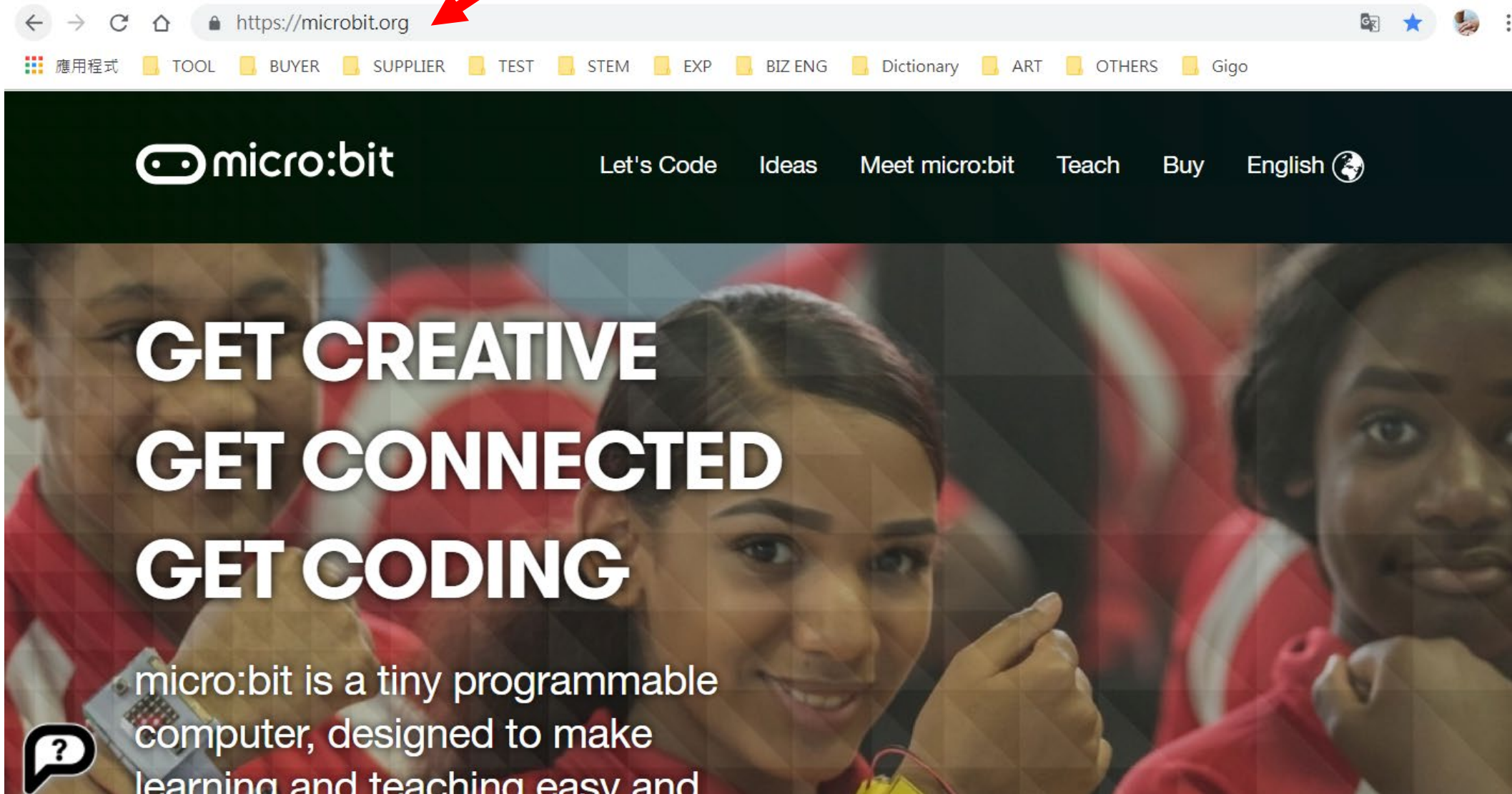


Tobbie II Extension

In order to use motor and IR functions you need to add the Tobbie II extension. Follow the steps below

STEP 1: Go to micro:bit website

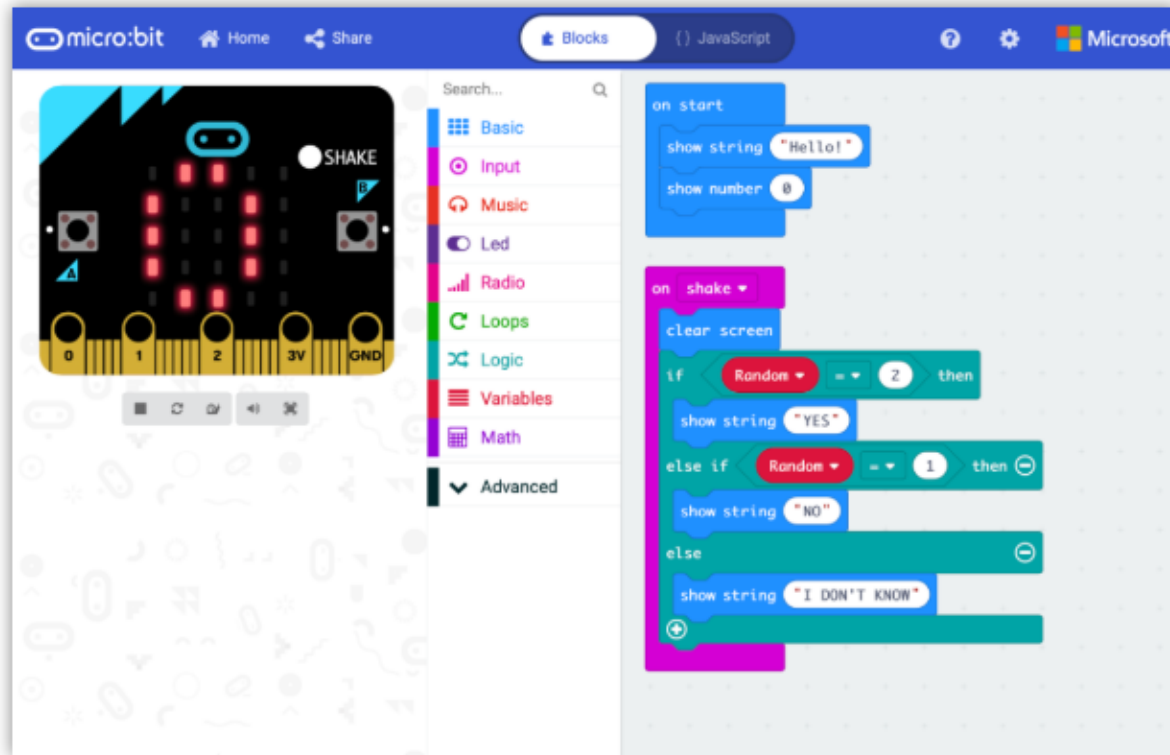


The screenshot shows a web browser displaying the micro:bit website. The address bar contains the URL <https://microbit.org>, which is highlighted by a red arrow. Below the address bar is a navigation menu with various categories: 應用程式, TOOL, BUYER, SUPPLIER, TEST, STEM, EXP, BIZ ENG, Dictionary, ART, OTHERS, and Gigo. The main header features the micro:bit logo and navigation links: Let's Code, Ideas, Meet micro:bit, Teach, Buy, and English. The main content area has a large banner with the text "GET CREATIVE", "GET CONNECTED", and "GET CODING" in white, bold letters. Below this, a smaller text block reads "micro:bit is a tiny programmable computer, designed to make learning and teaching easy and". A small speech bubble icon with a question mark is visible in the bottom left corner of the banner.

STEP 2: Click “Let’s Code”

The image shows a browser window displaying the micro:bit website. The address bar shows the URL <https://microbit.org>. The navigation menu includes the micro:bit logo, a button labeled "Let's Code" (highlighted with a white box and a red arrow), and other links: "Ideas", "Meet micro:bit", "Teach", "Buy", and "English" with a globe icon. Below the navigation bar is a large banner with the text "GET CREATIVE", "GET CONNECTED", and "GET CODING" in large white letters. Underneath, it says "micro:bit is a tiny programmable computer, designed to make" followed by a question mark icon and the text "easy and". The browser's taskbar at the bottom shows several open files: "09Notice Board (1).hex", "09Notice Board.hex", and "11.Bowling.hex". The system tray in the bottom right corner shows the date and time: "下午 03:34 2019/3/12".

STEP 3: Scroll down to “Let’s Code” and click



MakeCode Editor

The MakeCode editor provided by Microsoft makes it easy to program your micro:bit with blocks and JavaScript.

We have recently updated the editor, and the [previous version](#) is still available for anyone that needs it. If you have any issues accessing the editor, check that it isn't [blocked](#) in your school.

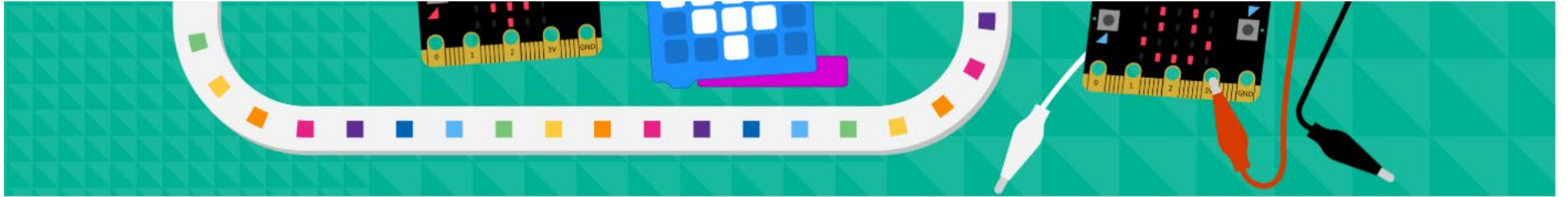
Let's Code

Reference


Lessons




STEP 4: Click “New Project”




My Projects Import



New Project

 Untitled

9 minutes ago

 CH11猜拳

15 days ago

 Smiley But

1

Tutorials

STEP 5: Click settings and then "Extensions"

The screenshot shows the Microsoft MakeCode editor interface for a micro:bit project. The top navigation bar includes the 'micro:bit' logo, 'Home', 'Share', 'Blocks', and 'JavaScript' tabs. A settings gear icon is located in the top right corner, with a red arrow pointing to it. The settings menu is open, showing options like 'Project Settings', 'Extensions' (highlighted in yellow), 'Delete Project', 'Report Abuse...', 'Language', 'High Contrast On', 'Reset', 'Pair device', and 'About...'. The main workspace displays a micro:bit board with a script area containing 'on start' and 'forever' blocks. A left sidebar lists various categories: Basic, Input, Music, Led, Radio, Loops, Logic, Variables, Math, and Advanced. At the bottom, there is a 'Download' button and a file name 'Untitled'.

STEP 6: Search for "Tobbie II"

← Go back Extensions ?

Tobbie II

bluetooth
Bluetooth services

devices
BETA - Camera, remote control and other Bluetooth services. App required.

radio-broadcast

servo
A micro-servo library

led-strip
A library for controlling LED strips

robot
A library for controlling a robot

arduino
A library for controlling an Arduino board

micro:bit
A library for controlling a micro:bit

STEP 7: Click searching result

← Go back

Extensions

?

Tobbie II



tobbiell

Tobbie-II for micro:bit

Learn more

Want to create your own extension? [Login to GitHub](#)

STEP 8: You will see Tobbie II extensions on left side

The image shows the Microsoft MakeCode editor interface for a micro:bit. At the top, there is a navigation bar with 'micro:bit', 'Home', 'Share', 'Blocks', and 'JavaScript' tabs. The 'Blocks' tab is active. On the left, there is a visual representation of the micro:bit board with pins labeled 0, 1, 2, 3V, and GND. Below the board are icons for running, erasing, and saving. The central area is a search bar labeled 'Search...' with a magnifying glass icon. Below the search bar is a list of extension categories: Basic, Input, Music, Led, Radio, Loops, Logic, Variables, Math, Tobbiell, and Advanced. The 'Tobbiell' category is highlighted in yellow, and a red arrow points to it. To the right of the search bar is a workspace with a grid background and two blue blocks: 'on start' and 'forever'. At the bottom, there is a 'Download' button, a file name field containing 'Untitled', and navigation icons for undo, redo, and zoom.

STEP 9: Click and acquire basic pre-coded moves

The screenshot displays the Microsoft MakeCode editor interface for a micro:bit. The top navigation bar includes the 'micro:bit' logo, 'Home', 'Share', 'Blocks', and 'JavaScript' tabs, along with a help icon, a settings gear, and the Microsoft logo. A red arrow points to the settings gear icon.

On the left, a virtual representation of the micro:bit board is shown with pins labeled 0, 1, 2, 3V, and GND. Below the board are icons for running, refreshing, and other actions.

The central panel features a search bar and a category menu with the following options: Basic, Input, Music, Led, Radio, Loops, Logic, Variables, Math, and Tobbiell (highlighted in orange). A 'more' option is also visible.

The right panel shows a pre-coded script for a 'Tobbiell' robot, enclosed in a yellow box. The script consists of the following blocks:

- get right IR data
- get left IR data
- is the right IR over 512 strength
- is the left IR over 512 strength
- Tobbie-II walking forward
- Tobbie-II walking backward
- Tobbie-II stop walking
- Tobbie-II turns right
- Tobbie-II turns left

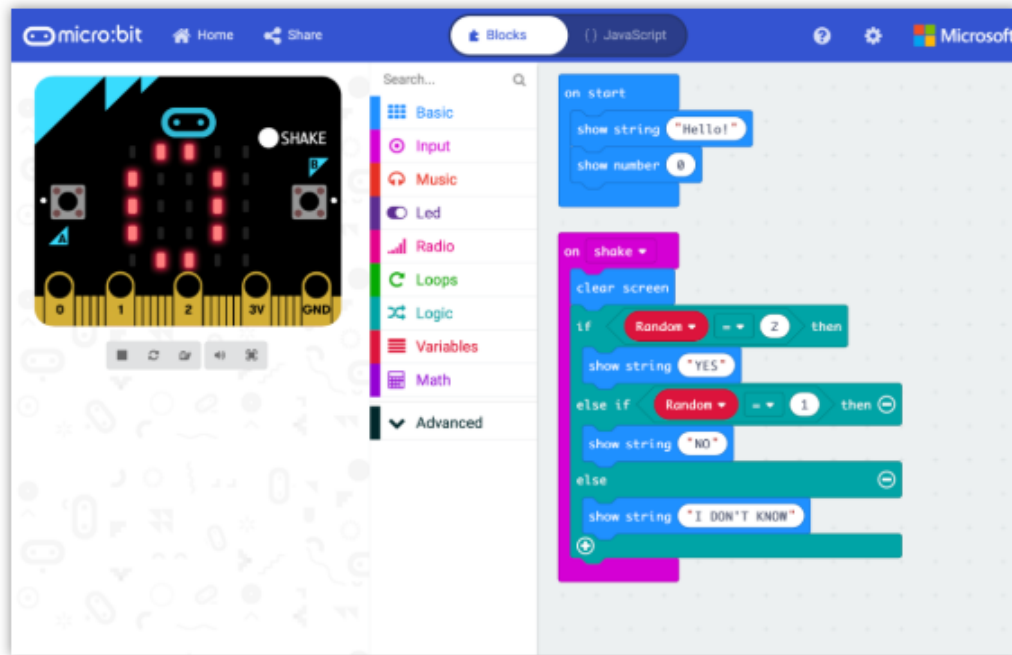
At the bottom, there is a 'Download' button, a file name 'Untitled', and navigation controls for undo, redo, and zoom.

Coding is about trial and error, learning from making mistakes. Any questions regarding how to make codes on micro:bit website, pls visit pages below.



Did you know that you can code your BBC micro:bit using Blocks, JavaScript, and Python?

If you have never used a BBC micro:bit try our [Quick Start Guide](#). ← **RESOURCE 1**



MakeCode Editor

The MakeCode editor provided by Microsoft makes it easy to program your micro:bit with blocks and JavaScript.

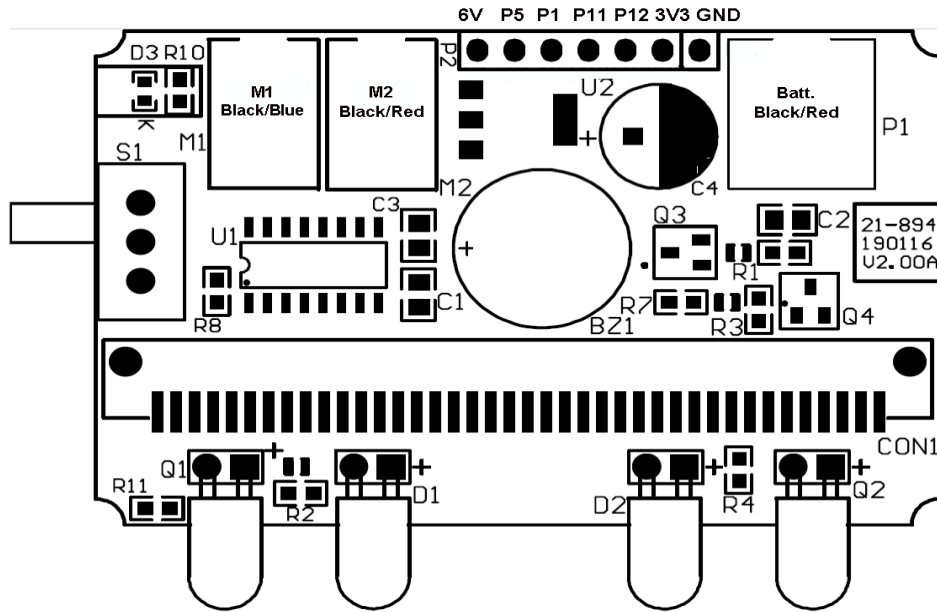
We have recently updated the editor, and the previous version is still available for anyone that needs it. If you have any issues accessing the editor, check that it isn't blocked in your school.

Let's Code

Reference

Lessons ← **RESOURCE 2**

URL: refer to Step 2 & 3



Micro:bit_Board	894 (Tobbie II Controller board)	
P0	Buzzer (BZ1)	Make a sound
P12	IR_TX (transmitter) (D1,D2)	Transmit IR
P1	IR_RX (Right) (Q1)	Receiving IR (Right)
P2	IR_RX (Left) (Q2)	Receiving IR (Left)
P13	M1A (Motor A+) (Blue)	Motor1 Output
P14	M1B (Motor A-) (Black)	Motor1 Output
P15	M2A(Motor B+) (Red)	Motor2 Output
P16	M2B (Motor B-) (Black)	Motor2 Output

