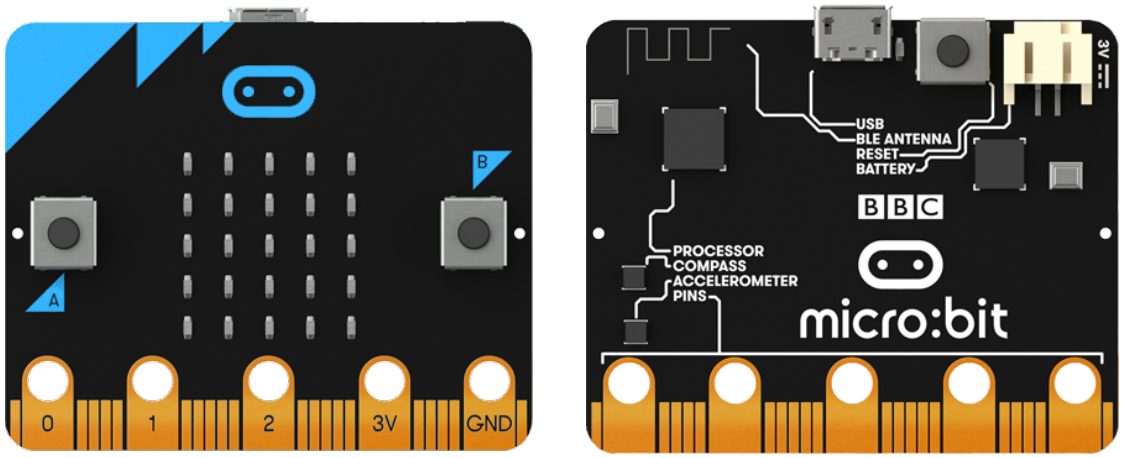
What is a Micro:Bit?

It is a pocket-sized computer 70 times smaller and 18 times faster than the original BBC Micro computers used in schools. It has 25 red LED lights that can flash messages and be used to create games.

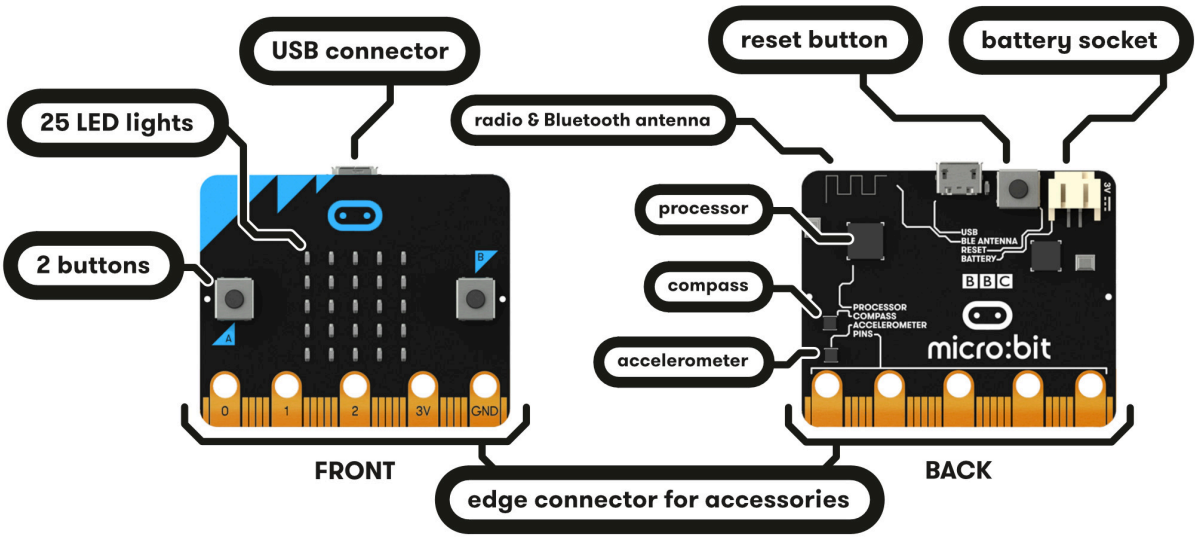


There are two programmable buttons that can be used to control games or pause and skip songs on a playlist.

It has an accelerometer so it can detect motion and knows when you're on the move. The built-in compass knows which direction you're heading in and it can use a low energy Bluetooth connection to interact with other devices and the Internet. You can find more information on the hardware in our guide.

(Source: https://support.microbit.org/support/solutions/articles/19000013983-what-is-a-micro-bit-)

Overview:



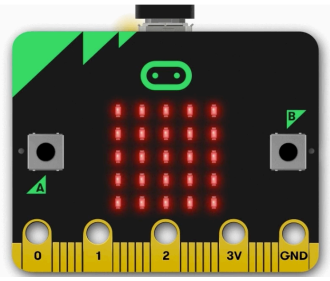
Your micro:bit has the following physical features:

- 25 individually-programmable LEDs
- 2 programmable buttons
- Physical connection pins
- Light and temperature sensors (Temperature sensor is embedded in the processor; LEDs work as a light sensor)
- Motion sensors (accelerometer and compass)
- Wireless Communication, via Radio and Bluetooth
- USB interface

(Source: https://microbit.org/guide/features/)

Let's start coding!

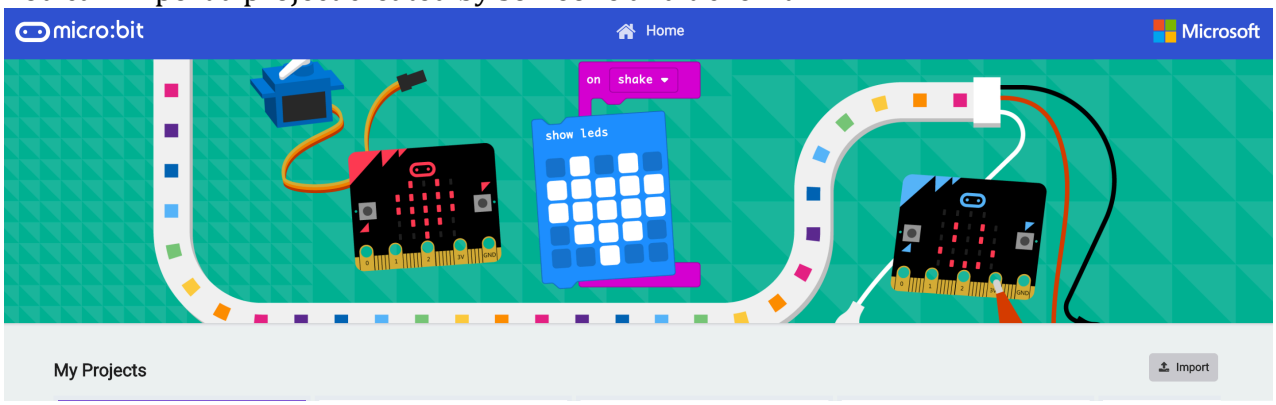
Step 1: Connect It
Connect the micro:bit to your computer via a micro USB cable.



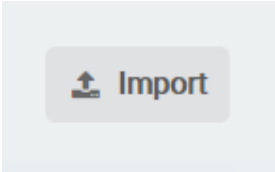
Your micro:bit will show up on your computer as a drive called 'MICROBIT'.

Step 2: Program It
Coding with MakeCode editor: https://makecode.microbit.org/

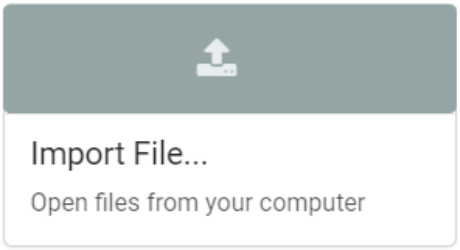
You can import a project created by someone and ticker it!



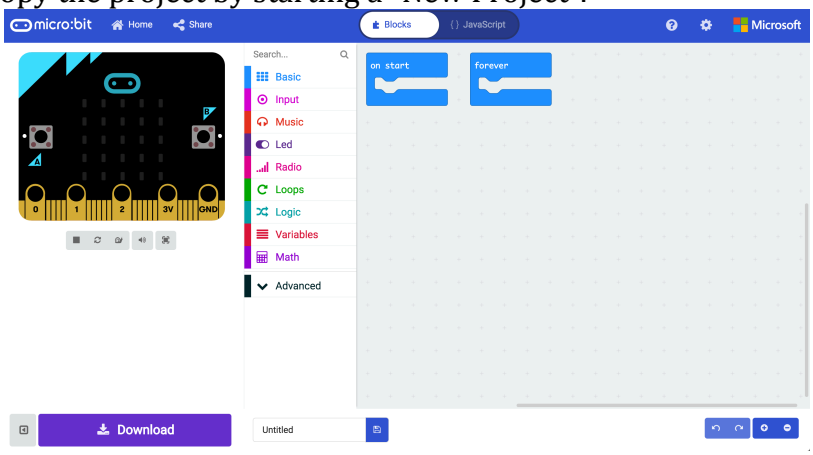
At the right of **My Projects** on the home screen, click on the **Import** button and then click on **Import File** in the import dialog. Select the file that you just saved to your computer in the previous step.



then...

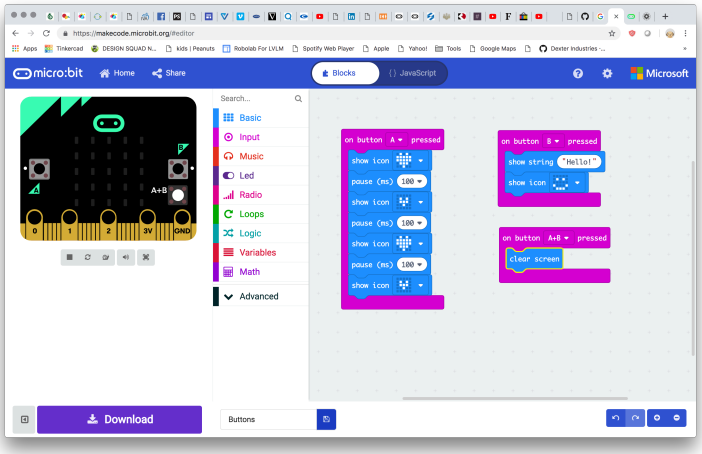


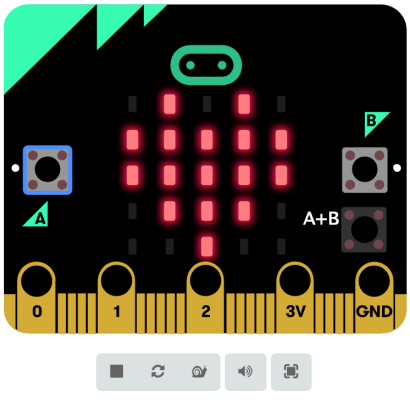
Or you can copy the project by starting a “New Project”.

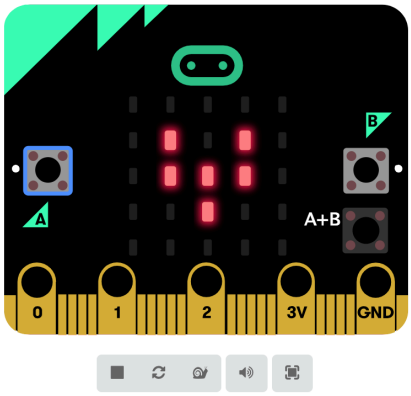


Name your project by typing in a name here, like “my first code”:

Once you create a project, the simulator on your left lets you play with it before downloading it onto your Micro:Bit.



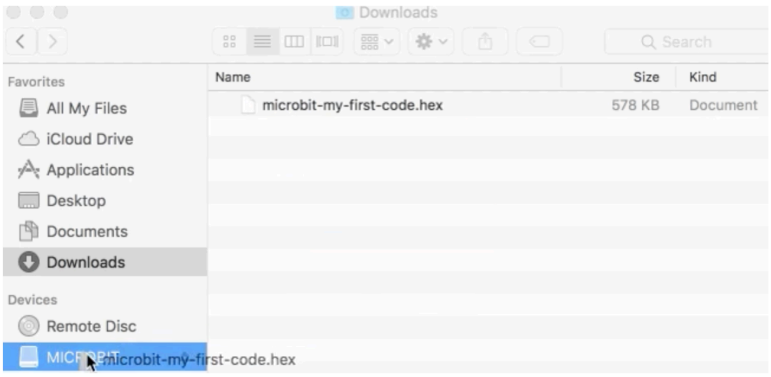




Step 3: Download It
Click the Download button in the editor. This will download a 'hex' file, which is a compact format of your program that your micro:bit can read.
NOTE: Remember where you downloaded the hex file!

Once the hex file has downloaded, copy it to your micro:bit just like copying a file to a USB drive.

Mac Drag and Drop



Step 4: Play It
The micro:bit will pause and the yellow LED on the back of the micro:bit will blink while your code is programmed. Once that's finished the code will run automatically!