

# COMPETITION MANUAL

## School Principal Primer

**APPLY to Participate online here: <http://bit.ly/devconkidsrobotics> by June 7, 2019**

### Introduction

The Micro:bit Robotics Competition, hosted by DEVCON Kids, is a 16 hour workshop and competition designed to engage and challenge 7th and 8th grade students (novice to computer programming and robotics) to build and program a car robot to complete a mission.

### What is DEVCON Kids?

DEVCON Kids is a program that teaches a problem solving framework through an introduction to computer programming. It is the newest program of Developers Connect Philippines (DEVCON), a non-profit organization of computer programmers and technology enthusiasts. DEVCON aims to elevate *Pinoy IT Talent* to sync, support, and succeed.

### Why participate?

As software becomes more and more ubiquitous in all aspects of our daily lives, it is crucial that our youth be prepared with the fundamental understanding and capability to shape that digital world. Enabling and empowering them to succeed in that future is the preparation we all need to provide for them. DEVCON Kids is here to share that work with you.

Not only are they learning the necessary skills, developing confidence in creating computing artifacts, but they must also see themselves as capable problem solvers, practicing resilience and persistence as they learn to write code.

Students who participate in this competition will be able to build and program a car robot that independently functions. They will be introduced to the DEVCON Kids Problem Solving Framework of Define, Plan, Act, and Reflect. They will be provided the materials, mentorship, and skills training necessary to participate in the competition at the end of the second day.



## Who can participate?

The robotics workshop and competition are designed for 7th and 8th grade students with no prior experience in computer programming and robotics. Students must be enrolled in public schools and must be accompanied by one teacher advisor for both days. Apply to participate here: <http://bit.ly/devconkidsrobotics> no later than June 7, 2019. *No previous coding experience is required.* All participants (students and advisors alike) must share an interest in learning about new ideas and new skills, not necessarily robotics and computer programming.

## When is the workshop and competition?

*There will be 2 workshop days: June 15 and June 22.*

June 15, 2019 from 8am to 5pm  
Amihan Global Strategies Phils. Inc.  
Unit 2606, 26th Floor Orient Square Building  
F. Ortigas Jr Road  
Ortigas Center, Pasig City

June 22, 2019 from 7:30am to 6pm  
DEVCON Summit  
Room #2, 4th Floor  
SMX Aura, Taguig

On Day 2, the top four performing teams will compete in the finals on the main stage in front of the entire conference, an audience of about 1,500 delegates.

Raise your school colors, make your school proud! Win 4 robots for your school!

## Workshop Details

Learning experiences offered are based on the Computer Science Teachers Association (CSTA) 2017 Standards.

## Schedule

All participants are required to attend both workshops in its entirety. The workshop will include building, programming, and testing a car robot. Everyone must arrive on time and allow 10 minutes for the check in process in the lobby.



## Schedule for Day 1

8:00 am	Registration & Welcome
8:30 am	Experience Computer Programming
10:00 am	Snacks
10:15 am	Meet the BBC Micro:bit
12:30 pm	Lunch
1:00 pm	Build and Program Robots
3:00 pm	Snacks
3:15 pm	Basic Robot Movement Challenges
4:30 pm	Recap
5:00 pm	Dismissal



## Schedule for Day 2

7:30 am	Registration & Welcome
8:00 am	Robotic Sensors
10:00 am	Snacks
10:15 am	Robotic Sensors
12:30 pm	Lunch
1:30 pm	Putting it all Together
3:00 pm	Snacks
3:15 pm	Competition begins
4:00 pm	Championship on Main Stage
4:20 pm	Awarding
5:00 pm	Dismissal from Workshop.



## Cost

Free! Thanks to our Corporate Sponsor, Optum Global Solutions.

The workshops include:

- 16 hours programming course
- Certificates of Participation for all
- Trophies for Winning Team
- Recognition of top performing teams during conference and in Social Media
- Lunch and snacks x 2 days



## The Competition

The competition scenario will be announced on the day of competition. It will be an application of concepts learned over the two days.

Student teams will be randomly assigned to group 1 or 2 to participate in several heats. The top two winners from each group will go “head to head” on stage.

The FINAL Competition will be held in front of all the summit participants in the Main Hall. The winning team will be awarded immediately after the competition.

## The Prize

The winning team gets to take home 4 robot kits to share with the school!

## Questions?

Contact Competition Coordinator Thezza Baluyos @thezza@devcon.ph

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