

# micro:bit WORKSHOP

*micro:bit is a small programmable computer and an **innovative educational tool** for teaching programming, robotics and automation. It is designed to be fun and easy to use. It can be coded with no prior knowledge computing. Being so easy to use it is an excellent spring board to more complex programming skills. After learning the basics you can program it with various programming languages such as Python and JavaScript. It also connects to other devices, sensors, kits and objects. There is no upper limit in the variety of micro:bit-projects!*

## **micro:bit robotics workshop (1 day)**

### **Morning session (08:30-11:30)**

Coffee and introductions  
Programming intro / recap  
Key features of micro:bit  
Programming environments  
Short programming exercises

### **Concepts:**

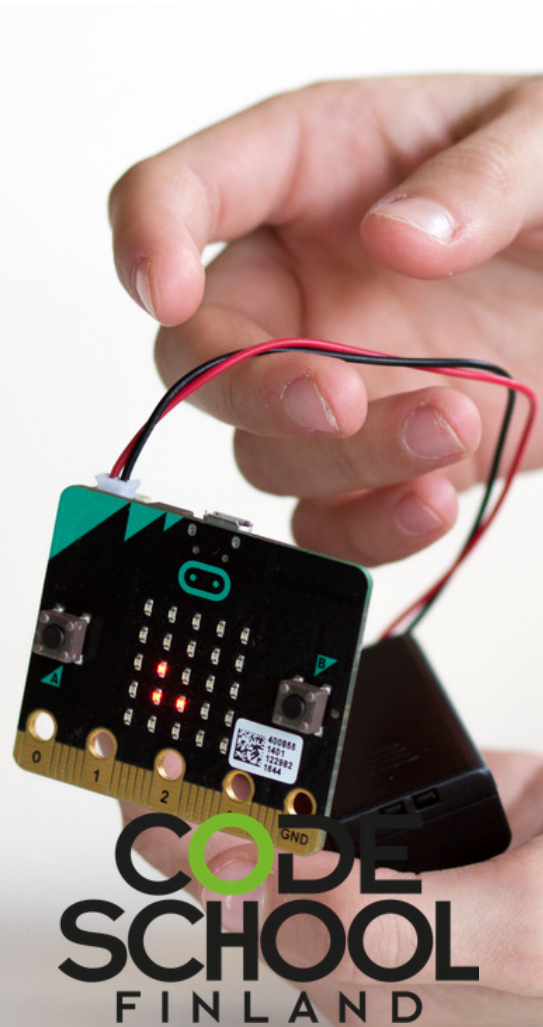
Censor usage, random generator, looping, conditional statements, variables, math, music  
flashing the code, debugging, connecting accessories

### **Afternoon session (13-16)**

Implementation of robotics projects in pairs or teams.  
Students can pick a project or create their own!

- 1) micro:pet (beginner)
- 2) micro:temperature gauge (moderate)
- 3) micro:monster (moderate) - light activated milk cartoon robot that moves its jaws
- 4) micro:bit selfie remote (advanced)

Presentation of projects & closure



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## micro:bit robotics workshop

Tuition and trainer support during the day  
micro:bit devices, parts, selection of handicraft  
materials and tools to use for the implementation  
projects.

## Micro:bit take-away robotics kit

Take your project home!

Take-away kit will enable creation of many different  
robotics projects back home.

Contains:

1 x micro:bit device

1 x battery holders

2 x AAA batteries

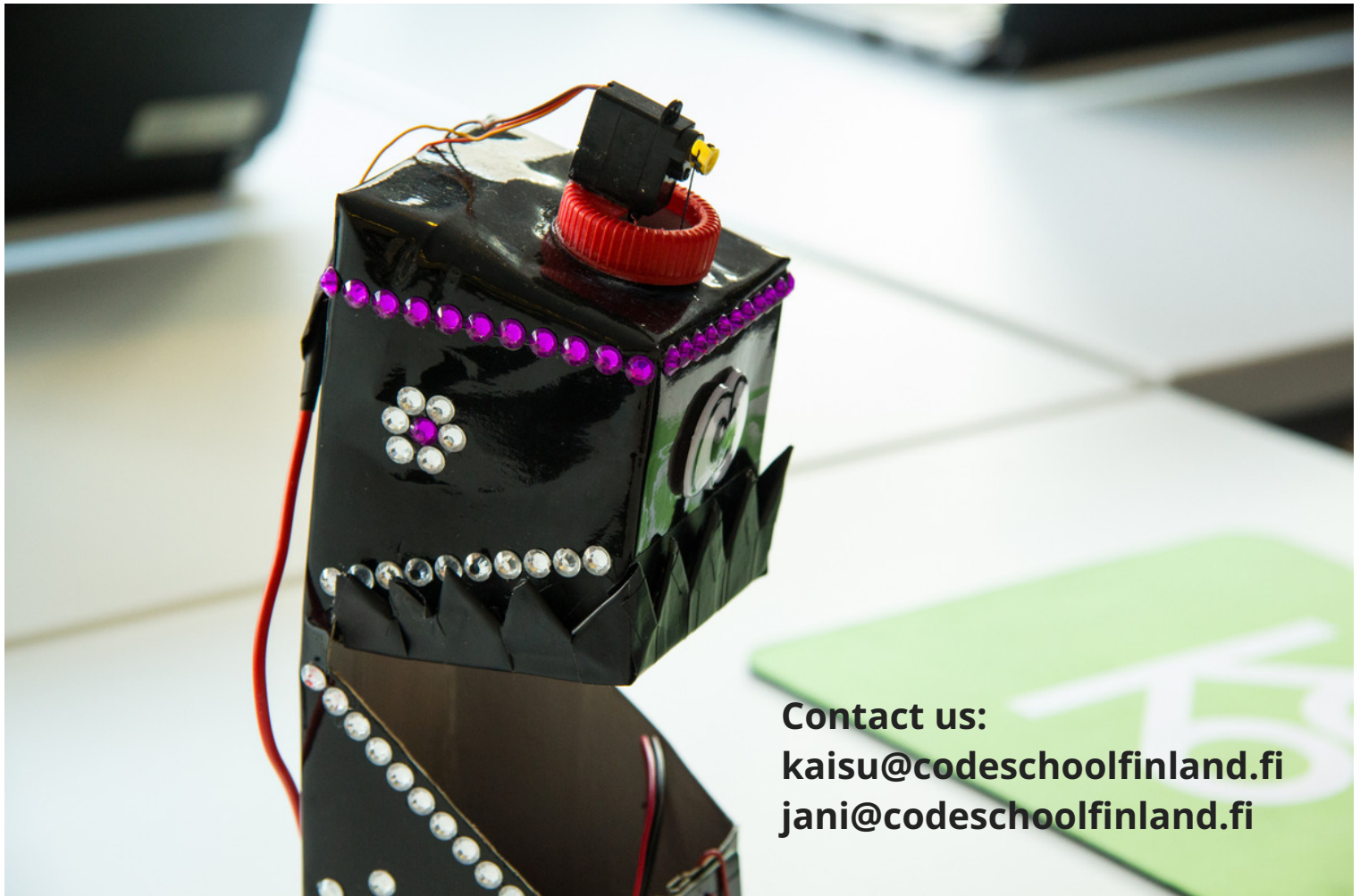
1 x USB cable

1 x micro servo motor

2 x alligator clips

***NOTE: delivery time 3-4 weeks; must be pre-ordered!***

*Minimum 20 students.*



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