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- ## Please, introduce yourself

I am a PhD candidate at the Lodz University of Technology, and I am working in the project CMI (https://cmi.edu.pl/) aiming to increase the competence of the teaching staff, i.e., people conducting extracurricular activities developing IT interests, as well as activating IT-talented youth, stimulating creativity and promoting team cooperation within IT clubs. CMI will contribute to increasing the teaching competences of 1500 people running IT clubs and 12000 students.

- ## What type of educational robot does your organization have?

Within the CMI project we are using programmable mobile robots, Kit-based mBOT

- ## How many times did you use the robot?

I have been using robots in practically every robotics class. In the first year of the program, it was necessary to spend more time before the class to understand the behavior of the robot and problems related to exercises.

- ## How and in what contexts your robot be used?

Education of teachers who work with highly skilled high school students.

- ## Which job/ skill/ activity is supported by the robot?

Mainly electrical engineering and software. Robots also helps to understand control algorithms.

- ## If not confidential, who provided your organization with this robot?

https://robotyedukacyjne.pl

- ## How long did the development of the education scenario take?

Development of the core scenario took 1 year but it is still improved.

- ## Is there any ready to use content that you can share with us?

Samples created by robot supplier are available
https://robotyedukacyjne.pl/scenariusze-lekcji.

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- Have you experienced any problem(s) with the robot?

Sometimes there is a problem with communication when a battery has low voltage.

- How was the problem resolved?

Charging the battery is enough.

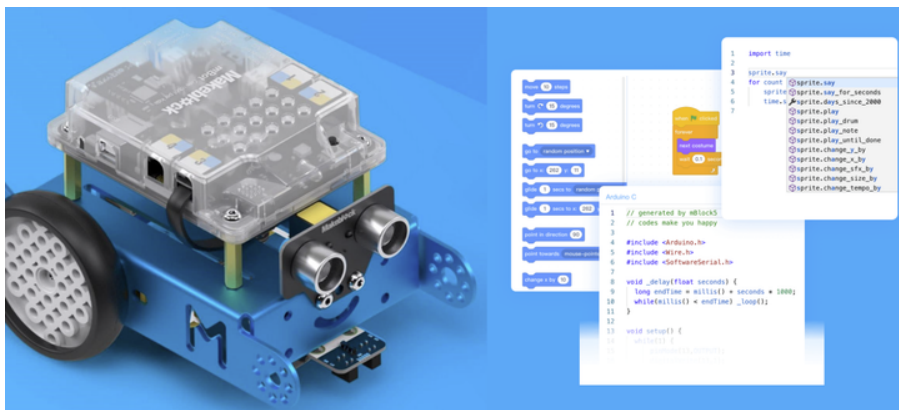- What consequences did this have on your day-to-day operations?

It's not a big deal when you know the cause of problem.

- Does the robot need additional kit of components to be fully working in the sphere chosen?

It depends on what we mean by fully working. Software and additional packages are free and gives full possibilities of programing. Kit with robot has some sensors but you can buy another package with different sensors and actuators.

- Is there anything else you would like to share with us?

The biggest obstacle to learning robotics is the approach to teaching it. Very often, people learning robotics do not know the basics such as the principle of operation of sensors or the basics of electronics. Very often, this basic knowledge is presented in an academic way, which is not necessarily adequate to the level of the class or part of this knowledge is not very important.