISSENSCHAFT (HIN HUA HIGH SCHOOL)
14. ACS IPOH (SK METHODIST (ACS) IPOH)
15. ROBOFREES (PENANG FREE SCHOOL)
16. JCBOT (SK CONVENT INFANT JESUS 1)
17. KINGDOM HEART 2 (SMJK CHAN WA)
18. INFINITE BLITZER (SMJK CHAN WA II)
19. SKTM RAPTORS (SK TAMAN MEGAH)
20. DETERMINATION (SMK METHODIST)
21. ROBOCOM (ROBOCOM SOLUTION)
22. A1M PRINCE (ASRAMA 1MALAYSIA)
23. TEAM QUASAR (SMJK KEAT HWA)
24. PERWIRA (SMK TAMAN PERWIRA)
25. MG FORCE (SMK MENGGUANG)
26. TECHNO TEENS (SMK PENANTI)
27. MALIM ALL STARZ (SMK MALIM)
28. TRIPLE B (SMK SERI MANJUNG)
29. BEAST BOY (SK BUKIT GAMBIR)
30. VOLTRONZ (CREATIVE MINDS)
31. ERISED (SMK CHENDERANG)
32. EPIC BANANA (SMK BERAPIT)
33. PADAWAN (CREATIVE MINDS)
34. UNION CHAIN (SMJK UNION)
35. YOLO BROS (SMK SEAFIELD)
36. PARITRONICS (MRSM PARIT)
37. AMAZING 10 (SJKC MIN SIN)
38. FUTURE (SMJK PHOR TAY)
39. RESCUE911 (CR8 PENANG)
40. SEBIANZ (SM SETIABUDI)
41. VICTORY (TECHTRONIC)
42. ANAS (SMJK KATHOLIK)
43. LEGO VENERO (THE MALAY COLLEGE KUALA KANGSAR)
44. REBORN 2.0 (SMJK PEREMPUAN CHINA PULAU PINANG)
45. ROBORUNNERS (KLINIK PAKAR KANAK-KANAK JUNINA)
46. TEAM R2U (ROBOTS2U ROBOTICS LEARNING CENTRE)
47. TEAM ALPHA (INTERNATIONAL SCHOOL OF KUANTAN)
48. MBS PENANG (METHODIST BOYS' SCHOOL PENANG)
49. CHUNGHUAKLANG(PSDN) (SM CHUNG HUA KLANG)
50. SKBRP ROBOTIC TEAM (SK BUKIT RAHMAN PUTRA)
51. SALAM PHILANTHROPY G. (MRSM JOHOR BAHRU)
52. LEMBAH BERINGIN TEAM (SK LEMBAH BERINGIN)
53. SESMA ROBOTEAM (SM SAINS SULTAN MAHMUD)
54. MAHARANI TEAM (SK BANDAR MAHARANI MUAR)
55. SEK. TAMIL PAYA RUMPUT (SJKT PAYA RUMPUT)
56. JENAN ROBOWHIZ (SM SULTAN ABDUL HALIM)
57. SEMERBAK EVOLUTION (SMK SERI GOMBAK)
58. SEMERBAK VENDETTA (SMK SERI GOMBAK)
59. PRECISION PHOENIX 2.0 (CREATIVE MINDS)
60. FLOW (SMJK CHUNG LING PULAU PINANG)
61. MUNSHI SABER (SMK MUNSHI ABDULLAH)
62. CASSIOPEIA (SK CONVENT GREEN LANE)
63. RED WARRIOR (SMK TINGGI BATU PAHAT)
64. FRANXIUMMAX (SBPI TUN ABDUL RAZAK)
65. TRIPLE B JUNIOR (SMK SERI MANJUNG)
66. LABYRINTHS (SMK TINGGI BATU PAHAT)
67. CAPTAIN PLANET (ROBOWIS SDN. BHD.)
68. MRSM MUAR ROBOTIC C. (MRSM MUAR)
69. FLAME CRESCENDIO (SMJK HWA LIAN)
70. CCR TEAM (S.J.K. (C) CHONG CHENG)
71. SEMARAK14 (SMK ORANG KAYA HAJI)
72. THE LONE RANGER (CREATIVE MINDS)
73. ALLIANCE (SMK TINGGI BATU PAHAT)
74. BUZZER BEATERS (CREATIVE MINDS)
75. PHANTOM ASSASSIN (CR8 PENANG)
76. THE MATRIX (SMK SUBANG BESTARI)
77. INVICTUS (SMK TINGGI BATU PAHAT)
78. GLADIATORS (CREATIVE ROBOTICS)
79. SILENCE ASSASSIN (CR8 PENANG)
80. SUN RIDERS (SJKC KWANG HWA)
81. SJI ROBOTICS (CREATIVE MINDS)
82. TEAM 5 (SK BANDAR MAHARANI)
83. SUKSES (SMK SERI KENANGAN)
84. NATURE KIDS (SJKC YUK CHAI)

TESTIMONIALS

"Ini merupakan kali kedua sekolah saya menyertai pertandingan ini. Pada tahun ini, pasukan robotik sekolah saya lebih berkeyakinan kerana telah membuat persediaan awal. Alhamdulillah, kami berjaya mendapat Programming Award. Pertandingan ini bagus sekali kerana membolehkan murid mempelajari kemahiran robotik hasil daripada kerjasama dengan rakan-rakan dan guru serta pengumpulan maklumat daripada internet. Selain itu, murid - murid juga dapat bertukar-tukar fikiran dan idea dengan pasukan lain melalui perbincangan dan pemerhatian. Di samping itu, ibu bapa turut memberikan sokongan seperti kewangan dan menghadiri pertandingan untuk memberikan sokongan padu."

(Mohd Khaidzir bin Yusof, Coach for team Lego Venero, The Malay College Kuala Kangsar)

"While working on the project, I learned to use some very useful software, such as SketchUp. I also learned to work in a team, to guide others and interact with them through this competition. All these skills will certainly help me in the future."

(Sam Jia Chin, Participant for team JS Flawless, SMJK Jit Sin Penang)

"I have been with my team (Vencedora) for 4 years. The team members learnt to be team players while preparing themselves for the competition. They have also learnt how to source for information to build the robot and the project. It is a good experience for the students. My most memorable experience is when my team emerged as the Champion in FLL Malaysia 2012. The team subsequently went over to St. Louis to take part in the World Festival. I will definitely carry on guiding and coaching the team so that these students will continue to excel."

(Tan Eng Hwee, Coach for team Vencedora, Kolej Yayasan Saad Melaka)

"Coaching the students in the FLL Malaysia Championship this year has been a very rewarding and fulfilling experience for me. I believe that they have learned how to work better as a team and practise Gracious Professionalism in the championship. These values would benefit them so much in terms of teamwork and practical presentations in the school today. Besides, they have also gained a lot of experience in being creative and innovative for the project during the championship. Therefore, my students and I are very excited to take part again in the next FLL Malaysia Championship in 2015 because we are ready for the new challenge!"

(Paul Ong, Coach for team Light Fusion, REAL School Cahaya Campus Shah Alam)

WELL DONE AND MANY THANKS TO OUR VOLUNTEERS



How to Participate in FLL?

Form a Team

A team is made up of 6 to 10 students and at least one Coach. Team members can come from different schools and ages, but they must be within the age of 9 and 16. The FLL is open to students from all types of schools - national, private, international, etc. The Coach must be an adult and may be a teacher, professor, parent, college student, or even an ex-FLL participant.

Get the Kit

The LEGO® MINDSTORMS® robotics set is required for the Robot Game. It is recommended for teams to have at least two robotics sets to allow more flexibility when testing different robot designs. The LEGO® MINDSTORMS® set can be purchased from Sasbadi.

Register

All participating teams must register with Sasbadi. Fill up the registration form and submit it to Sasbadi before the registration deadline. Participation is limited and registration is on a first come, first served basis. Please refer to the registration form for more information.

Practice

The Challenge kit will be delivered to registered teams for practice. There will be ample time for teams to work on the Project and to practice on the Robot Game. The Challenge will be the same as the one on the real competition day.

Be There

The event will be held at a local venue. All teams will gather and compete at the national level competition for three days. Please refer to Sasbadi for venue information and competition date.

For additional information, please contact Sasbadi or visit:

fll.sasbadi.com
www.firstlegoleague.org

Organiser



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Strategic Partners



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UNIVERSITY
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HELP
University College



MONASH University



MOTOROLA SOLUTIONS
FOUNDATION

SASBADI SDN. BHD. (139288-X)

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