

WORLD ROBOT OLYMPIAD™



PANAMA 2023

INTERNATIONAL FINAL 2023 WORLD ROBOT OLYMPIAD

07 – 09 NOVEMBER 2023





ORGANIZER / ORGANIZADOR

Address / Dirección

FUNDESTEAM

STEAM House, N° 7, Calle Club Ecuestre

Avenida Juan Pablo II, Parque Natural Metropolitano,

Ancón, Ciudad de Panamá, Provincia de Panamá, Rep. De Panamá

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Contact / Contacto

info@fundesteam.org

Managing Director / Director Gerente

Marvin Castillo

SOCIAL MEDIA



 **Website:** www.fundesteam.org

 **Twitter:** www.twitter.com/fundesteam

 **Facebook:** www.facebook.com/fundesteam

 **Instagram:** www.instagram.com/fundesteam

 **YouTube:** www.youtube.com/fundesteam



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Yazmín Colón de Cortizo

**First Lady of
Panama**

We are delighted to welcome you to Panama!

It is with great pride and joy that our nation is the host of the World Robot Olympiad 2023 an unprecedented event in Panamá. We welcome, with open arms, boys, girls, and youth from over 80 countries. Their teams will showcase their projects focused on how robots can connect and enhance our society in a sustainable, safe, and efficient way.

We are a country that connects the world in various ways: maritime, air, land routes, as well as through our extensive fiber optic networks. Therefore, the theme of this Olympiad in Panama, 'Connecting the World,' is simply perfect and appropriate.

Since 2019, the Office of the First Lady has supported and collaborated alongside the Ministry of Education and FUNDESTEAM. The implementation of STEAM education and educational robotics is a tangible reality from the earliest ages, in our Early Childhood Care Center, to all levels in public and private schools throughout the country.

We have also included teachers in this exciting transformation, because we know that training is key to success. Over 1,300 educators have obtained an educational robotics certification program (diploma), enabling them to transfer their knowledge to the students. Thanks to their continuous academic training, we have achieved the creation of over 1,000 robotics clubs nationwide.

Having you at this global Olympiad sends a very powerful message. It inspires thousands of boys, girls, and youth in Panama and around the world to pursue STEAM education.

From the bottom of my heart, I thank everyone who has joined us in this important journey, and especially, I extend my gratitude to our visitors for assisting, demonstrating, and believing in the profound impact of educational robotics and the STEAM methodology.

On behalf of the Panamanian people, I invite you to enjoy all the wonderful experiences our country has to offer. A final word to the students: If you can dream it, you can achieve it!

Yazmín Colón de Cortizo

First Lady of Panama



Mr. Brent Hutcheson

Chair of the WRO
Advisory Council

Welcome to the World Robot Olympiad 2023 International Final in Panama!

A lot of you, like me, have travelled a long, long way to participate in this year's event in Panama. It was probably a big effort, and we thank you for that, but it also provides many exciting and new opportunities; a chance to visit another country in Latin America, a chance to meet many of the new countries participating in WRO for the first time, a chance to be part of a global competition and a chance to make new friends.

We are living in a time rapidly transformed by technology, where artificial intelligence and robotics are becoming an important part of our daily lives. People all over the world are realizing how important technology is for solving problems. And all of your young minds taking part in WRO are at the forefront of these developments. You can develop to be the architects of new solutions that use AI and robotics. By aligning your efforts with the Sustainable Development Goals, you're also demonstrating how innovation can be responsible and impactful.

Speaking of changes, WRO itself has evolved. We recently made a number of changes: to rules, format of the competition and category names. We are still trying out new formats and introducing more open source principles to foster inclusivity and accessibility. Our goal is to empower more young minds like yours to participate, learn, and thrive.

So, here's to the WRO 2023 International Final—an exceptional convergence of young brilliance, innovation, and the spirit of change. As we celebrate your achievements, let's also remember that you're not just competing; you're shaping a world where technology serves humanity in extraordinary ways.

I wish you all a wonderful event!

A handwritten signature in blue ink, appearing to read 'Brent Hutcheson', with a long horizontal line extending to the right.

Brent Hutcheson

Chair of the WRO Advisory Council



Marvin Castillo


**President of
FUNDESTEAM**

**Dear WRO Community,
Dear National Organizers,
Dear participants,
Dear Guests,**

Nine years ago, we participated for the first time in a WRO International Final in Sochi, Russia. That experience was so significant in our lives that it made us have an epiphany that ten years later, the students with the skills of those in the Olympiad would take away the jobs of our Panamanian and Latin American children, because the competencies and knowledge that I could watch there, I couldn't see in our students from Panama.

That is how this dream began, in which thousands of students, parents, teachers, civil society, and authorities could see with their own eyes what boys, girls, and adolescents from developed countries knew and could achieve through the STEAM methodology and Educational Robotics. That dream has been fulfilled today, thanks to Mr. President Laurentino Cortizo, the First Lady Mrs. Yasmín Colón de Cortizo, the Minister of Education, Maruja Gorday de Villalobos, the National Government, and, of course, all the sponsors and allies, who have united to create a legacy that will change the future of thousands of children who have been and will be touched in Panama and Latin America by hundreds of Regionals, National and the International Final of the World Robot Olympiad, that for the second time in 20 years is implemented in the Americas.

Today, the legacy of this private-public alliance has created 1,200 Robotics clubs in Public Educational Centers in Panama, with more than 1,300 teachers trained in coding, STEAM education, and Robotics, participating in 16 Regional Olympiads throughout 2023, with over 4,000 children participating in Local, Regional, and National Olympiad programs, thus making our country the second in the world, with the most significant number of teams participating in the WRO Panama 2023 season.



In addition, FUNDESTEAM went beyond national borders to help our Latin American countries by starting their Regional and National Olympiad programs. Thanks to the support from the DMO from Panama (Promtur), we managed to get Argentina, Brazil, Venezuela, Chile, Uruguay, Guatemala, Haiti, the Dominican Republic, and Barbados to join the WRO community, so today, in this 20th season of the WRO International Final in Panama, 82 countries (new record) participate and visit this great event. This entire history of joint work between the WRO Association, Authorities, Civil Society, and Companies has allowed us to receive this record number of participants with a program rich in our culture, customs, hospitality, and, of course, the human quality that characterizes us as Panamanians and Latin Americans, offering a world-class tournament, with the latest technology, in one of the best convention centers on the continent with the welcome of our beautiful Panama City, a cosmopolitan, international and modern city. I wish all our guests, competitors, and visitors the best of success during these three days, and I trust that we will mark their lives so positively that they will always carry us in their hearts and want to return; after all, In Panama, you live for more!

Thank you very much



Marvin Castillo
President of FUNDESTEAM





TO OUR PARTNERS AND SPONSORS

The route that has led us to the realization of the WRO Panama 2023 International Final, has been full of challenges that have gone hand in hand with the ability of our organization to innovate and adapt to the new realities of education in Panama and Latin America. We have successfully worked as a team with important allies, who have supported our efforts and made it possible.

Our organization, FUNDESTEAM, is grateful for the support of the President of the Republic Laurentino Cortizo and his wife, the First Lady of the Republic Yasmín Colón de Cortizo, who is the STEAM Education Ambassador for Latin America. We also appreciate the work of the Minister of Education, Maruja Gorday de Villalobos, who has promoted STEAM Education in Panama and backed our efforts to host the International Final WRO Panama 2023.

This event will host over



30,000 national guests
and **3,000 international guests from 80 different countries.**

The participants include more than



1,150 talented students
and more than **350 tutors, as well as national organizers, family members and friends who support them.**

We also thank our collaborators, allies and sponsors who have trusted us and helped us to create this opportunity: WRO (World Robot Olympiad Association), Lego Education, Arduino Education, Matrix Robotics System, Olibots, Meritus, Toio, Makelblock, Ministry of the Presidency, Ministry of Economy and Finance, Ministry of Education, Promtur, Samsung, Tigo, APROB (First Lady's office), Embassy of Korea, IFARHU (Institute for the Training and Development of Human Resources), Fundación Deveaux,



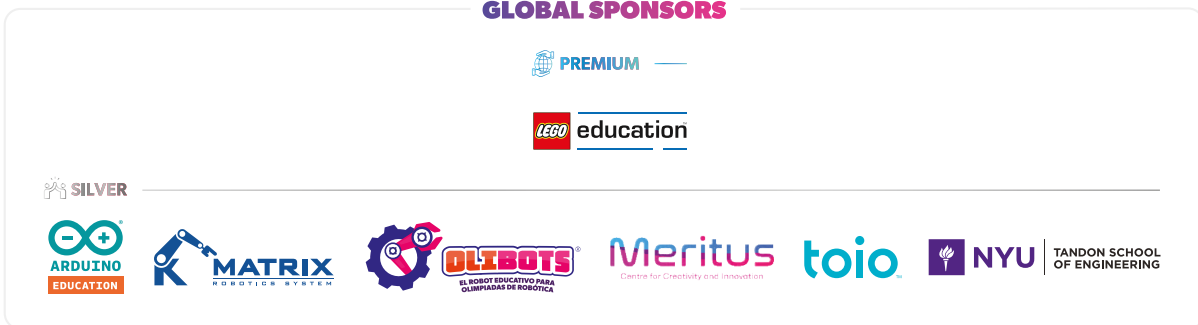
Autoridad Marítima de Panamá, First Quantum Minerals - Cobre Panamá, Exsusa, Learning Vila, Chevron, Ministry of Culture, Boeing / PADF, Huawei, Ciudad del Saber, KPMG, TVN, SERTv, Fundación Medcom, Türkiye, Telemetro Radio, Saudi, among others.

We hope to keep working with you in the future and to have your support in this journey that began as a dream and has now become a reality. **Thank you for supporting the International Final in Panama 2023!**

ORGANIZERS



GLOBAL SPONSORS



SPONSORS



STRATEGIC ALLIES





THANKS TO ALL INTERNATIONAL WRO PARTNERS

WRO® is only able to do what we do thanks to our partners – they make the programs delivered by WRO Association and our National Organizers and events like the International Final possible.

We want



**more children from more
countries participating;**

to increase accessibility and better engage under-represented groups; and, to introduce new programs to improve impact.

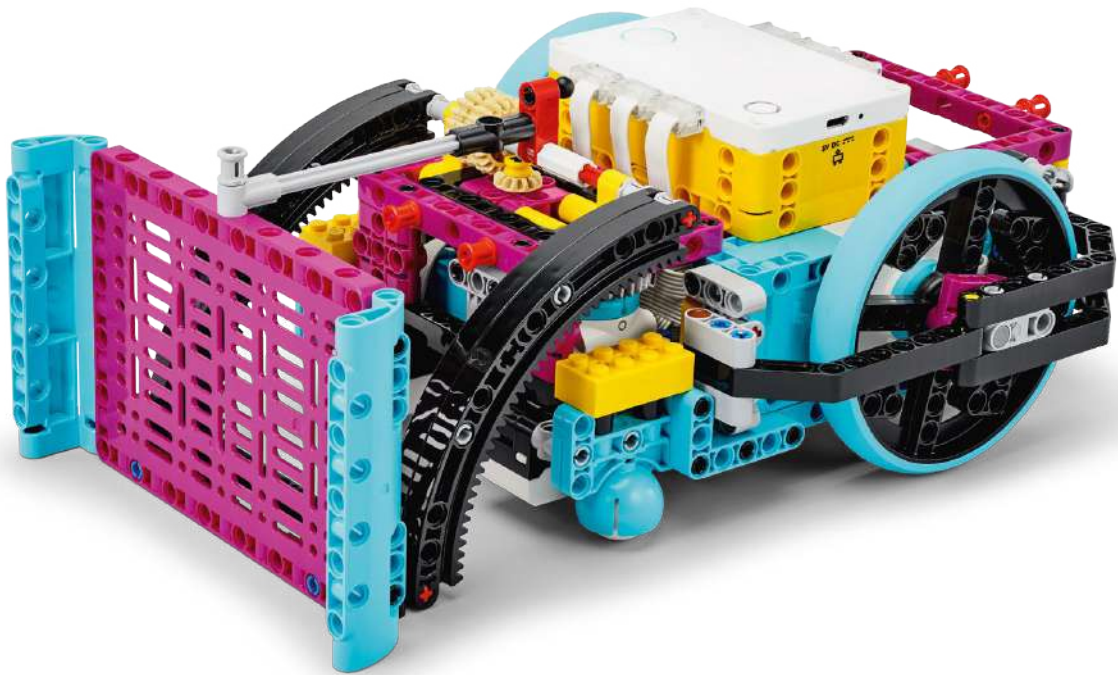
For this, we need more organizations that share our vision and values to join us in our mission.

If you would like to learn more about supporting WRO please visit:

[www.wro-association.org/
join-support/support-wro/](http://www.wro-association.org/join-support/support-wro/)



Teach students the (fun)ction of computer science.



Make computer science fun and engaging through the power of purposeful play. The LEGO® Learning System incorporates hands-on lessons that excite students and make complex subjects tangible.

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LEGO® Education

For more than 40 years, LEGO® Education has empowered students to turn their natural curiosity into creative exploration, equipping them to take on the future as the world changes around them. Students bring science, technology, design engineering, math and coding to life in the classroom using LEGO Education SPIKE Prime. Here, they design and build programmable robots to solve problems within STEM, combining their design and coding skills to create innovative solutions to real-world problems. Get hands on with the power of coding, by encouraging students to develop 21st century skills through computational thinking, as they program solutions in a real-world context, using engaging physical and digital creation.

www.legoeducation.com



SILVER

Arduino Education

www.arduino.cc/education



MATRIX Robotics

www.matrixrobotics.com



OLIBOTS

www.aprenderhaciendo.co.cr



Meritus Centre for Creativity and Innovation

www.merituseducation.com



toio

www.afrel.co.jp/afterschool/toio/

www.sony.com/en/SonyInfo/design/stories/toio/



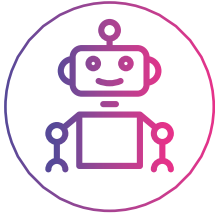
ACADEMIC PARTNER

NYU Tandon School of Engineering

The NYU Tandon School of Engineering empowers people to use science and technology as tools to build a better society. Dedicated to creating solutions that can tackle tomorrow's problems today, NYU Tandon focuses on invention, innovation, and entrepreneurship. As a university partner, NYU Tandon School of Engineering supports the mission of World Robot Olympiad to engage young people from around the world by developing their creativity while working to solve challenges through robotic competition.

www.engineering.nyu.edu





WRO IN PANAMA

FUNDESTEAM is a leader in Panama for STEAM education, and the WRO Association's Regional Office for Latin America, meaning that it has a local and regional impact on STEAM learning and innovation.

Through a broad National Alliance, which has included the President of the Republic of Panama, Laurentino Cortizo Cohen, the First Lady and STEAM Ambassador for the Americas, Yazmín Colón de Cortizo, Business Associations (Chamber of Commerce, AMCHAM, CAPATEC), our Scientific Community, the Ministry of Education, among others; Panama won the hosting of the International Final of the World Robot Olympiad for 2023 (WRO PANAMA 2023).

Therefore, from



7 to 9 November,
more than **3,000**
guests from 80
countries;

including



the best STEAM
students in the
world,

will be present at the Panama Convention Center with their Robotics and STEAM projects, focused on presenting solutions that will help us achieve the Sustainable Development Goals.

This is the largest educational event in Central and South America, and we are delighted to welcome you all to Panama.





WHY THE WRO INTERNATIONAL FINAL IN PANAMA?

For the last 20 years, in parallel to the economic growth, Panama has developed Public Policies focused on STEAM research, implementation, and education. And as we became a global hub for logistics, now the Country aims to become a Regional Hub for Technology and Scientific Development.

Hosting the WRO 2023 International Final in Panama is a strategic goal that aligns with our vision of becoming a regional hub for Technology and Robotics, a platform to foster innovation and ultimately making STEAM Education available for all, helping to bridge the gaps in Latin America, Panama, and The World.

By hosting the



WRO 2023,

we will fulfill our mission to serve the World.

The WRO Panama 2023 International Grand Final will be a historic opportunity for STEAM Education and we want this event to be a memorable experience for everyone.







NATIONAL ORGANIZER:



Since 2014, the National Foundation for the Development of STEAM (FUNDESTEAM) has promoted the adoption of STEAM methodology in the Panamanian education system through various innovative training programs for teachers and students.

Thanks to the support of private companies, multilateral agencies and government entities, these programs have impacted more than



20,000 Panamanian students

by providing robotics labs to



1,200 official schools and educational centers

in vulnerable situations,

training more than



4,200 teachers and **organizing 40 regional and national robot Olympiads since 2015.**

FUNDESTEAM's objectives are focused on increasing the number of country members from the Latin American region in the WRO International Community and spread the voice about STEAM Education in our continent.

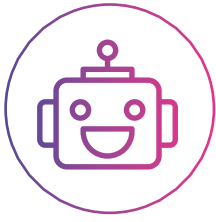


FUNDESTEAM's vision aims to promote and develop educational programs that incite interest in STEAM in the minds of children and youth through innovation, collaboration and problem solving. Thus, breaking the cycle of poverty and changing the lives of thousands of children as well as the future of Latin America

To achieve greater innovation and sustainability, FUNDESTEAM will pursue these strategies:

- Research and Development (R+D)
- Impact on public policies
- STEAM Innovation Forums
- Teacher training
- STEAM events and competitions with students across regional-provincial, national and International WRO Olympiads.
- STEAM Scholarship Programs
- Special projects:
 - Early childhood
 - STEAM Girls 360°
 - STEAM Labs





WRO® IN 2023

Connecting the World has been the theme for this season. And in many ways, this is what World Robot Olympiad is all about. The international WRO® community is now reaching almost 100 countries. Young minds and their mentors from all corners of the world are given the same challenges – and come together here in Panama to show what they have learned.



One of the reasons WRO selected Panama as the host of WRO 2023, was their plan to build momentum for WRO, not just in Panama, but across Latin America. With the support of Panama, WRO has been setting up National Organizers in ten countries, with more to follow in the next season. We have seen a sharp increase in team participation already with almost 2,000 new teams from the Americas region this year.

The category of choice for many of the new teams in Latin America is Future Innovators. Here they can identify problems that are relevant to them - and unleash their creative potential in pursuit of solutions. And they can do so at any level – and with the technology of their choice. In this way, Future Innovators is an impactful first experience with robotics and WRO for these teams and their mentors.

Hosting the International Final is a monumental task – but the reward is strong. Like many other WRO countries, Germany experienced a big drop in team participation during the COVID pandemic. But after hosting WRO 2022, Germany saw 710 teams participate in more than 39 regional events in 2023.

Key to the return to pre-covid numbers in Germany is a very strong network of volunteers. WRO 2022 was organized by a dynamic group of more than 100 volunteers; a group that built a lot of experience and motivation which now translates into regional impact across the country. Similarly, we expect that WRO 2023 in Panama will have a lasting impact. Not just in Panama – but in many other countries in the region.

Worldwide, National Organizers are working hard to deliver on



our mission to inspire more young people to take an interest in STEAM.

Everyone doing what they can to connect more educators and their students with WRO. The future is looking bright – and together we are Connecting the World.





WORLD ROBOT OLYMPIAD 2023

THEME:

The WRO® theme for 2023 is Connecting the World.

In 2023 teams will learn about shipping logistics and about the infrastructure for our digital technology. They will investigate how robots can help both shipping and digital technology infrastructure to be more safe, more sustainable and more efficient.

The WRO 2023 Panama Logo “Connecting the World” is based on significant elements and symbols that represent Panama, our country, which connects the American continent. Also, we have the Panama Canal, which is a revolutionary technology and engineering work from 1914, that connects the world. The Logo’s main theme is about innovation and technology represented by the robot character that observes with curiosity and interest the new creations during the WRO 2023 event.





FUTURE INNOVATORS

The International Final of WRO 2023 will take place in Panama, a country that connects the world through its canal. Therefore, we focus on how robots can help connect the world in a sustainable way.

Ever since the Panama Canal was completed, Panama has been a central point for world-wide maritime logistics; 144 shipping routes cross through the Panama Canal connecting 160 countries. Around 14,000 big ships use the Canal each year. Panama is also becoming an important part of the world-wide internet cable network; our daily use of digital technology depends heavily on infrastructure like cables under the oceans, data centers, satellites, and mobile connections. Sustainability is becoming increasingly important in both shipment and tech industry. Robots can help both shipping and digital technology infrastructure to work more safely and efficiently. In 2023 teams will learn about the importance of logistics, the digital technology physical infrastructure and sustainability for our global connections in life and industry and about how robotics systems play a role in this.



Your Robot Mission:

For the 2023 WRO Future Innovators category, teams have the task to develop a robot model which helps with connecting people and places in a sustainable way. Teams may choose one of the two areas (1, 2) to work on, but they can also choose to work on a project that focuses on a combination of the two areas.





Connecting over water

We are looking for



robotic solutions

that help to make shipping over water more efficient, more safe, and more environmentally friendly.

Seas, rivers and canals have been very important for transporting goods and people for thousands of years and they still play a very important role. This is a big reason why, many cities are close to the sea or a river. Many things you find in the shop* have been transported over water.

Shipping over water is efficient, but there are still many things that can be improved. Ships are getting bigger, and accidents can have serious consequences. Ships can also accidentally break underwater cables or collide with offshore plants. Some ships are also still illegally dumping waste in the ocean or rivers, which is hard to track. Shipping routes or locks in rivers can also have a negative effect on underwater life. New technologies can help, and robots can play an important role in the future of shipping by doing tasks that are normally done by humans or by improving processes.

* The OECD states that 90% of traded goods have been transported over water.



Connecting with Information Technology (IT)

We are looking for



robotic solutions

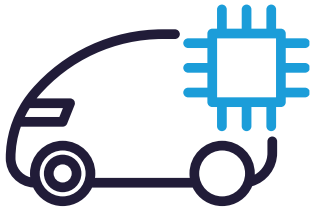
that help to setup and maintain sustainable IT infrastructure around the world to make us able to connect and communicate.

In our modern life we use more and more digital technologies. We use our mobile phones for social media and for watching videos online. Shops use automated data to know what they have sold and what they should order. You can even track ships and airplanes online and see where they are in the world.

All this data we are sending and receiving needs to be transported worldwide. There is already a lot of infrastructure available. But this infrastructure needs constant maintenance and improvement. There are also questions related to the energy consumption of data centres and environmental impact. And there are areas where people do not have internet access yet.

For the sub-themes mentioned above (Connecting over Water and Connecting with Information Technology) you can find a connection and inspiration using the Sustainable Development Goals.

SDG#9 (Industry Innovation Infrastructure) and SDG#14 (Life under water) are most obviously related to the theme; however, there are multiple goals that support the theme, depending on your project idea.



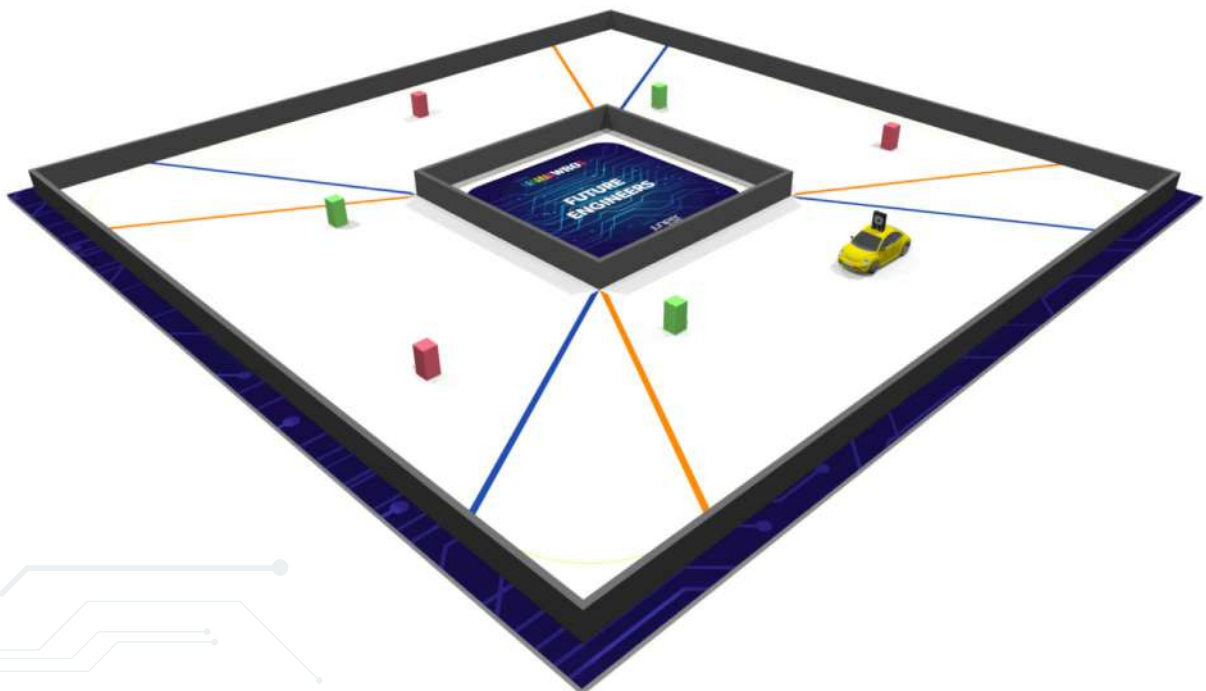
FUTURE ENGINEERS

The self-driving car challenge in this season is a Time Attack race: there will not be multiple cars at the same time on the track. Instead, one car per attempt will try to achieve the best time by driving several laps fully autonomously. The traffic signs indicate the side of the lane the vehicle has to follow.

In order to perform the race, the car must drive three laps.



The vehicle is not allowed to move or knock down the traffic signs.





ROBO SPORTS

In the RoboSports category, teams design robots that compete with robots of another team in direct matches. In a match each of two teams have 2 robots on the field. The game is called “Double Tennis”. Each team tries to place as many balls as possible in the opposite half of the game field.

In addition to the normal programming and building challenges,



**teams can
use cameras
to detect
balls**

and learn about image recognition.





ROBO MISSION

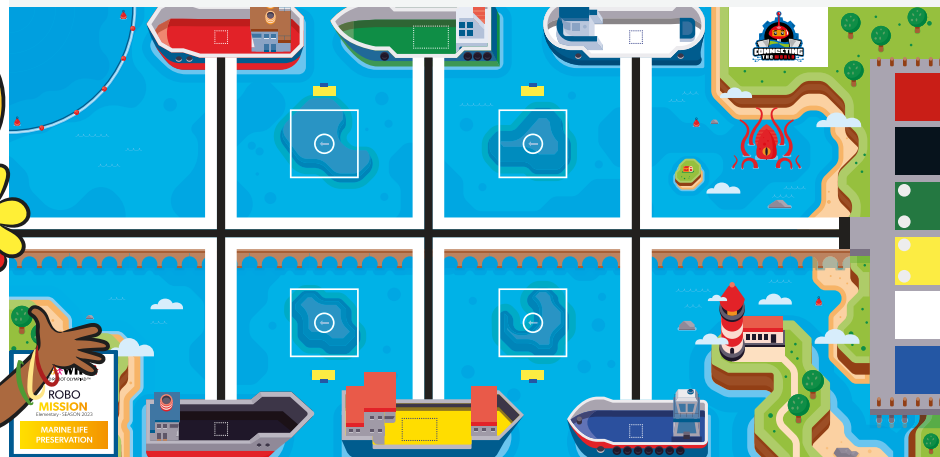
In RoboMission; teams build and program a robot that solve challenges on a competition field. The robots are fully autonomous and cannot be remote controlled. Each age group has a different topic and field.



Elementary

Marine Life Preservation

On the Elementary game field, the robot will help managing ship waste, restore coral areas and rescue a whale from a shallow area in the sea.

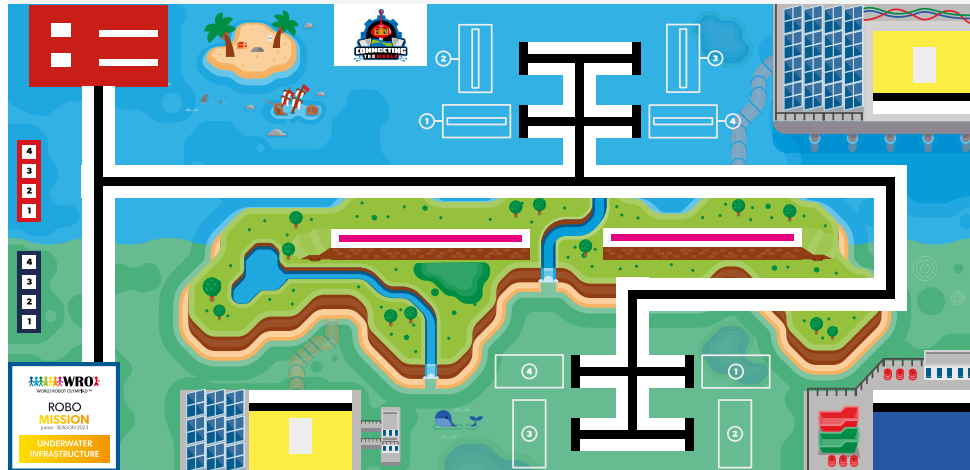




Junior

Underwater Infrastructure

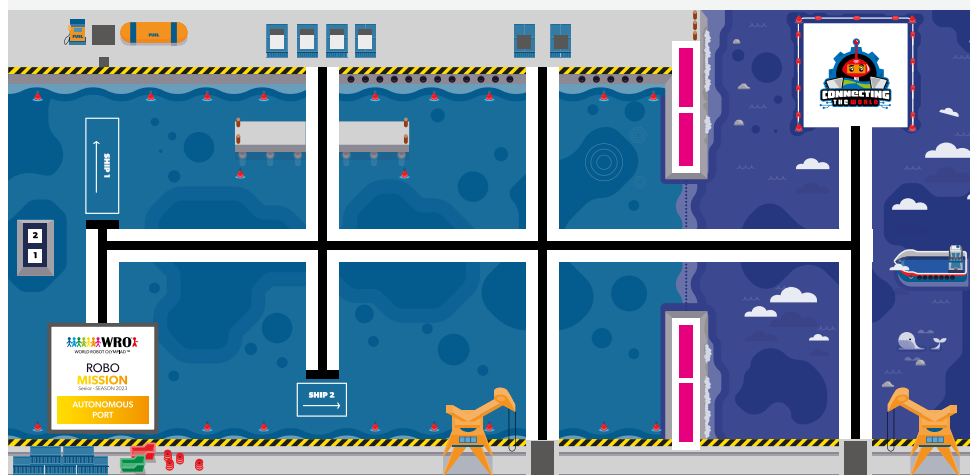
On the Junior game field, the robot will help to install and repair submarine cables, install submarine server farms, and activate offshore solar panels.



Senior

Autonomous Port

On the Senior game field, the robot will help to load and unload ships, fuel them and pilot them to open sea.

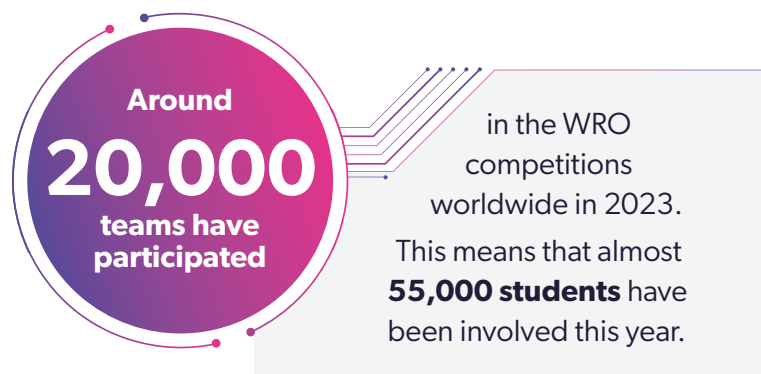
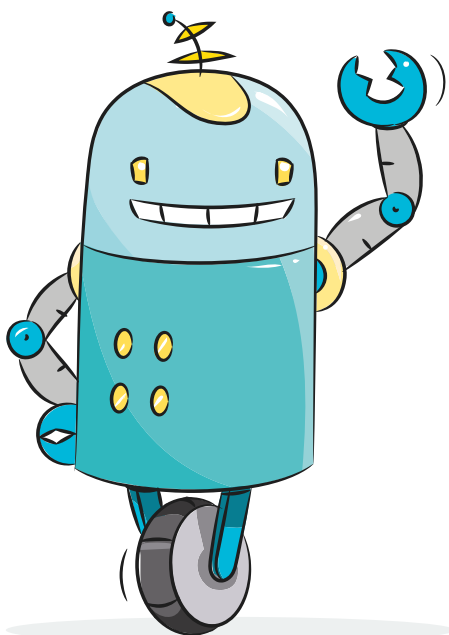




WRO 2023 SEASON

FACTS & NUMBERS

The WRO tournament started in 2004 with 12 countries.



The age of the participants at this event is between 8 and 19 years old, there are several age groups that participants can join.

The teams have been helped by over:

22,000
adult helpers

who acted
as coaches,
judges, organizers,
and volunteers at
events.



At this international
final many volunteers
from Panama are helping,
and there are volunteer
judges coming from

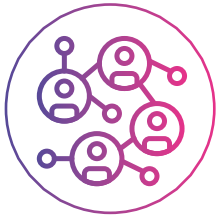
46
countries.



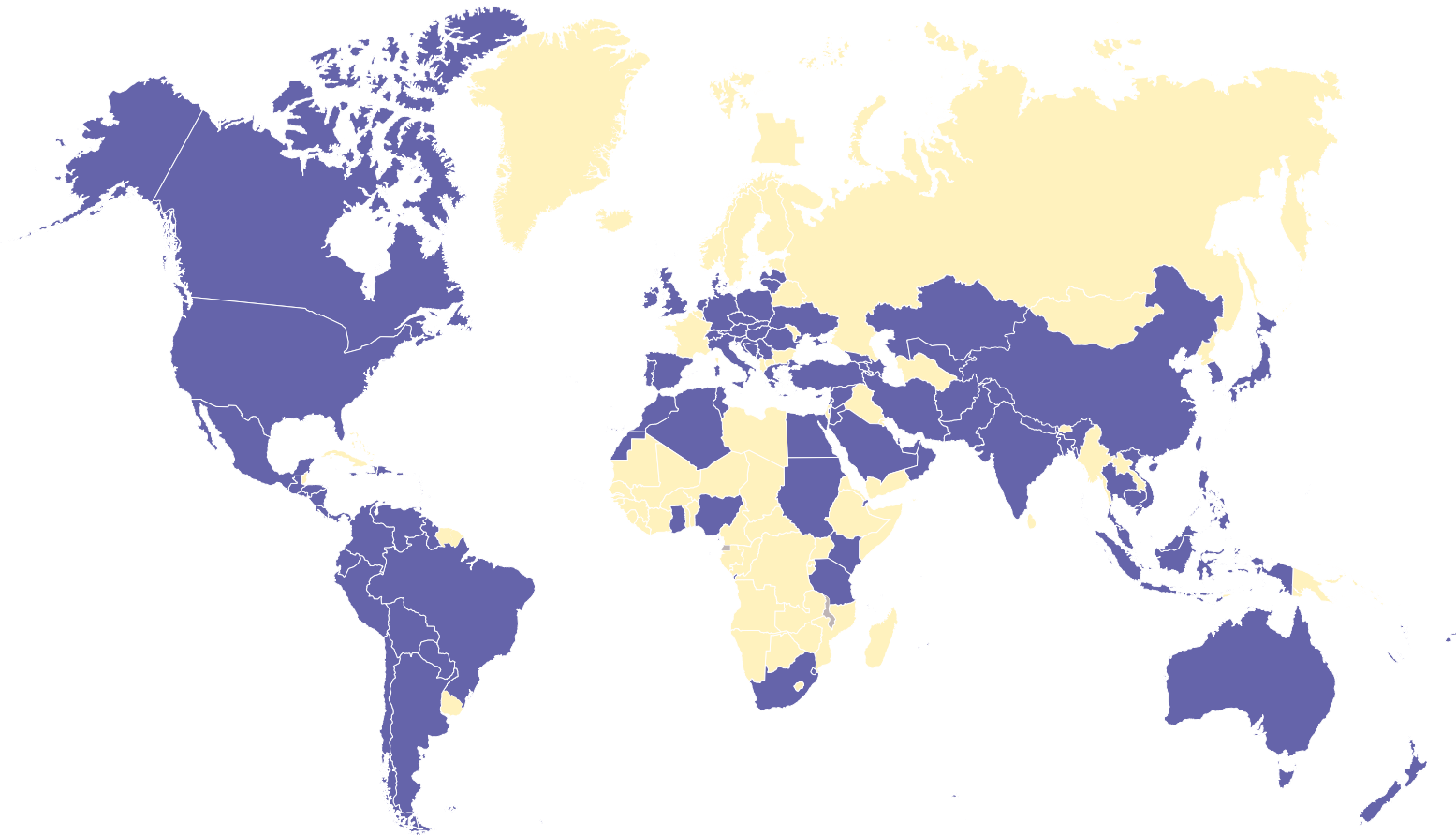
Registered
participants and
other visitors at the
International Final in 2023:

around
30,000





MEMBER COUNTRIES ATTENDING THE 2023 EDITION



Africa

Ghana
Kenya
Nigeria
South Africa

America

Argentina
Bolivia
Brazil
Canada
Chile
Colombia
Costa Rica
Dominican Republic
Ecuador
El Salvador
Guatemala
Haití
Honduras
Jamaica
Mexico
Nicaragua
Panama
Peru
Puerto Rico
USA
Venezuela

Asia & Oceania

Australia
Bangladesh
Cambodia
China
Chinese Taipei
Hong Kong
India
Indonesia
Japan
Kazakhstan
Macau
Malaysia
Pakistan
Philippines
Singapore
South Korea
Tajikistan
Thailand
Vietnam

Europe

Armenia
Austria
Azerbaijan
Bosnia
Herzegovina
Croatia
Cyprus
Czechia
Denmark
Georgia
Germany
Greece
Hungary
Ireland
Italy
Latvia
Montenegro
Netherlands
Poland
Portugal
Romania
Serbia
Slovakia
Slovenia
Spain
Switzerland
Turkey
Ukraine
United Kingdom

MENA

Bahrain
Iran
Lebanon
Morocco
Oman
Palestine
State
Saudi Arabia
Syria
Tunisia



STEAM ACTIVITIES IN WRO PANAMA 2023

At the International Final WRO PANAMA 2023 everything will connect you to the robotic world, catching fans interests and getting more people get interested in STEAM too.

We will offer a broad STEAM program to make the visit to the event as attractive as possible. In this order of ideas, we attracted many different partners who will offer different options such as:

- STEAM exhibitions with hands-on activities
- Lecture program about relevant STEAM subjects
- Workshop program to gather and share experiences
- Guided tours of the event.





WELCOME TO PANAMA

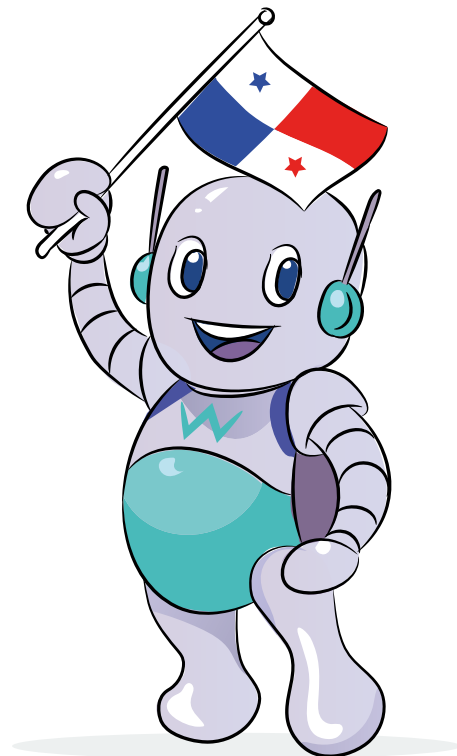
Panama is the land that joined the Americas. The land that separated and then connected the oceans. The land that transformed the planet's biodiversity and changed the world forever.

Panama is located not only between North and South America or the Caribbean and the Pacific, but also between accelerated cosmopolitan life and traditional cultures; science and history; sun-drenched land and mysterious rainforest; adventure and relaxation and modernity and tradition.

Panama is a unique country which rewards exploration, bringing together countless sights and sensations, all within 30,000 square miles.

Panama is the perfect immersive adventure option for the truly conscious traveler, especially those seeking authentic experiences that will not be found anywhere else in the world.

¡Nos vemos en Panamá!
See you in Panama!







ACTIVITIES IN PANAMA

So many beautiful options. As soon as you arrive, you will notice that Panama is safe, modern, colorful with fabulous nearby attractions. Most of them between 10 and 45 minutes from your hotel room. You will start enjoying your visit immediately.



● **The City Vibes Experience:**

Visit the Old Panama City or Panama Viejo, the Old Quarter (Casco Viejo) and the Modern City. Experience the three Panama Cities and appreciate the contrasts between them. Learn about our history, culture and architectural development.



● **Bike Experience:**

Discover Amador Causeway, a unique road that connects mainland Panama to the picturesque islands of Naos, Perico, and Flamenco. Explore the area at your own pace with our diverse selection of rentals. Whether you prefer the comfort of a 6-passenger bike, the thrill of a mountain bike, or a child-friendly option, we have you covered.



● **The Panama Canal Experience:**

Be prepared for a fascinating exploration of the Pacific end of the iconic Panama Canal, a marvel of engineering that revolutionized global maritime trade. First, we'll take you to the Panama Canal's Visitor Center which offers an unparalleled view of the intricate lock system, allowing you to witness firsthand as massive ships transition between the Atlantic and Pacific Oceans. Then, enhance your understanding of the canal's rich history and engineering complexities with a captivating IMAX documentary.



● **STEAM & Cultural Experience:**

Our journey will begin at the Biodiversity Museum—a stunning fusion of science and art located on the Amador Causeway. Next, explore the wonders of The Punta Culebra Nature Center, a renowned Smithsonian Institute facility. Lastly, ascend to the City of Knowledge, a cutting-edge business and technology park boasting unparalleled views of the Miraflores Locks—an engineering marvel of the Panama Canal. Here, thought leaders from diverse fields collaborate on groundbreaking projects aimed at driving social change through sustainable innovation.





● **Embera's indigenous culture:**

Discover paradise in its most authentic form on this captivating journey into the heart of the Chagres River's lush jungles. Your adventure will kick off with a seamless one-hour transfer to the Embera's pier, where you'll embark on traditional Embera hand-carved boats to navigate the mystical river. As you reach the Embera village, prepare for a timeless experience that plunges you deep into a world of ancestral traditions—dances, music, and rituals that have remained largely untouched since pre-colonial times.



● **The Beach Experience:**

Enjoy beautiful sea journeys and enjoy the most beautiful beaches of the Pacific Ocean and the Caribbean Sea. You will have the opportunity to spend a day on the Taboga Island, a San Blas Beach day or experience the Pearl Island Sailing. We guarantee you cherished memories of paradisiacal visits in harmony with nature.



● **The Countryside Experience:**

Personalize your experience by making tailor-made tours to the Countryside. You can choose the region where you want to go exploring: Bocas del Toro, Chiriquí, Central Provinces, beaches, magical small towns, tropical forests, The Coiba National Park.



CHILD SAFEGUARDING POLICIES

As an organisation that works with children and young people up to the age of 19, World Robot Olympiad Association (WRO) has a big responsibility for the safety of all participants.

Participating in WRO, should be a fun and rewarding experience. And WRO and our partners in the member countries must do our utmost to provide a safe environment.

At WRO organised events such as the WRO International Final 2023, we are guided by the policies developed by UNICEF. These policies have been developed with input from the LEGO® Group.

From the UNICEF Child Safeguarding Toolkit:

“All children, wherever they live and whatever their circumstances, have the right to be protected, nurtured and free from all forms of violence, abuse, neglect, maltreatment, and exploitation as set out in the Convention on the Rights of the Child. Respecting and supporting this right is the essence of child safeguarding.”

Volunteers at WRO 2023



have been guided on how to take relevant action when faced with potential or actual safeguarding risks.

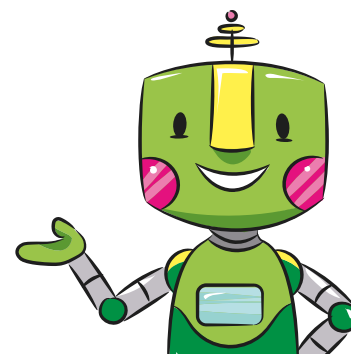
For access to the full UNICEF Child Safeguarding Toolkit simply search for these keywords in your preferred web browser: **“UNICEF Child Safeguarding Toolkit”**.



ITINERARY OF
ACTIVITIES IN THE
2023 INTERNATIONAL
FINAL

Day 1

07 NOVEMBER



TIME	ROBOMISSION	ROBOSPORTS	FUTURE INNOVATORS	FUTURE ENGINEERS
07:00	Breakfast in Hotel			
08:00	Transfer Hotel - Venue (Panama Convention Center)			
09:00	Venue Open			
09:30	Free Practice Time	Free Practice Time	Setup Booths	Free Practice Time
10:00	Coaches Meeting (1h) Continue free practice for teams	Judge Meeting (1h) Continue free practice for teams	Judge Meeting (1h) Continue Setup Booths for teams	Judge Meeting (1h) Continue free practice for teams
11:00	Free Practice Time	Free Practice Time	Setup Booths Judges check Booths	Free Practice Time Judges review Documentation
11:30	Lunch	Coach Meeting (1h) Continue free practice for teams	Coach Meeting (30 min) Continue setup	Coach Meeting (30 min) Continue free practice
12:00		Free Practice Time	Setup Booths Judges check Booths	Free Practice Time Judges review Documentation
12:30	Free practice time	Robot Check		Lunch
12:45		Judges Meeting (1h) Continue free practice for teams	Lunch	
13:00	Free practice time	One Test Game per Team		Setup Booths Judges check Booths
13:15			One Test Game per Team	
13:30	Lunch			
14:15	Free practice time	One Test Game per Team	Setup Booths Judges check Booths	Free practice time
14:30				
15:15	Transfer to venue (Figali)			
15:45	Opening ceremony (FIGALI)			
16:00	Dinner (Panama Convention Center)			
16:30	Transfer Venue - Hotels			
18:00	Venue closed			
19:30				
20:30				

Day 2

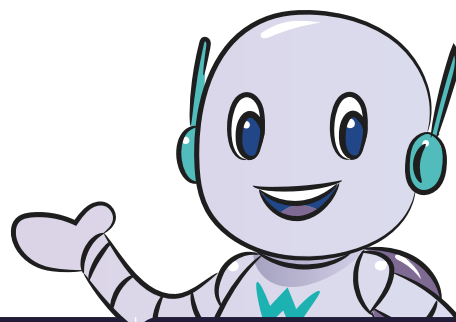
08 NOVEMBER



TIME	ROBOMISSION	ROBOSPORTS	FUTURE INNOVATORS	FUTURE ENGINEERS
05:30	Breakfast in Hotels			
06:30	Transfer Hotel - Venue (Panama Convention Center)			
07:30	Venue Open			
08:15	Announcement Surprise Rule	Official Practice Time (60 minutes)	Judging Rounds	Official Practice Time (90 min) Judges question Team on Eng. Doc.
08:45	Official Practice Time (90 minutes)			
09:15		1. Game per Team		1. Open Challenge
09:45		2. Game per Team		Official Practice Time (90 min) Judges question Team on Eng. Doc.
10:15		3. Game per Team		Official Practice Time (90 min) Judges question Team on Eng. Doc.
10:45	Robot Check	Lunch		Robot Check
11:15	Round 1 Season Challenge		2. Open Challenge	
11:45	Lunch	Lunch	Lunch	Lunch
12:15				
12:45	Official Practice Time (60minutes)	5. Game per Team	Judging Rounds	Robot Check
13:15				6. Game per Team
14:15	Robot Check	Round 2 Season Challenge	Judging Rounds	Official Practice Time (90 min) Judges question Team on Eng. Doc.
14:45	Round 3 Season Challenge			
15:15	Official Practice Time (60minutes)	6. Game per Team	Judging Rounds	Official Practice Time (90 min) Judges question Team on Eng. Doc.
16:15	Robot Check			
16:45	Round 3 Season Challenge			
17:15	Transfer to Venue (FIGALI)			
18:00	Friendship Night & Dinner (FIGALI)			
21:00	Transfer Venue-Hotels (Panama Convention Center)			
21:30	Venue Closed			

Day 3

09 NOVEMBER

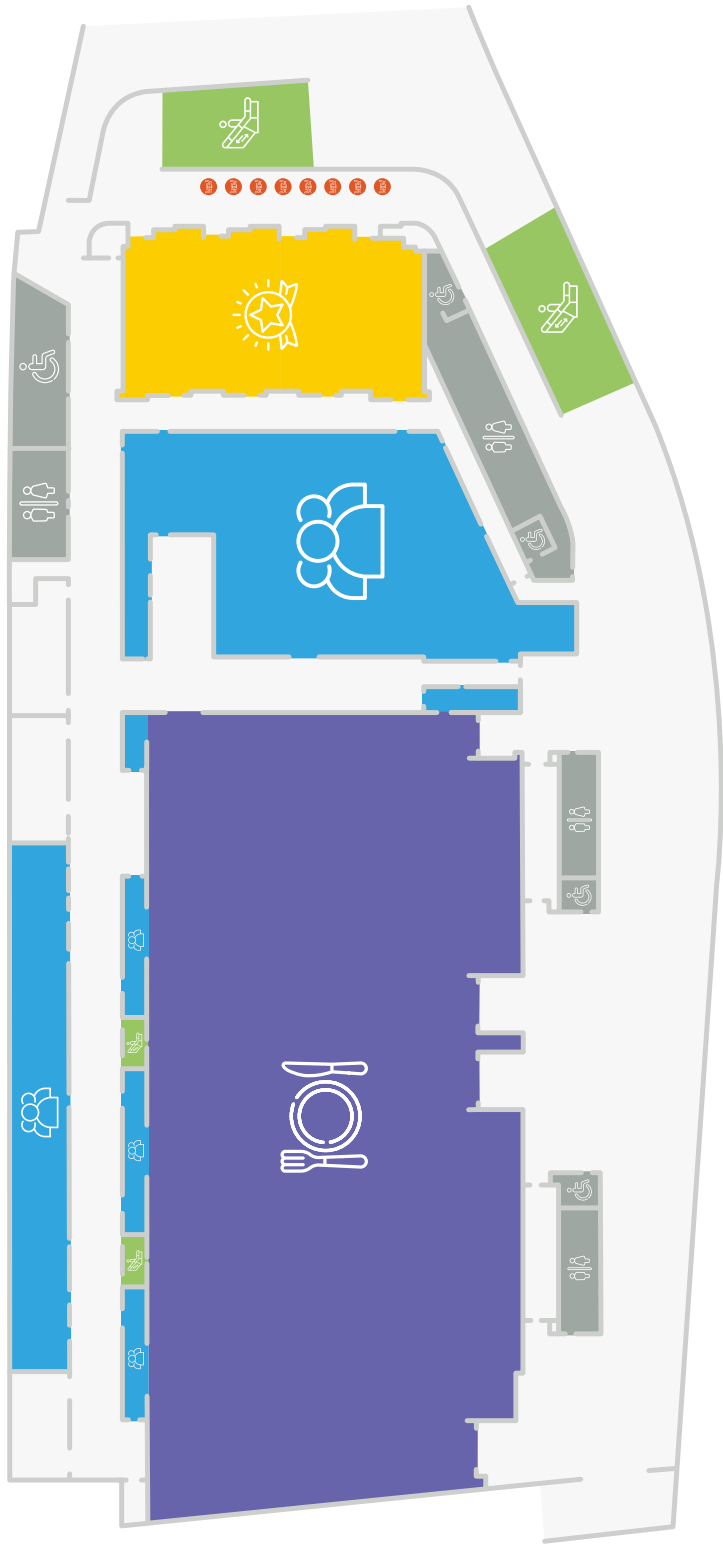








TIME	ROBOMISSION	ROBOSPORTS	FUTURE INNOVATORS	FUTURE ENGINEERS
05:30	Breakfast in Hotels			
06:30	Transfer Hotel - Venue (Panama Convention Center)			
07:00	Venue Open			
08:15	Announcement 3 ^o Day Challenge	7. Game per Team	Judging Rounds	Official Practice Time (90 min) Judges question Team on Eng. Doc.
08:45	Free Practice Time (105 min)			
09:15		Internal Judging Discussions	Robot Check	
09:45				2. Obstacle Challenge
10:15	Match # Balancing	Begin Final Deliberation Meeting	Lunch	
10:30	Deadline Attempt 1			Lunch
10:45	Free Practice Time (90 min)	Lunch	Lunch	
11:45	Free Practice Time (90 min)			Lunch
12:15	Deadline Attempt 2	Lunch	Lunch	
12:30	Lunch			Visit to Exhibitions
13:00		Visit to Exhibitions		
13:45	Visit to Exhibitions		Visit to Exhibitions	Visit to Exhibitions
14:30	Booths Dismantling			
15:00	Closing & Award Ceremony (FIGALI)			
17:30	Dinner (Panama Convention Center)			
18:30	Transfer to Airport or Hotels			
20:30	Venue Closed			



FLOOR PLANS OF THE **PANAMA** **CONVENTION** **CENTER**



















MEZZANINE



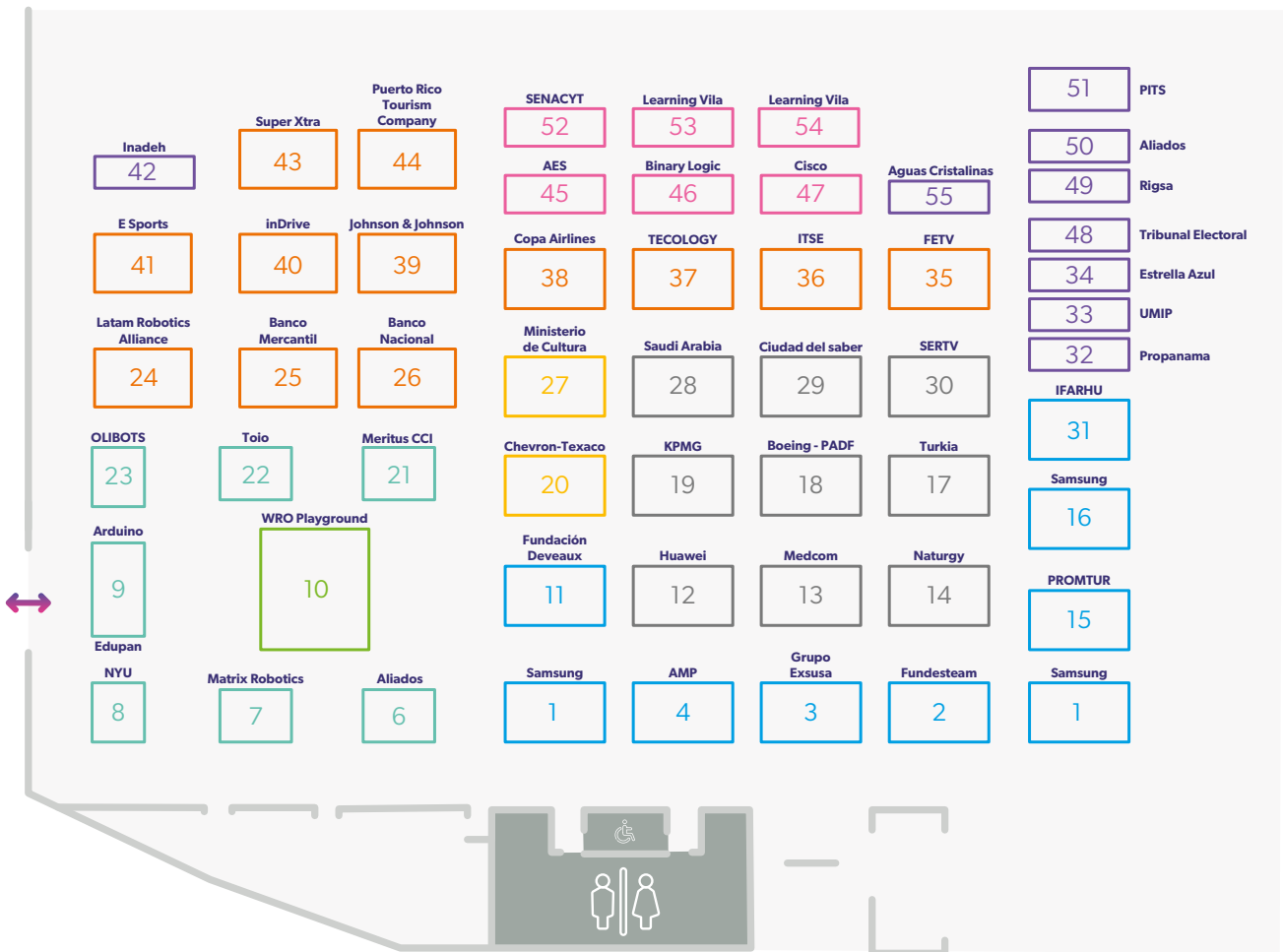
	Bathroom		Tables and chairs
	Service area		Lunch and Dinner hall
	VIP Lounge		Electric stairs

GROUND FLOOR



SPONSORS & EXHIBITORS





LIST OF TEAMS

COUNTRY	TEAM	CATEGORY	AGE GROUP
Argentina	Aquality	Future Innovators	Junior
Argentina	EPET 38	RoboMission	Senior
Argentina	Flamita	Future Innovators	Senior
Argentina	IITA SL NUMBER TWO	RoboMission	Elementary
Argentina	IITA SL RFB	RoboMission	Elementary
Argentina	IITA Sports 2	RoboSports	RoboSports
Argentina	Yacyretá Team	Future Innovators	Elementary
Argentina	Yarará Team	Future Engineers	Engineers
Armenia	GitTun	RoboMission	Junior
Australia	Trademark	RoboMission	Junior
Austria	B&R Eisbärlis	RoboMission	Senior
Austria	Plasma-Bots	RoboMission	Junior
Azerbaijan	AZE 44 Falcons	RoboMission	Junior
Azerbaijan	AZE 86.6	Future Engineers	Engineers
Azerbaijan	Caspian Rescuer	Future Innovators	Senior
Azerbaijan	Dynamite Baku	RoboMission	Senior
Azerbaijan	East Zangezur	RoboSports	RoboSports
Azerbaijan	HAF Sumgayit	RoboMission	Elementary
Azerbaijan	Lavanda Zagatala	Future Innovators	Elementary
Azerbaijan	Village Boys (Mechatronic Engineers)	Future Innovators	Junior

COUNTRY	TEAM	CATEGORY	AGE GROUP
Bahrain	BH-ROBOMATRIX	Future Innovators	Junior
Bangladesh	Byte Bandits	Future Innovators	Senior
Bangladesh	mechaScratch_404	Future Engineers	Engineers
Bangladesh	Robonium Bangladesh	Future Innovators	Senior
Bolivia	Hydra	RoboMission	Senior
Bolivia	RBT	Future Innovators	Junior
Bolivia	RoboTec	RoboMission	Junior
Bolivia	XLR8	RoboMission	Senior
Bolivia	XLR8U	RoboMission	Junior
Bosnia and Herzegovina	Elementary Eliminator 072	RoboMission	Elementary
Bosnia and Herzegovina	Jack Sparrow 072	RoboMission	Senior
Bosnia and Herzegovina	Stem Academy Junior	RoboMission	Junior
Brazil	Equipe Esgualepado - Robótica Sinodal	RoboMission	Senior
Brazil	MIB_Robotcsteam	RoboMission	Senior
Cambodia	ROBOAT	Future Innovators	Senior
Canada	Dominus	Future Engineers	Engineers
Canada	Double-X	RoboMission	Senior
Canada	McDonalds Ice Cream Machine	RoboMission	Elementary
Canada	Miracle Monkeys	RoboMission	Junior
Canada	Oceanic Pioneers	Future Innovators	Senior
Canada	Smart Devils	RoboMission	Junior
Canada	TMC	RoboSports	RoboSports
China	Courage	RoboMission	Elementary
China	GEKHUB	RoboSports	RoboSports
China	Ocean Robot	Future Innovators	Elementary
China	SZLG Galaxy	RoboMission	Junior
China	TDL	RoboMission	Elementary
China	The N°1 Team of Jinhua Dragon in the 19 th Middle School of Xingtai	RoboMission	Junior

COUNTRY	TEAM	CATEGORY	AGE GROUP
Chinese Taipei	AI Robotics	RoboMission	Senior
Chinese Taipei	Azure Sea Team	Future Innovators	Senior
Chinese Taipei	Back to back for win	RoboMission	Junior
Chinese Taipei	Curious Robotics	RoboMission	Junior
Chinese Taipei	FAME	RoboMission	Elementary
Chinese Taipei	Fantasy	Future Innovators	Elementary
Chinese Taipei	Lego Lau Xiao	RoboMission	Senior
Chinese Taipei	Never Give Up	RoboMission	Elementary
Chinese Taipei	OFDL LKY Taiwan	RoboSports	RoboSports
Chinese Taipei	OFDL RTB Taiwan	RoboSports	RoboSports
Chinese Taipei	PowerKids	Future Innovators	Junior
Chinese Taipei	Sarsaparilla	RoboMission	Elementary
Chinese Taipei	Shinan Fire On All Cylinders	Future Engineers	Engineers
Chinese Taipei	Yoder Robot	RoboMission	Junior
Colombia	Majuy Botcitos	RoboMission	Elementary
Colombia	Natugonzaguistas	Future Innovators	Elementary
Colombia	ROBOTYC SYSTEMS	RoboMission	Senior
Colombia	Tech Warriors	RoboMission	Junior
Costa Rica	Agua	Future Innovators	Elementary
Costa Rica	ASHOBIG	RoboSports	RoboSports
Costa Rica	Coral Tec+	Future Innovators	Senior
Costa Rica	Edubots	RoboMission	Senior
Costa Rica	Innovators +	Future Innovators	Junior
Costa Rica	JD2	RoboMission	Senior
Costa Rica	Mecatronics de Moncho	RoboSports	RoboSports
Costa Rica	MMK Muni Cartago	RoboMission	Elementary
Costa Rica	SEK 1	RoboMission	Junior
Costa Rica	SEK 2	RoboMission	Junior
Costa Rica	The Three Musketeers	RoboMission	Elementary
Croatia	CHAOS Josipovac 2	RoboMission	Elementary

COUNTRY	TEAM	CATEGORY	AGE GROUP
Croatia	Golden Drop	Future Innovators	Senior
Croatia	Just Here For Cake	RoboMission	Junior
Croatia	PrimeRD	RoboMission	Senior
Cyprus	GYMNASIO ARADIPPOU 2023	RoboMission	Junior
Cyprus	STEM Boys Cyprus	RoboMission	Senior
Cyprus	STEM Girls Cyprus	RoboMission	Elementary
Czechia	HobbyRobot	RoboMission	Junior
Dominican Republic	MECABOT	Future Engineers	Engineers
Ecuador	AquaTech Explorers	Future Innovators	Senior
Ecuador	NautilusTECH LP	Future Innovators	Elementary
El Salvador	ABC Robotics Club	RoboMission	Senior
El Salvador	EDULAB MAITI	RoboMission	Junior
El Salvador	Game Changer Techno Tribe	RoboMission	Elementary
El Salvador	Glasswing	Future Innovators	Elementary
El Salvador	Hikerbots	Future Innovators	Junior
Georgia	GADGETEENS	RoboMission	Junior
Georgia	GANDAGANA	RoboMission	Elementary
Georgia	TEAM GAGUA	RoboMission	Senior
Germany	BotBrothers	RoboMission	Senior
Germany	Jakorobo&Co	RoboMission	Senior
Germany	JAT	Future Innovators	Elementary
Germany	KFG Junior	RoboMission	Junior
Germany	KFG-Spike-Robotics	RoboMission	Elementary
Germany	LEGO CRAFT FI	Future Innovators	Senior
Germany	Leonardos I	RoboSports	RoboSports
Germany	Pfort GT	Future Engineers	Engineers
Germany	Robotic Boys	RoboMission	Senior
Germany	RoKo-Robot	RoboMission	Junior
Germany	SimpleBots Elementary	RoboMission	Elementary
Germany	Smart Frogs	RoboMission	Elementary

COUNTRY	TEAM	CATEGORY	AGE GROUP
Germany	Smart Riders	Future Engineers	Engineers
Germany	Support Submarine (SuppSub)	Future Innovators	Senior
Germany	The Team O'Ball	RoboSports	RoboSports
Germany	W-A-L Roboter AG 2	RoboMission	Junior
Ghana	APEX	RoboMission	Senior
Ghana	AQUARIAN SMART LABS (AL 4.0)	Future Innovators	Elementary
Ghana	SANITY	RoboMission	Elementary
Ghana	WATERPROOF	RoboMission	Junior
Greece	bitLab	RoboSports	RoboSports
Greece	Evripos Robotics	Future Engineers	Engineers
Greece	JoFre	RoboMission	Senior
Greece	Minders	Future Innovators	Senior
Greece	Save Energy	RoboMission	Junior
Greece	Smartbirds	Future Innovators	Junior
Greece	Teamwork Happiness	RoboMission	Elementary
Guatemala	DragonBots	RoboMission	Junior
Guatemala	Equipo Verde Los Olivos del Norte	Future Innovators	Junior
Guatemala	Oppenheimer Jrs	Future Innovators	Senior
Haiti	TECH GARAGE	Future Innovators	Elementary
Honduras	HONDURAS OPTIMUS PRIME	RoboMission	Senior
Hong Kong	Hero Pong	Future Engineers	Engineers
Hong Kong	The Farmland Union of Hong Kong	RoboSports	RoboSports
Hong Kong	UCCKE	Future Innovators	Junior
Hong Kong	We and Us	RoboMission	Senior
Hong Kong	You and Us	RoboMission	Junior
Hungary	BB banda	RoboMission	Elementary
Hungary	BDB robotics infinity	RoboSports	RoboSports
Hungary	Storms Junior	RoboMission	Junior
Hungary	Storms Senior	RoboMission	Senior
Hungary	TheGaals	Future Innovators	Junior

COUNTRY	TEAM	CATEGORY	AGE GROUP
India	2EZ	RoboMission	Senior
India	404	Future Engineers	Engineers
India	GALEFORCE	Future Innovators	Junior
India	PortKey	Future Innovators	Elementary
India	RFL MarineBot	RoboMission	Elementary
India	RoboKings	RoboMission	Junior
India	Team N°. 1	Future Innovators	Senior
India	Techtory	RoboMission	Elementary
Indonesia	Freedom	RoboMission	Junior
Indonesia	Prometheus	RoboMission	Senior
Iran	CAN DO	RoboSports	RoboSports
Iran	Er-Ta-So	RoboMission	Junior
Iran	Mars Rover	Future Engineers	Engineers
Iran	Persian Robot	RoboMission	Elementary
Iran	Revolutionist	RoboMission	Senior
Italy	G&G	RoboMission	Junior
Italy	Gli Sbucciafili	RoboMission	Senior
Italy	ILAB	RoboSports	RoboSports
Italy	ROBOKRAKEN	RoboMission	Elementary
Italy	VIRTUAL BLUE	Future Innovators	Elementary
Italy	VOLTERRA	Future Engineers	Engineers
Jamaica	Reach Bolts	RoboMission	Elementary
Japan	Amicus YTS	RoboMission	Junior
Japan	Big Turtle	Future Innovators	Junior
Japan	Blue Banana tennis	RoboMission	Elementary
Japan	Chicken nugget	RoboMission	Elementary
Japan	Double Kalbi Grill Gobble	RoboMission	Junior
Japan	KH	RoboMission	Elementary
Japan	meiden first tpy	RoboMission	Senior
Japan	National Institute of Technology, Ishikawa College	Future Engineers	Engineers

COUNTRY	TEAM	CATEGORY	AGE GROUP
Japan	OtemonChallenger	Future Innovators	Senior
Japan	POISON	RoboSports	RoboSports
Japan	Team K	RoboMission	Junior
Japan	Tezukayama Å	RoboMission	Senior
Japan	UNAGI-RO	RoboSports	RoboSports
Japan	YTHS 2BY	RoboMission	Senior
Kazakhstan	A'Doner	RoboSports	RoboSports
Kazakhstan	ACRS	Future Innovators	Senior
Kazakhstan	idk	RoboSports	RoboSports
Kazakhstan	Milestone	RoboMission	Junior
Kazakhstan	Ngs	RoboMission	Elementary
Kazakhstan	Qyzylorda	Future Engineers	Engineers
Kazakhstan	QYZYLORDA Rage	RoboMission	Senior
Kazakhstan	Robolab	RoboMission	Elementary
Kazakhstan	ROBOTEK Cyrex	RoboMission	Junior
Kazakhstan	ROBOTEK Fusion	RoboMission	Senior
Kazakhstan	ROBOTEK Prime	Future Engineers	Engineers
Kazakhstan	Tlcs.bot	Future Innovators	Senior
Kazakhstan	Zere	Future Innovators	Elementary
Kenya	Merishaw JSS Lego Pals	RoboMission	Junior
Kenya	Samaj Everest	Future Innovators	Elementary
Kenya	Samaj Hackers	RoboMission	Elementary
Kenya	Samaj Robo Warriors	RoboMission	Senior
Kenya	SCLP Aqua Rangers	Future Innovators	Junior
Lebanon	APROMON	Future Engineers	Engineers
Lebanon	GREEN SAILOR	Future Innovators	Senior
Lebanon	SJS Robotronics	RoboMission	Senior
Lebanon	STEAM X	RoboMission	Elementary
Macau	CDSJ5-S01	RoboMission	Senior
Macau	CK Avenger	RoboSports	RoboSports

COUNTRY	TEAM	CATEGORY	AGE GROUP
Macau	MACAU YWC	RoboMission	Junior
Macau	PCMS	RoboMission	Elementary
Macau	PCMS-INNOVATORS	Future Innovators	Elementary
Macau	PTRT	RoboSports	RoboSports
Malaysia	AdvanzSAFE	Future Innovators	Junior
Malaysia	Champions KC1	RoboMission	Elementary
Malaysia	GO! go! PC2	RoboMission	Elementary
Malaysia	HSBP Tech Keepers	Future Innovators	Senior
Malaysia	I-Robonator	Future Engineers	Engineers
Malaysia	KWANGHUA FALCON 01	RoboMission	Junior
Malaysia	KWANGHUA FALCON 02	RoboSports	RoboSports
Malaysia	OCEAN HUB	Future Innovators	Elementary
Malaysia	SKBU2	RoboMission	Elementary
Malaysia	Up Up C.H.M	RoboMission	Junior
Malaysia	UP UP C.H.M.	RoboSports	RoboSports
Malaysia	UP UP C.H.M. 01	RoboMission	Senior
Malaysia	UP UP C.H.M. 02	RoboMission	Senior
Mexico	Ciberbots	RoboMission	Junior
Mexico	Gardner Maremotriz	Future Innovators	Junior
Mexico	Jos	RoboMission	Junior
Mexico	Los Grises	RoboMission	Elementary
Mexico	Los Molcajeteros	RoboMission	Senior
Mexico	MEKLAB-ROBOTICS	RoboMission	Senior
Mexico	Olive Garden	RoboMission	Elementary
Mexico	RoboTecnica Chilaquiles	RoboMission	Junior
Mexico	RoboTecnica Churros	RoboMission	Junior
Mexico	RoboTecnica Team Umizoomi	RoboMission	Senior
Mexico	Rocket	RoboMission	Senior
Mexico	Technobrain	RoboMission	Elementary
Mexico	Threats 50	RoboMission	Senior

COUNTRY	TEAM	CATEGORY	AGE GROUP
Montenegro	Beta	RoboMission	Senior
Morocco	3M	RoboMission	Junior
Morocco	Nova Explorers	Future Innovators	Junior
Netherlands	Baguette Aquatics	Future Innovators	Senior
Netherlands	Team Cheesebot	RoboMission	Senior
Nicaragua	Finntechs	RoboMission	Elementary
Nicaragua	NicaRobotica Midnigth Sons	RoboMission	Senior
Nicaragua	NicaRobotica Prime Robots	RoboMission	Junior
Nicaragua	Secret Code	RoboMission	Senior
Nigeria	Build Quest	RoboMission	Junior
Nigeria	Design Jockey	RoboMission	Senior
Nigeria	Genius Bot	RoboMission	Junior
Nigeria	Lagos Amazons	RoboMission	Senior
Nigeria	Lagos Legends	RoboMission	Senior
Nigeria	Lagos Titans	RoboMission	Junior
Oman	Laddoo	RoboMission	Senior
Pakistan	AC Team X	Future Engineers	Engineers
Pakistan	Automaton	Future Innovators	Senior
Pakistan	Byte Brigade	RoboMission	Senior
Pakistan	M.A.S. Innovators	Future Innovators	Elementary
Pakistan	TechBot	RoboMission	Elementary
Palestine	Future Team - GAZA	Future Innovators	Senior
Palestine	July Cake - NABLUS	Future Innovators	Senior
Palestine	KANAAN - QABATIYA	Future Engineers	Engineers
Palestine	MARS - BETHLEHEM	Future Engineers	Engineers
Palestine	New Horizon - TULKAREM	RoboMission	Senior
Palestine	Over Power - YATTA	RoboMission	Junior
Palestine	PURPOSE	RoboMission	Elementary
Panama	AcquaBotix	Future Innovators	Senior
Panama	Aqua Thomix	RoboMission	Senior

COUNTRY	TEAM	CATEGORY	AGE GROUP
Panama	Asimov Vasic	RoboMission	Junior
Panama	Asimov_X_Ray	RoboMission	Junior
Panama	Astroboys	RoboSports	RoboSports
Panama	Bennets Brigade	Future Engineers	Engineers
Panama	Brilliant Minds	Future Engineers	Engineers
Panama	Camrobot	RoboMission	Elementary
Panama	Carey	Future Innovators	Senior
Panama	Contenedor Seguro	Future Innovators	Elementary
Panama	Dipsi Girls	Future Innovators	Elementary
Panama	Kamda	Future Innovators	Junior
Panama	Los Kanas	RoboMission	Elementary
Panama	Los Rompecircuitos	RoboMission	Senior
Panama	Maxell	RoboSports	RoboSports
Panama	Rbots	Future Innovators	Senior
Panama	RNM Robotics	RoboMission	Elementary
Panama	Robo Filter	Future Innovators	Junior
Panama	Robot Cam	RoboMission	Junior
Panama	Seatitans	Future Innovators	Junior
Panama	Tekbot Senior	RoboMission	Senior
Panama	The Brotherhood	RoboSports	RoboSports
Panama	The Groot	Future Engineers	Engineers
Panama	Titanes del Interoceánicos	Future Innovators	Elementary
Peru	DIARSO	RoboMission	Junior
Peru	Lourdinás Leading the Change	Future Innovators	Junior
Peru	MAYOR TECH	Future Innovators	Senior
Peru	The Lego'S	RoboMission	Junior
Peru	The Piece	RoboMission	Senior
Philippines	Batangas State University	Future Engineers	Engineers
Philippines	Batangas State University(Batang Spartan)	RoboMission	Junior
Philippines	Betty Go Belmonte Elementary School	RoboMission	Elementary

COUNTRY	TEAM	CATEGORY	AGE GROUP
Philippines	DYCI Primes	Future Innovators	Junior
Philippines	Ibo Elementary School	RoboMission	Elementary
Philippines	JAPeR Memorial High School-DepEd Bohol	Future Innovators	Senior
Philippines	JAPeR Memorial High School-Junior High	RoboMission	Junior
Philippines	Legaspi Science High School	RoboSports	RoboSports
Philippines	Marie Ernestine School	RoboMission	Senior
Philippines	Marigondon National High School	RoboSports	RoboSports
Philippines	P6 Sci-Pi Robotics Team	Future Innovators	Elementary
Philippines	St. John's Wort Montessori School	Future Engineers	Engineers
Poland	Bonzo Team	RoboMission	Senior
Poland	Space Beavers 2	RoboMission	Junior
Poland	Space Beavers One	RoboMission	Elementary
Poland	Morse Team	Future Innovators	Junior
Portugal	AGSG	Future Engineers	Engineers
Portugal	Program to Communicate	Future Innovators	Junior
Puerto Rico	Academia Menonita	RoboMission	Elementary
Puerto Rico	Colegio Limari	RoboMission	Elementary
Puerto Rico	Esc. Abelardo Martínez Otero	RoboMission	Senior
Puerto Rico	Esc. Benjamín Harrison-1	RoboSports	RoboSports
Puerto Rico	Esc. Benjamín Harrison-2	RoboSports	RoboSports
Puerto Rico	Esc. Bilingue Padre Rufo-1	RoboMission	Junior
Puerto Rico	Esc. Bilingue Padre Rufo-2	RoboMission	Junior
Puerto Rico	Esc. Ecológica José De Diego	RoboMission	Elementary
Puerto Rico	Esc. Gabriel Mistral	RoboMission	Senior
Puerto Rico	Esc. Manuel Méndez Liciaga	Future Engineers	Engineers
Puerto Rico	Esc. Padre Aníbal Reyes Belén	RoboMission	Senior
Puerto Rico	Esc. Voc. Tomás C. Ongay	Future Engineers	Engineers
Puerto Rico	RobinsonSchool-InnovatorsJunior	Future Innovators	Junior
Puerto Rico	Techno Inventors-RoboMissionJunior	RoboMission	Junior
Puerto Rico	TechnoInventors-InnovatorsElementary	Future Innovators	Elementary

COUNTRY	TEAM	CATEGORY	AGE GROUP
Puerto Rico	TechnoInventors-InnovatorsSenior	Future Innovators	Senior
Romania	Nerdvana Hercules	RoboSports	RoboSports
Romania	Nerdvana Mensa	RoboMission	Senior
Romania	Nerdvana Nemesis	Future Engineers	Engineers
Romania	Nerdvana Taurus	RoboMission	Junior
Romania	RObotMANIA	RoboMission	Elementary
Romania	Vrum Vrum Robots - Eco Pirates	Future Innovators	Junior
Saudi Arabia	Ajyal Almarefaah International - KSA	RoboMission	Senior
Saudi Arabia	Al-Braem - KSA	RoboSports	RoboSports
Saudi Arabia	Ambitious - KSA	RoboMission	Senior
Saudi Arabia	BLACK FINGERS - KSA	Future Engineers	Engineers
Saudi Arabia	ELMOBDEON - KSA	RoboMission	Elementary
Saudi Arabia	Geniuses - KSA	RoboMission	Junior
Saudi Arabia	JAWATHA - KSA	Future Innovators	Elementary
Saudi Arabia	JRS SPORT - KSA	RoboSports	RoboSports
Saudi Arabia	PRO ROBOT - KSA	RoboMission	Junior
Saudi Arabia	QPS - KSA	RoboMission	Senior
Saudi Arabia	QPS Challenge - KSA	RoboMission	Elementary
Saudi Arabia	ROBOSMART AL AMJAD - KSA	Future Innovators	Junior
Saudi Arabia	Rowad Crafters - KSA	Future Innovators	Senior
Saudi Arabia	SAUDI FALCONS - KSA	Future Engineers	Engineers
Saudi Arabia	The Wadi Wolves - KSA	RoboMission	Junior
Serbia	Cacti	RoboMission	Elementary
Serbia	Mindstrongs	RoboMission	Senior
Serbia	RoboRiders	RoboMission	Junior
Singapore	ALTAS	RoboMission	Elementary
Singapore	Barbatos	RoboMission	Junior
Singapore	Clutch	RoboMission	Senior
Singapore	CyberSkulls	RoboMission	Junior
Singapore	Rescue	RoboMission	Elementary

COUNTRY	TEAM	CATEGORY	AGE GROUP
Singapore	SOR Open Team 2	Future Innovators	Elementary
Slovakia	Robotgirls	RoboMission	Elementary
Slovakia	Roboys	RoboMission	Senior
Slovakia	Rubikon	RoboMission	Junior
Slovenia	BARCA	RoboMission	Junior
Slovenia	EKIPA X	RoboMission	Senior
Slovenia	Killers	RoboMission	Elementary
Slovenia	LOPARJA	RoboSports	RoboSports
South Africa	C.U.P.	RoboSports	RoboSports
South Africa	Cow Tipping Dwarves	Future Innovators	Senior
South Africa	Hi Tech Pandas	RoboMission	Elementary
South Africa	JAT SA	RoboMission	Senior
South Africa	MacGyver	RoboMission	Senior
South Africa	Next Gen	RoboMission	Elementary
South Africa	Techno Venom	RoboMission	Junior
South Korea	Best Robot	RoboMission	Elementary
South Korea	BISANG	Future Innovators	Senior
South Korea	Coding Slave	RoboMission	Elementary
South Korea	DREAM IN LEGO	Future Innovators	Elementary
South Korea	EASY	RoboMission	Junior
South Korea	Future Dream	RoboMission	Elementary
South Korea	HONEST	RoboMission	Junior
South Korea	Ottogi	RoboMission	Senior
South Korea	ROCOM	Future Innovators	Junior
South Korea	WEMBRO	RoboSports	RoboSports
Spain	ACME	Future Engineers	Engineers
Spain	BEGOÑAZPI	RoboSports	RoboSports
Spain	HUBLIAN	RoboMission	Junior
Spain	INSANOS	RoboMission	Senior
Spain	LEGOSCA	RoboMission	Elementary

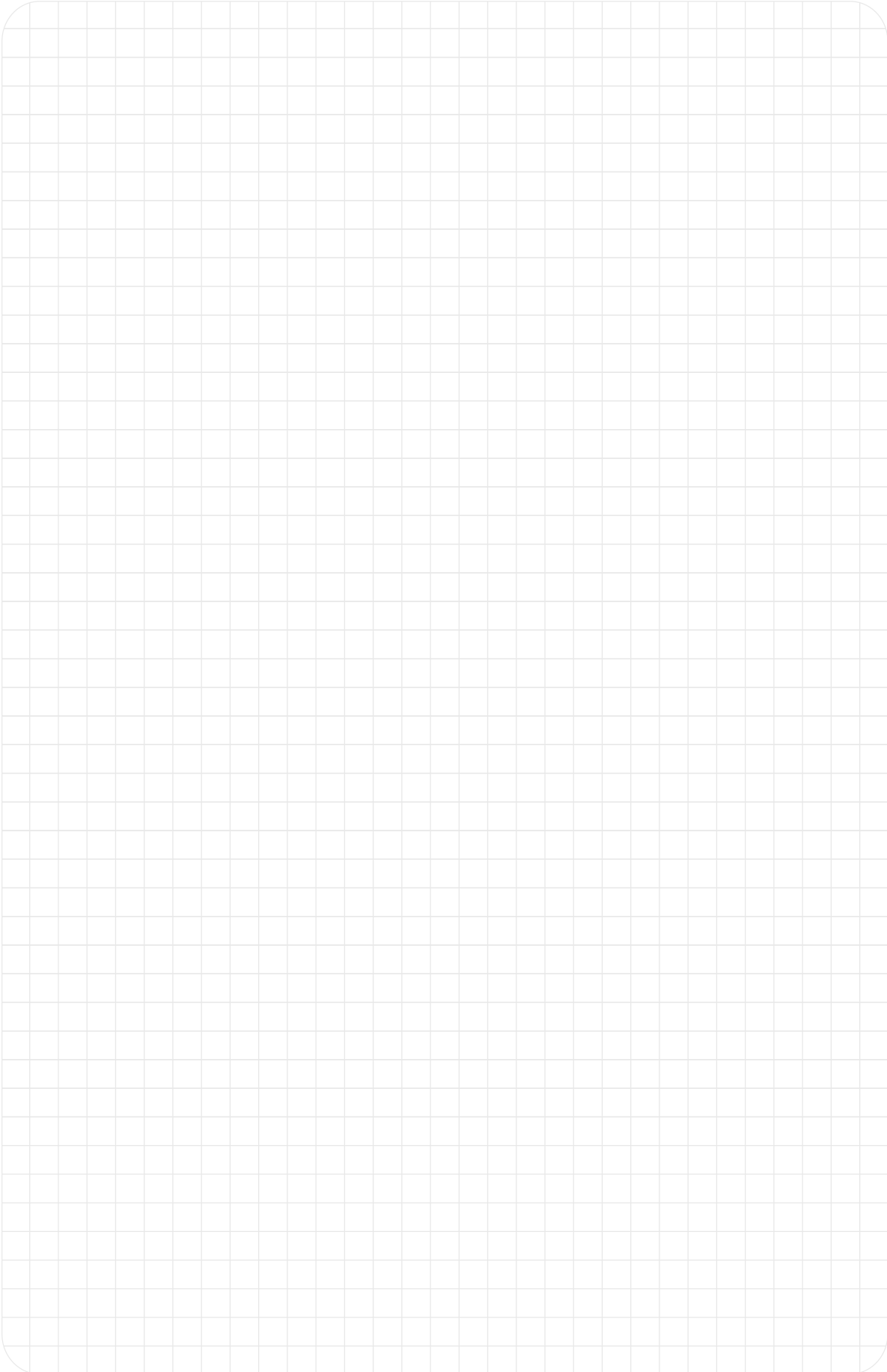
COUNTRY	TEAM	CATEGORY	AGE GROUP
Spain	R2D2	Future Innovators	Junior
Spain	ROBOT BROTHERS	RoboMission	Elementary
Spain	THE @'S TEAM	RoboMission	Junior
Switzerland	Balda7strich3	RoboMission	Junior
Switzerland	Flawil Beavers	RoboMission	Senior
Switzerland	JuRoBo11	RoboMission	Elementary
Switzerland	Robo Matik - New Generation	RoboMission	Junior
Switzerland	robo-sapiens	RoboMission	Elementary
Switzerland	Robolution	RoboMission	Senior
Syria	Autonomous Buggies	Future Engineers	Engineers
Syria	H2A	RoboMission	Senior
Tajikistan	Binom Tajikistan	RoboSports	RoboSports
Tajikistan	Liga Robotov Tajikistan	Future Engineers	Engineers
Thailand	BIG Floppa	RoboSports	RoboSports
Thailand	Chao Sai Bai Yen	RoboMission	Senior
Thailand	CKK-ALLAKA	RoboMission	Senior
Thailand	CKK-Beelzebub	RoboMission	Senior
Thailand	CUD ClickRobot	Future Innovators	Elementary
Thailand	KMIDS INNO GANG	Future Innovators	Senior
Thailand	KMIDS ROBOYS	Future Innovators	Junior
Thailand	Ma-Tham-Mai	RoboMission	Junior
Thailand	PANYA ROBOT	RoboSports	RoboSports
Thailand	Red Force	RoboMission	Elementary
Thailand	Sunflower	Future Engineers	Engineers
Thailand	Technolobrick	RoboMission	Elementary
Thailand	Trust your anthem	RoboMission	Junior
Thailand	Zenith	Future Engineers	Engineers
Tunisia	Junior Robotics Lab Tunisia	RoboMission	Junior
Tunisia	Robotica's king Tunisia	RoboMission	Elementary
Turkey	ALBATROS	RoboMission	Elementary

COUNTRY	TEAM	CATEGORY	AGE GROUP
Turkey	ÇAKATECH	RoboMission	Senior
Turkey	JUNIOR ALTAŞ	RoboMission	Junior
Turkey	PROVIDERS	Future Innovators	Junior
Ukraine	kyivrobomagic	RoboMission	Junior
Ukraine	PolitUA	RoboMission	Junior
Ukraine	Radobot	RoboMission	Elementary
United Kingdom	Light Bulb Eater	RoboMission	Junior
United States of America	Archimedean Gama	RoboMission	Senior
United States of America	Chaotics	RoboMission	Elementary
United States of America	Dolphin Hearts	Future Innovators	Elementary
United States of America	Dynamic Duo	RoboSports	RoboSports
United States of America	FEV	Future Engineers	Engineers
United States of America	Global Connector	Future Innovators	Elementary
United States of America	GMR (Great Minds Robotics)	RoboMission	Senior
United States of America	Innovation Nation	Future Innovators	Junior
United States of America	JAW	RoboMission	Junior
United States of America	Mission Possible	RoboMission	Elementary
United States of America	Robotic Panthers	RoboMission	Elementary
United States of America	SPARK	Future Engineers	Engineers
United States of America	Techies	RoboMission	Junior
United States of America	Ultrasonicists	RoboMission	Senior
United States of America	USEL-Upland	RoboSports	RoboSports

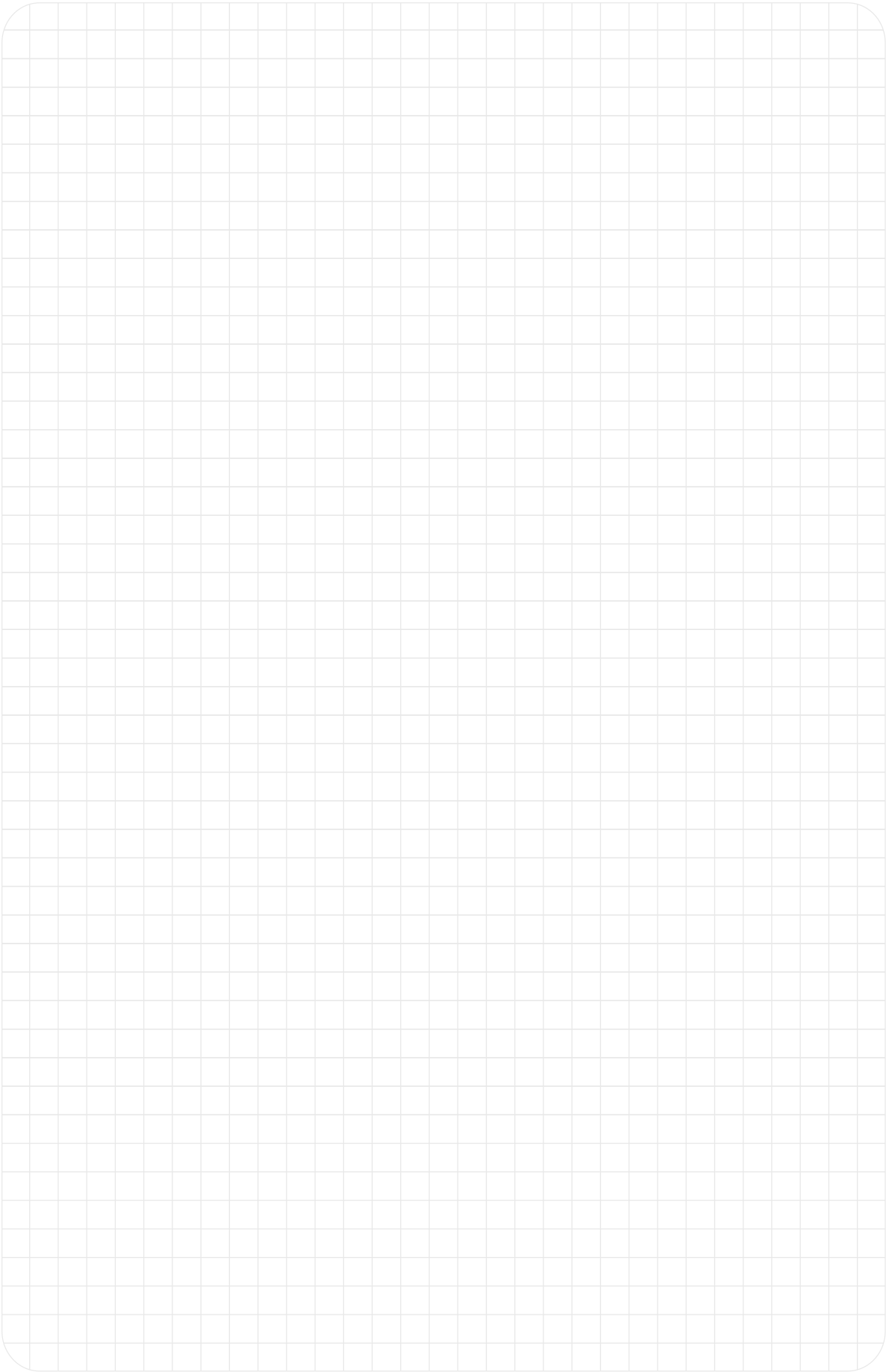
COUNTRY	TEAM	CATEGORY	AGE GROUP
United States of America	Zyzybot	RoboMission	Junior
Venezuela	Avila Tech	RoboSports	RoboSports
Venezuela	CBIT Humberto Tejera	Future Innovators	Elementary
Venezuela	CJROB	Future Innovators	Senior
Venezuela	David y Goliat	RoboMission	Junior
Venezuela	Los Inventores	RoboMission	Elementary
Venezuela	Red Machine	Future Engineers	Engineers
Venezuela	Robot Guys	RoboMission	Senior
Venezuela	Tomorrows Innovators	Future Innovators	Junior
Vietnam	HKN- B1-01	RoboMission	Elementary
Vietnam	HONG BANG 1	RoboSports	RoboSports
Vietnam	HONG BANG 2	RoboSports	RoboSports
Vietnam	HONG BANG 4	RoboMission	Junior
Vietnam	HONG BANG 5	RoboMission	Elementary
Vietnam	PORTERROR.WS	Future Innovators	Senior
Vietnam	VIET ROBOT B2-01	RoboMission	Junior
Vietnam	VIET ROBOT B3-02	RoboMission	Senior
Vietnam	VIET ROBOT B4-02	Future Innovators	Elementary
Vietnam	WE ARE FROM VIETNAM	RoboMission	Senior
Vietnam	WELLSPRING SG 01	RoboMission	Elementary
Vietnam	WELLSPRING SG 05	Future Innovators	Junior
Vietnam	WS_DTMKK	RoboMission	Senior
Vietnam	WS.AIDs	RoboMission	Junior

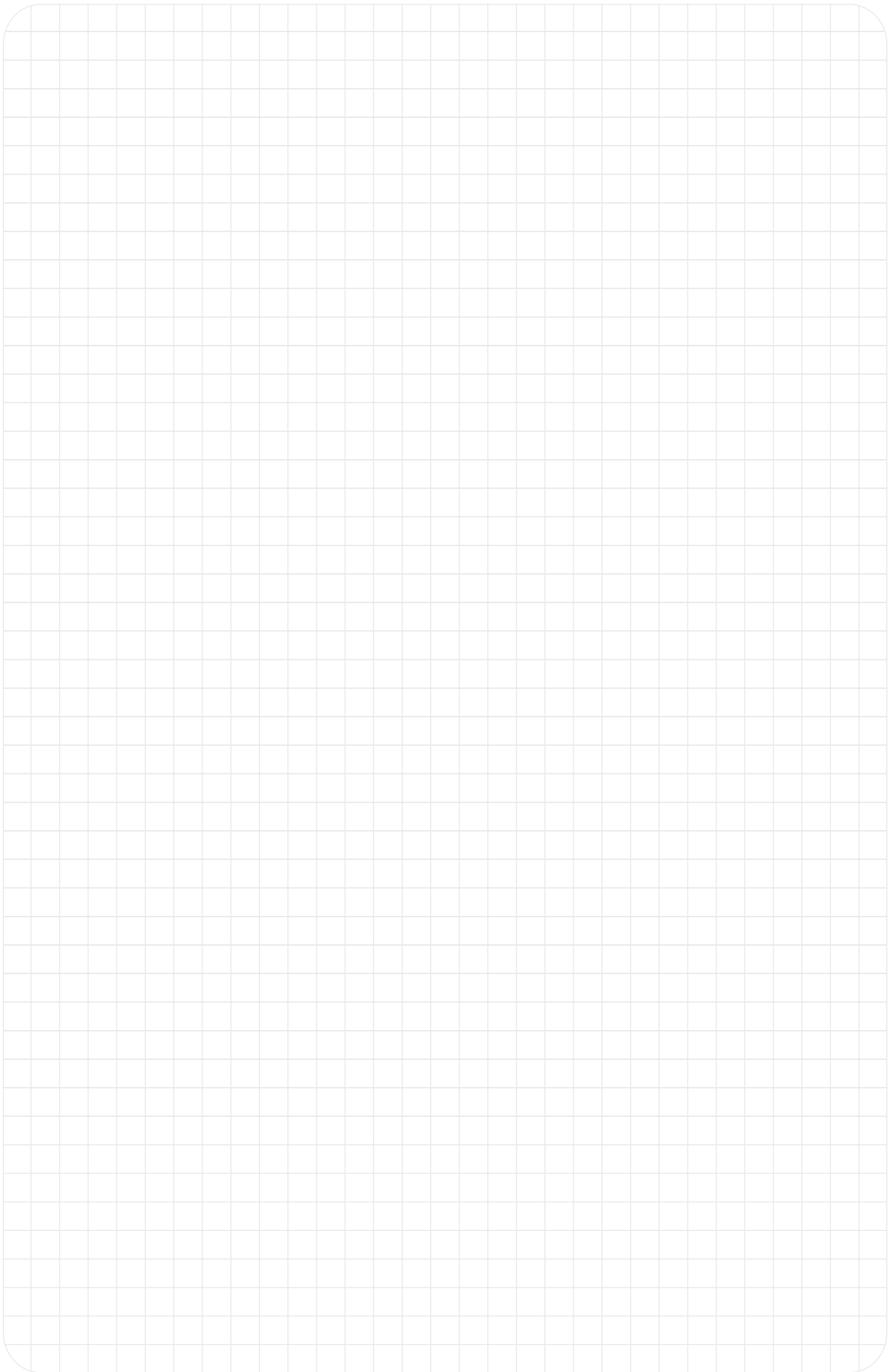
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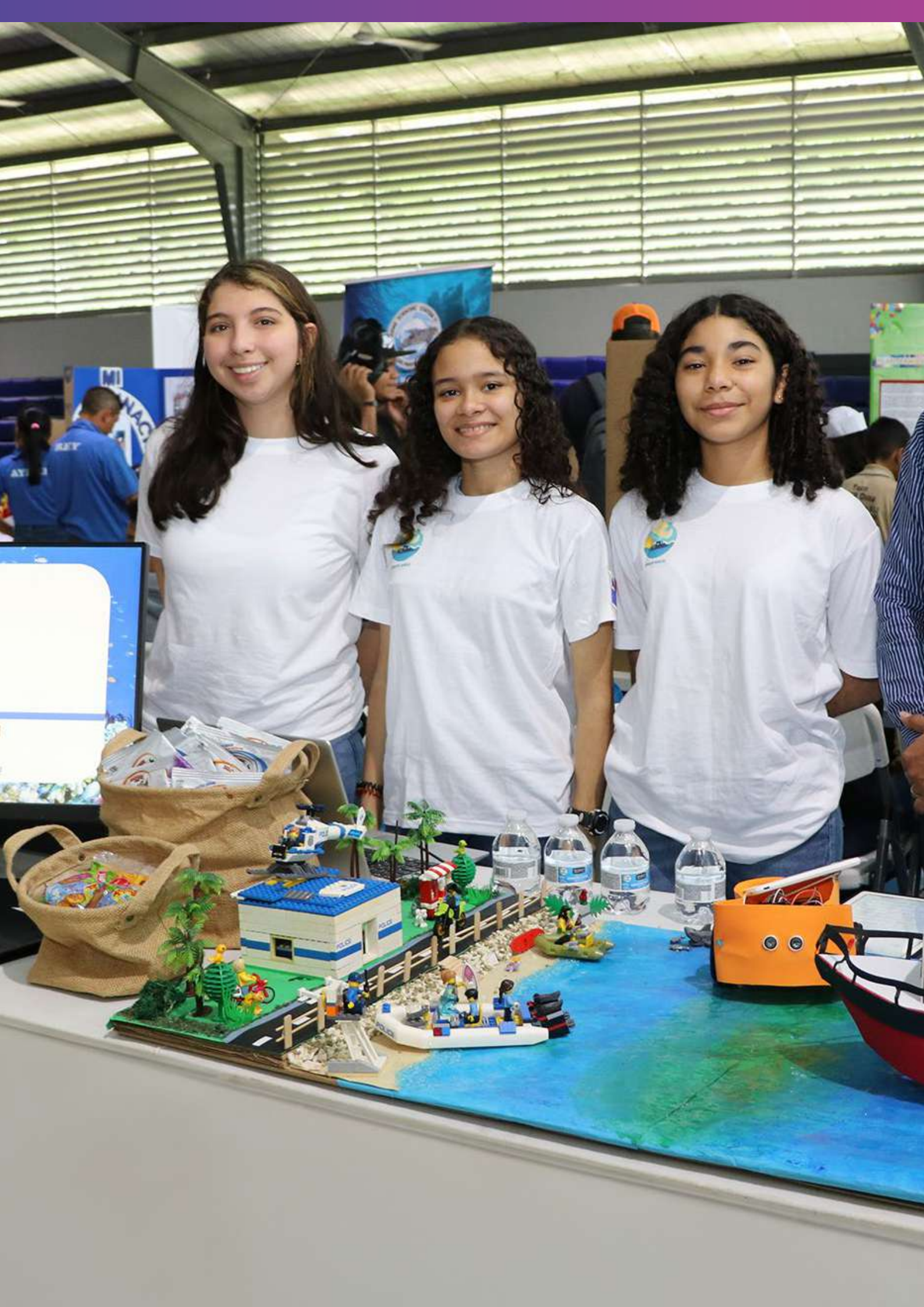
A large grid area for taking notes, consisting of a 30x30 grid of small squares. The grid is contained within a rounded rectangular border.

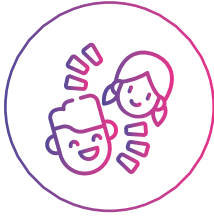
















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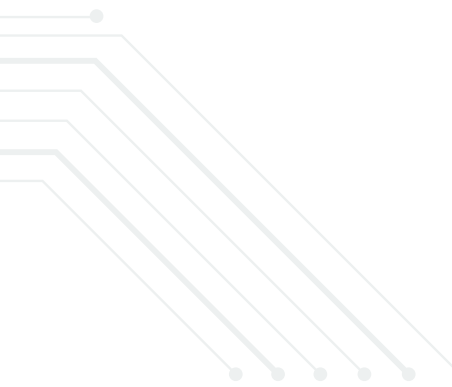
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