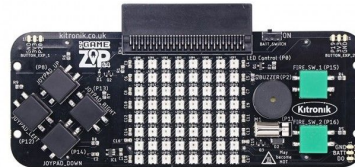
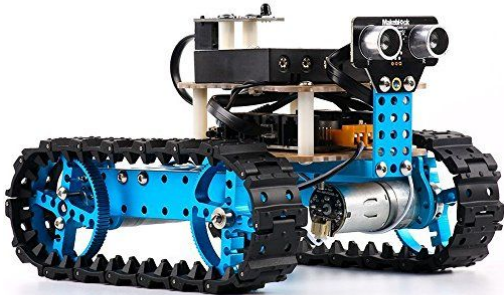
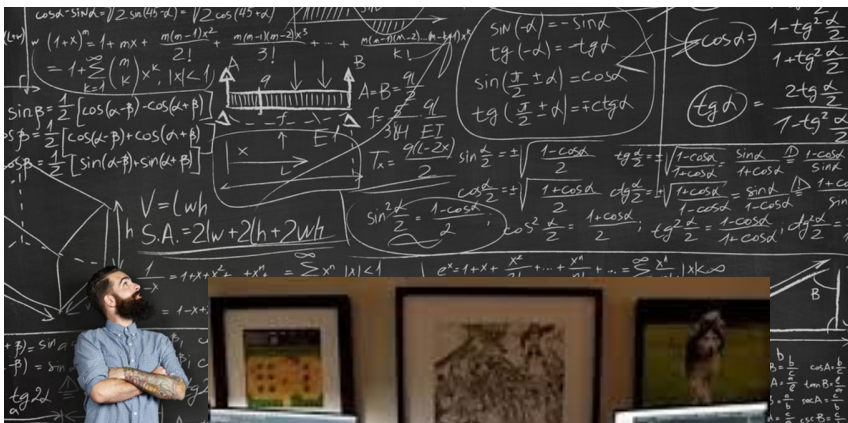




Teaching using micro computers



#STEM
#Robotics
#Electronics
#IoT
#Hardware



VS





It's okay to not be good at coding. Even non-programmers have once coded of it

Note about me

I'm not a professional teacher

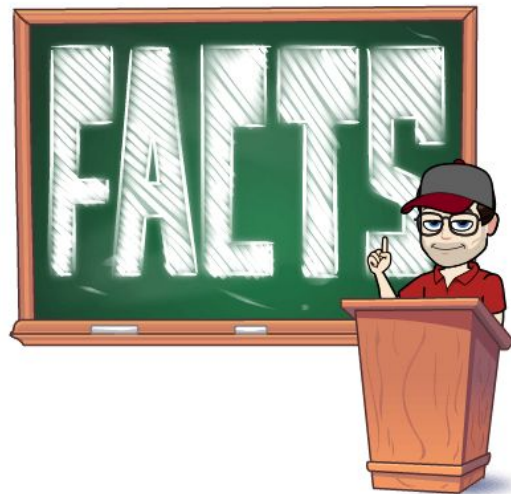
Passionate about teaching and technology.
Love to work with open communities
Software Engineer, CoderDojo Mentor

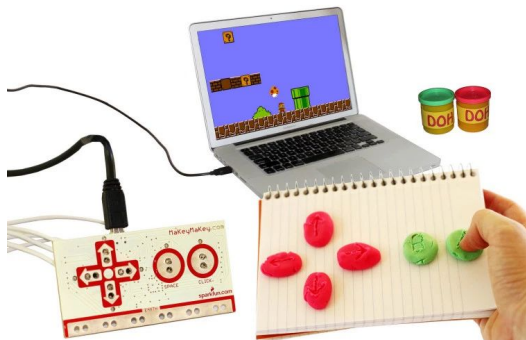


[wojtroken](https://twitter.com/wojtroken)

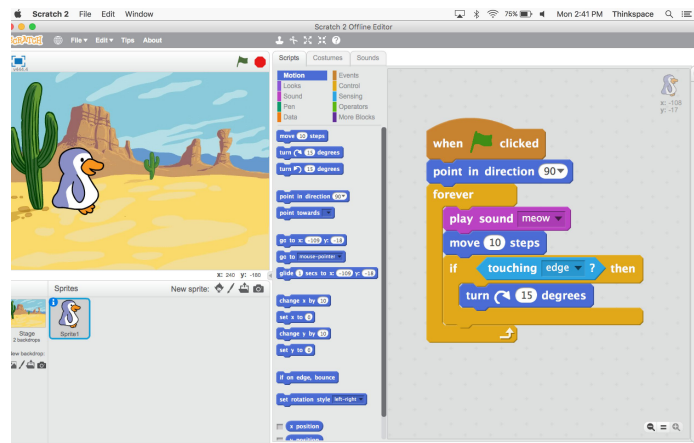
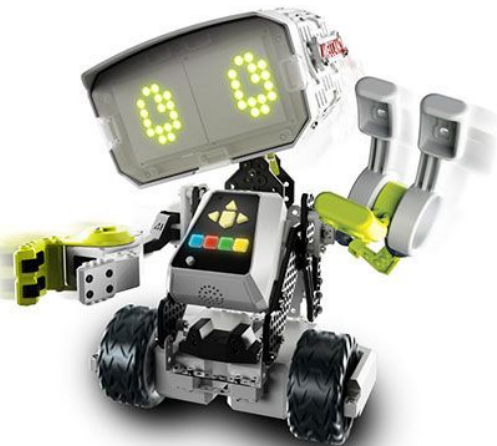


[pantommie](https://www.instagram.com/pantommie)





Software vs hardware



Is this hard or expensive?



LEGO
MINDSTORMS...

€395.99

RobotShop.com

Free delivery

By Google



BBC micro:bit
Programmable...

€17.50

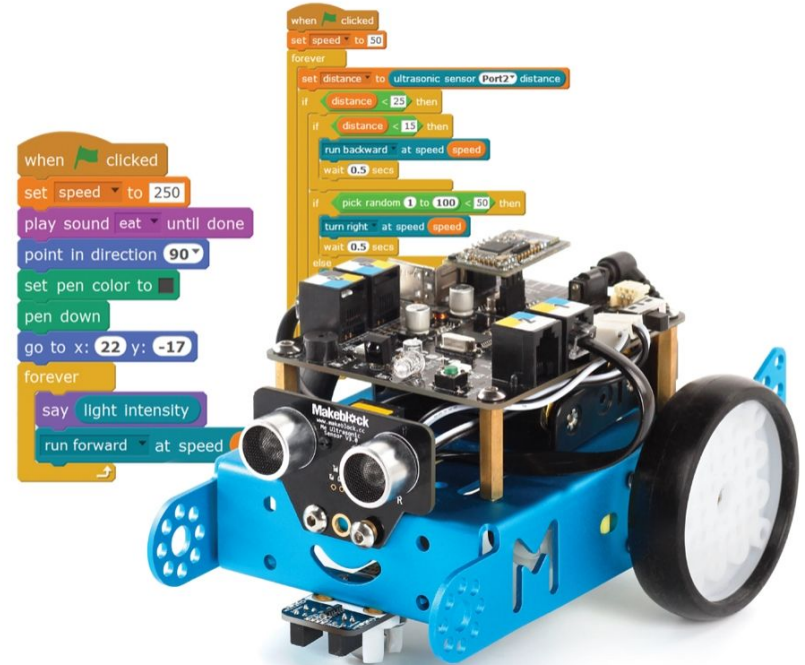
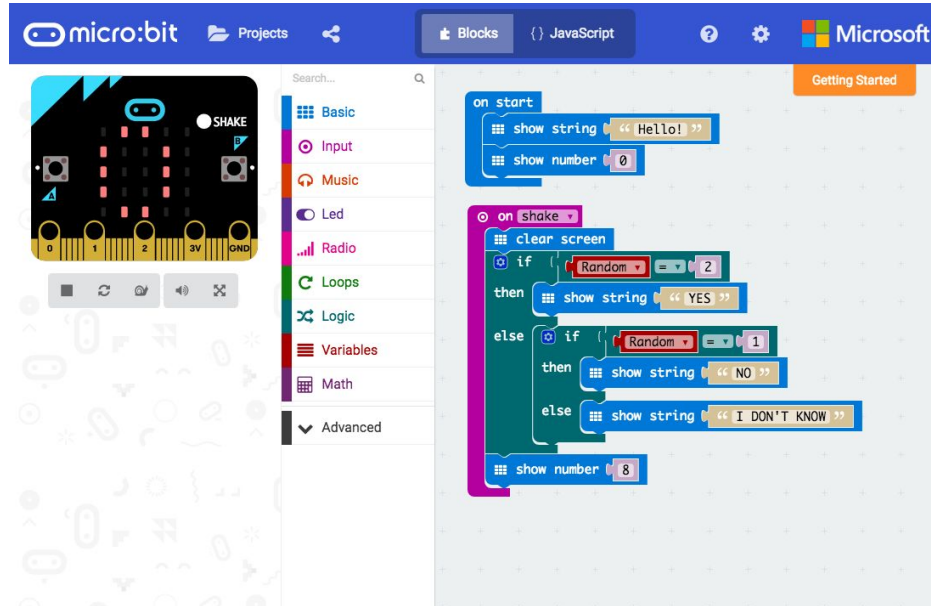
RobotShop.com

★★★★★ (68)

By Google



Coding can be simple



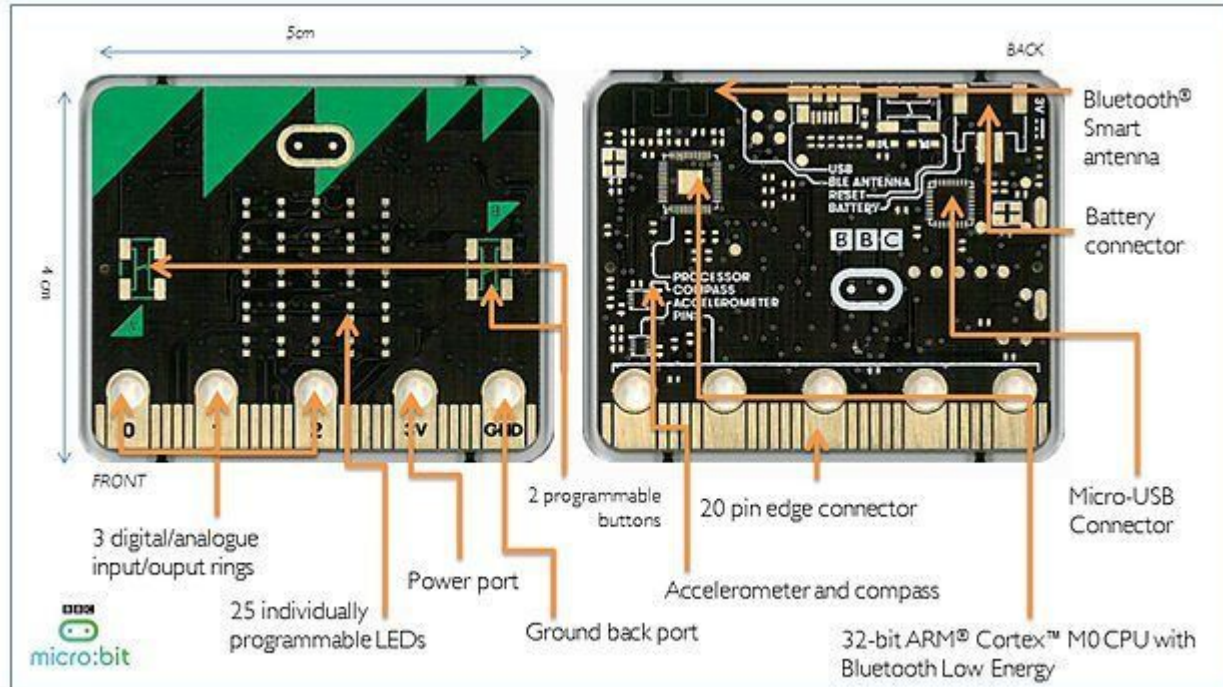


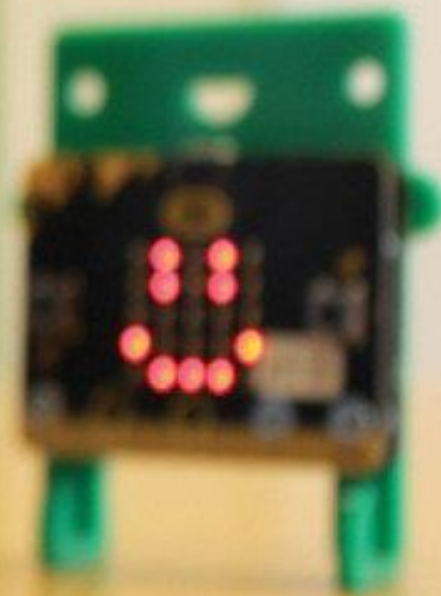
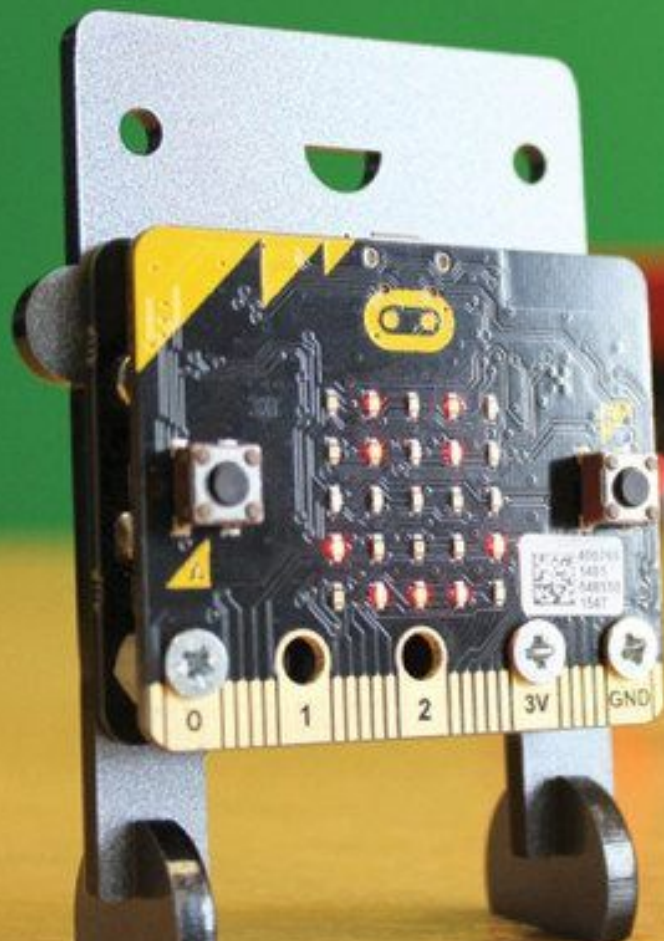
GET CREATIVE GET CONNECTED GET CODING

micro:bit is a tiny programmable computer, designed to make learning and teaching easy and fun!

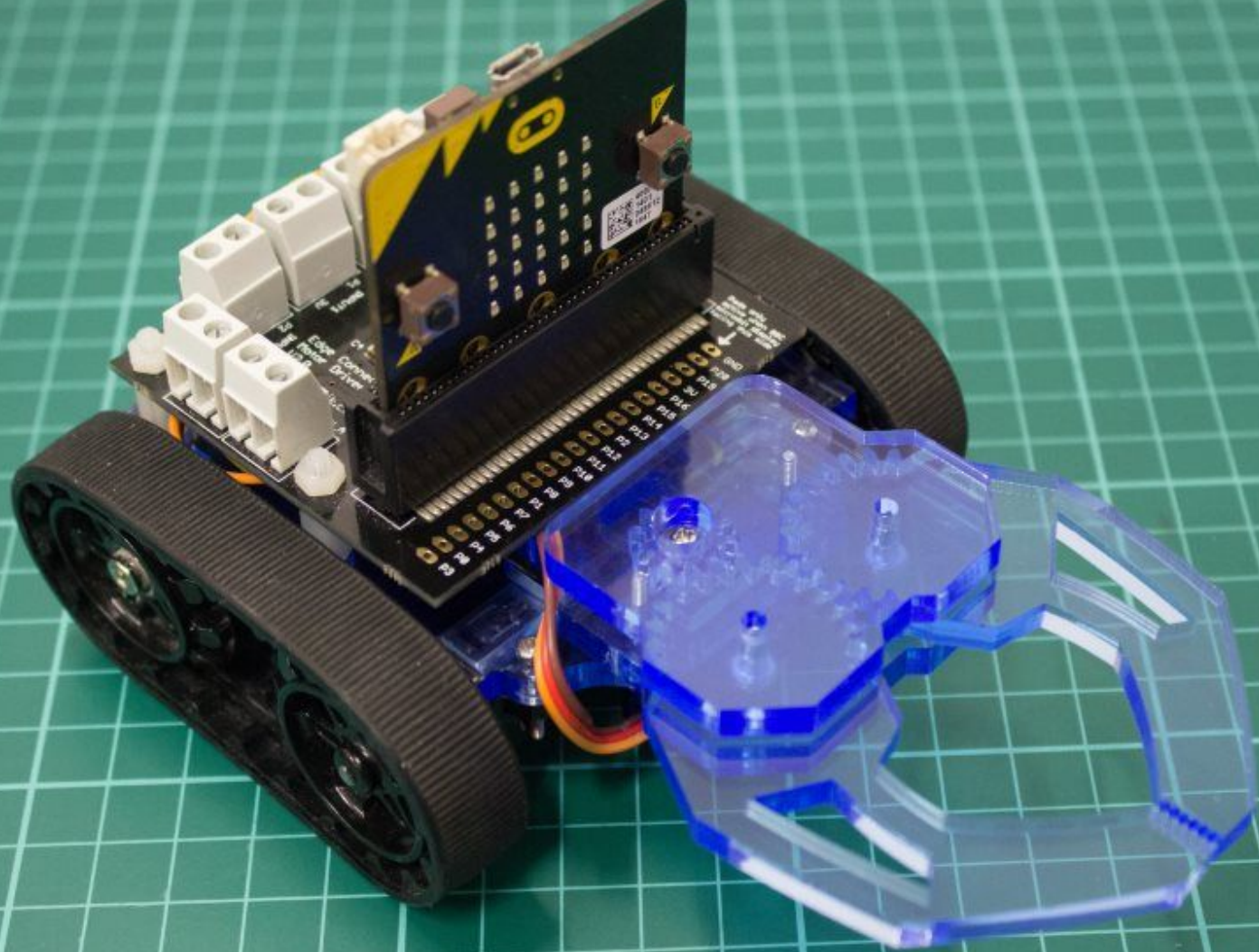


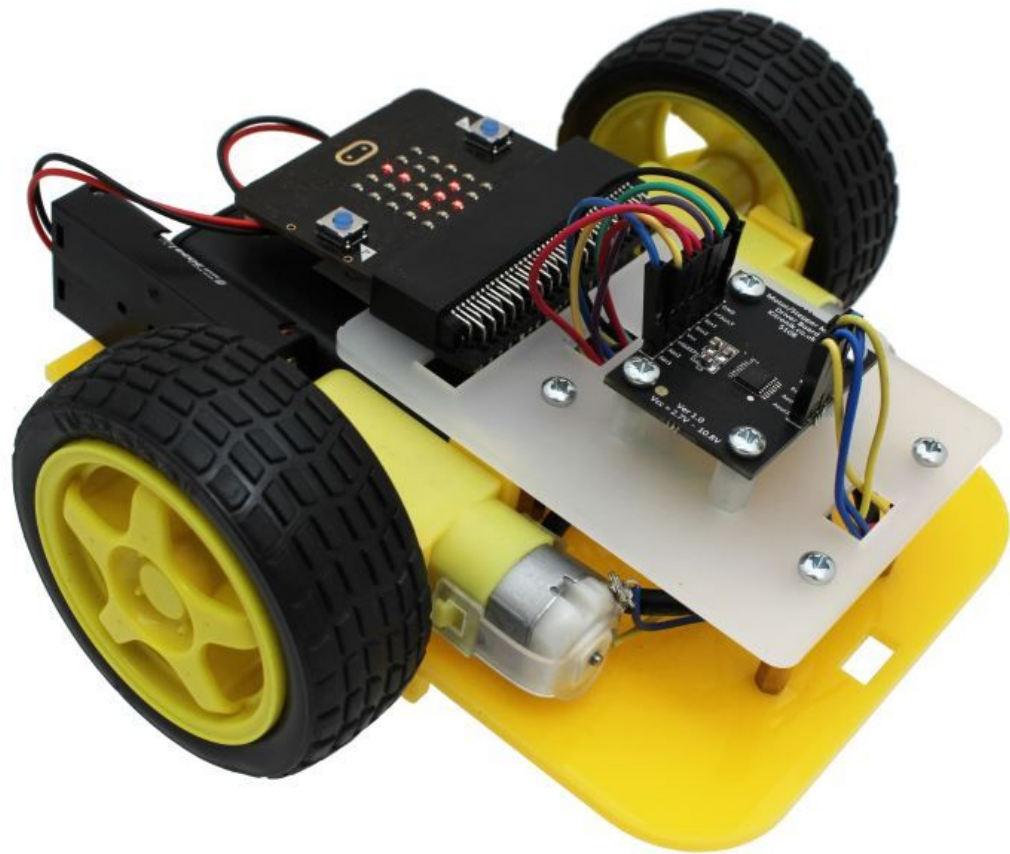
Micro size == Large possibilities



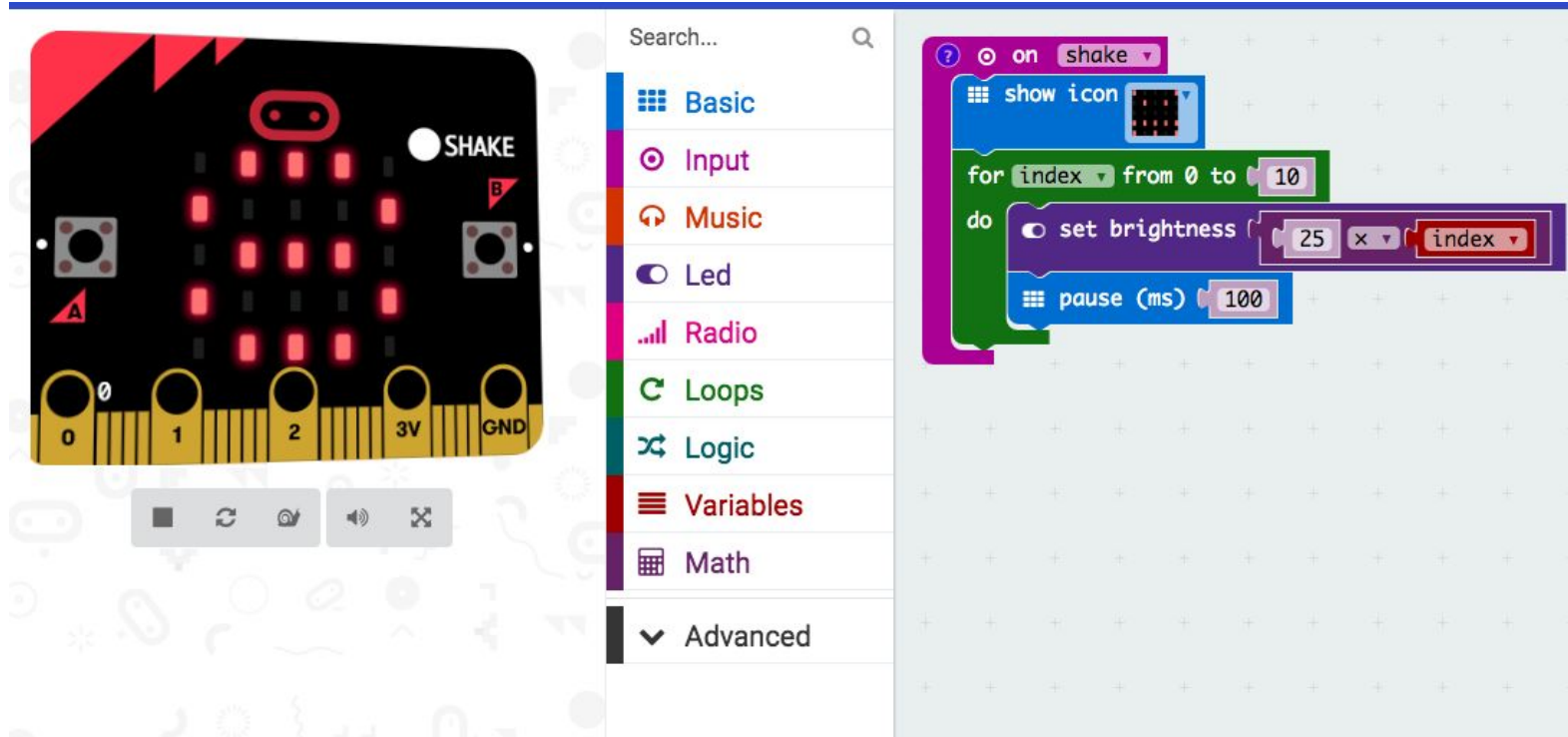








Software support

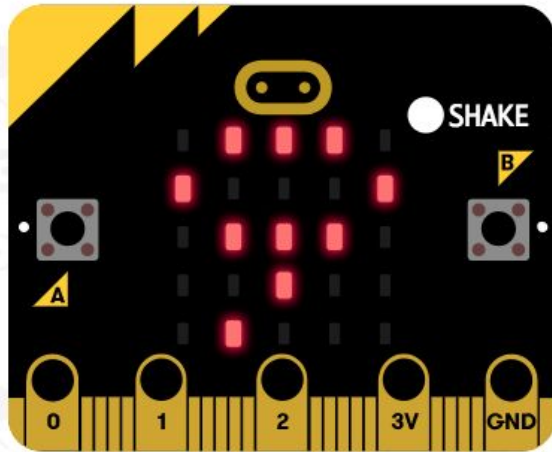


The image displays a software interface for programming a microcontroller board, likely an Arduino Uno, using a Scratch-like block-based programming language. The interface is divided into three main sections:

- Hardware View (Left):** A top-down view of the microcontroller board. It features a grid of red LEDs, a "SHAKE" button, and a ruler at the bottom with labels for pins 0, 1, 2, 3V, and GND. Below the board view are icons for a square, a refresh button, a camera, a speaker, and a crosshair.
- Category List (Middle):** A vertical sidebar with a search bar at the top. It contains the following categories: Basic, Input, Music, Led, Radio, Loops, Logic, Variables, Math, and Advanced. Each category is represented by a colored icon and text.
- Code Editor (Right):** A workspace for writing code blocks. The current code is as follows:

```
on shake
  show icon [LED icon]
  for index from 0 to 10
  do
    set brightness [25 x index]
    pause (ms) [100]
```

Software support



Basic

Input

Music

Led

Radio

Loops

Logic

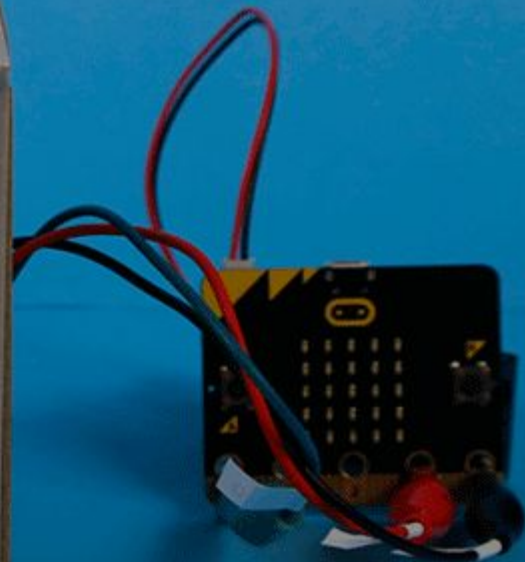
Variables

Math

Advanced

```
1 let clock = 0
2 let secretCode = ""
3 // I do not like shakes
4 input.onGesture(Gesture.Shake, function() {
5   basic.showIcon(IconName.Heart)
6   for (let index = 0; index < 10; index++) {
7     led.setBrightness(255 - index * 25)
8     basic.pause(100)
9   }
10 })
11 // Because there is always
12 // build
13 function mobileNext() {
14   code = ""
15   for (let index2 = 0; index2 < 10; index2++) {
16     // Probably a bug,
17     basic.showNumber(9 - index2)
18     basic.pause(4000)
```

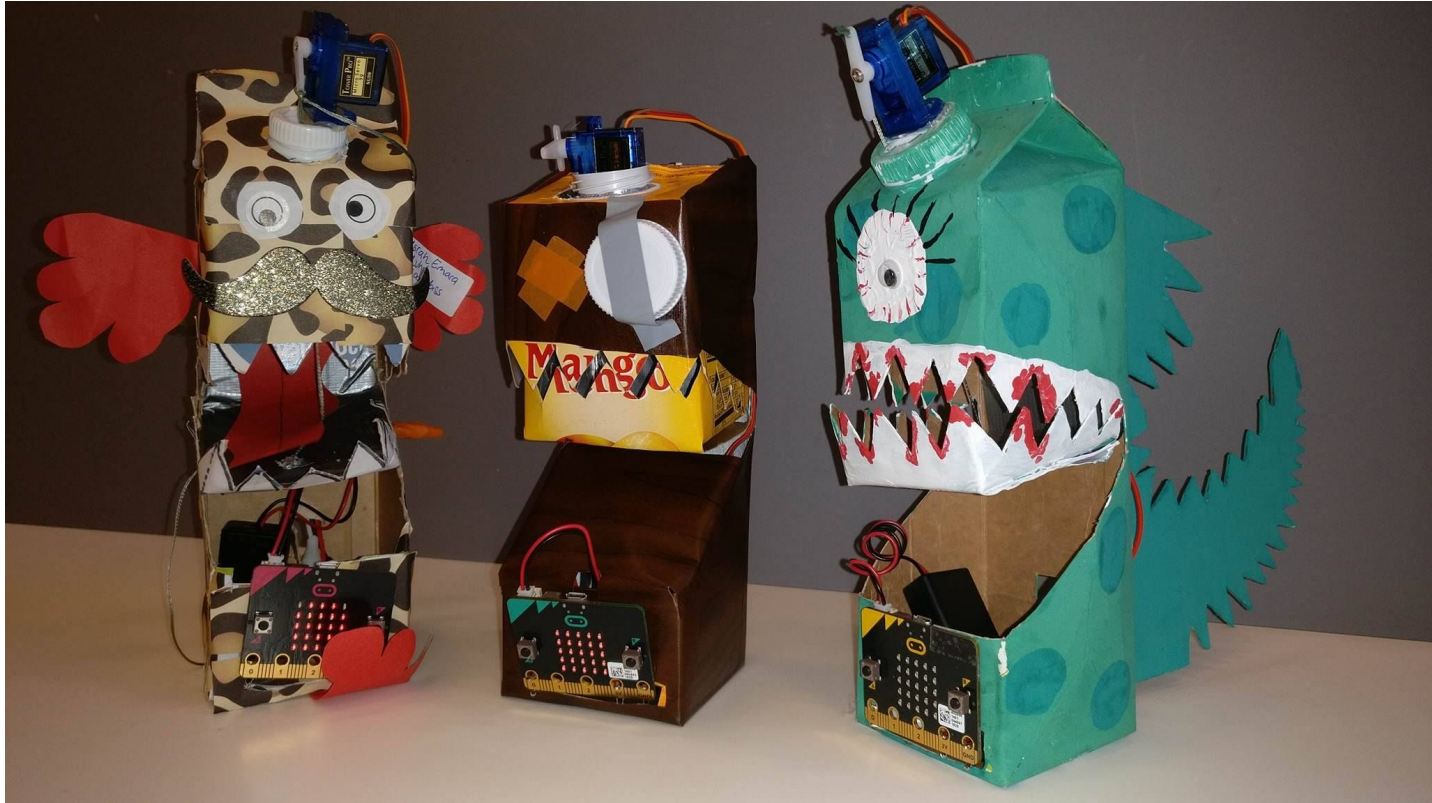
YES



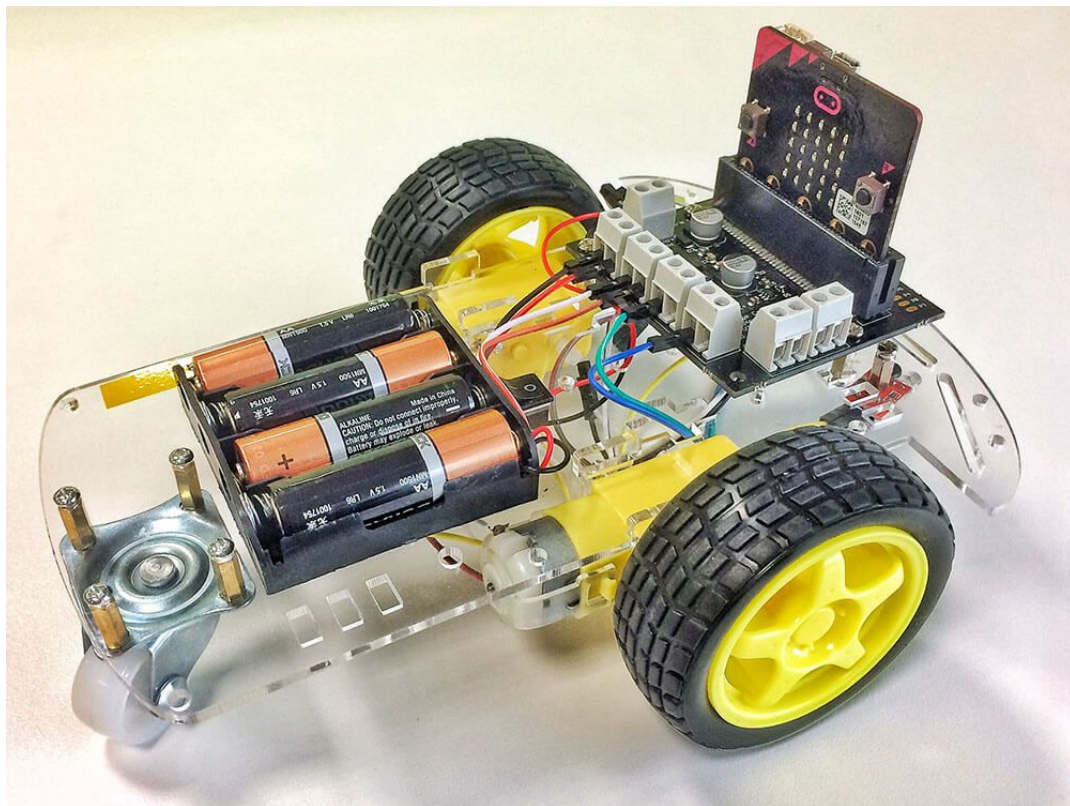
Microbit Step Counter



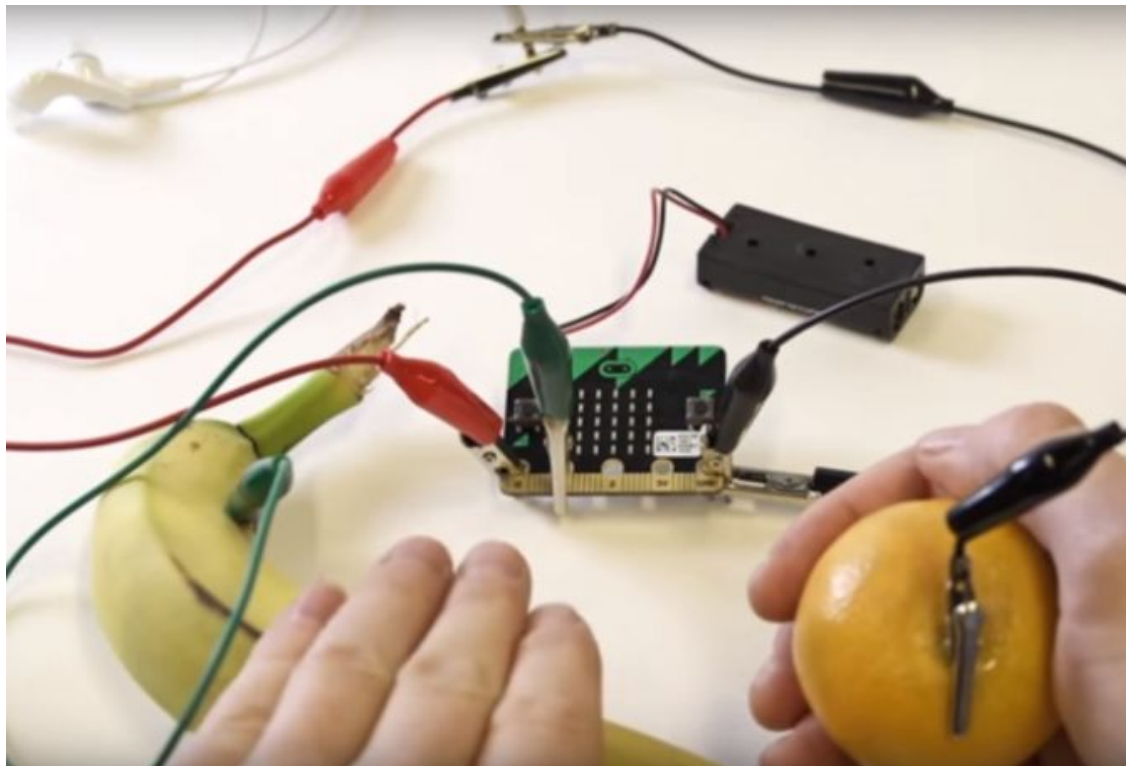
Milk Carton Robot



Robot Car



Banana keyboard



Workshop

