

Introduction to Micro:bit

# Introduction

In this lesson, we will learn how use Micro:bit programming environment. We will create a simple led drawing and load it into the micro:bit controller.

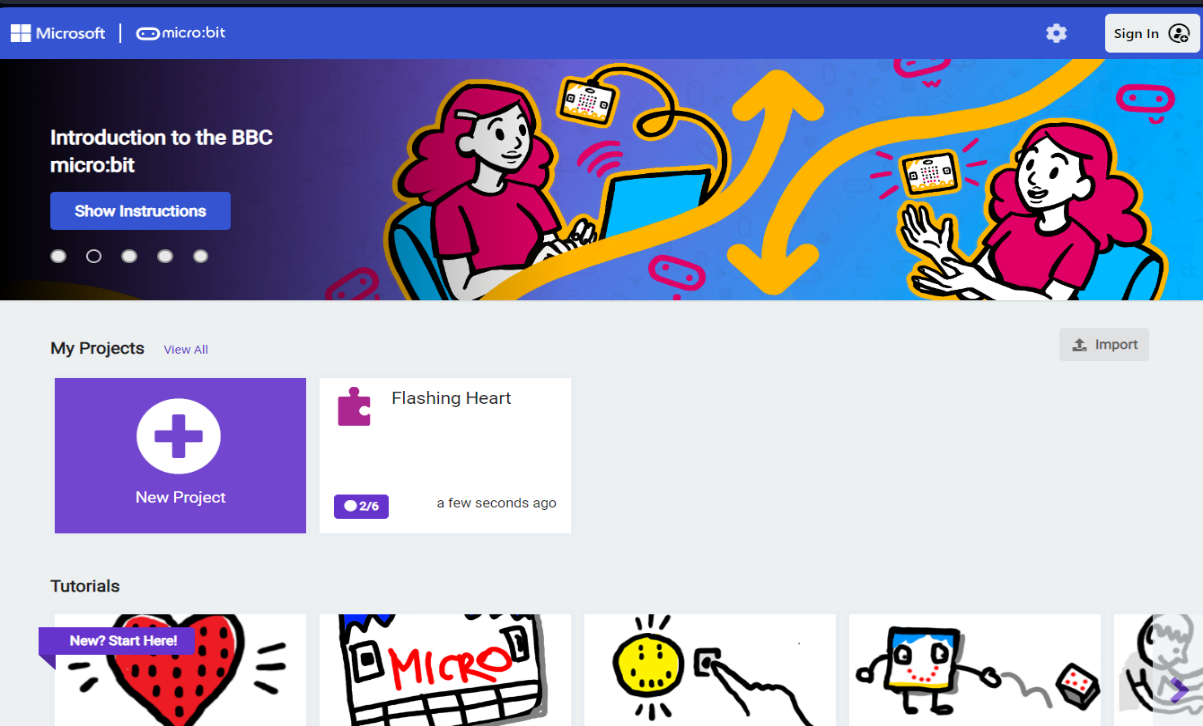
# Necessarry:

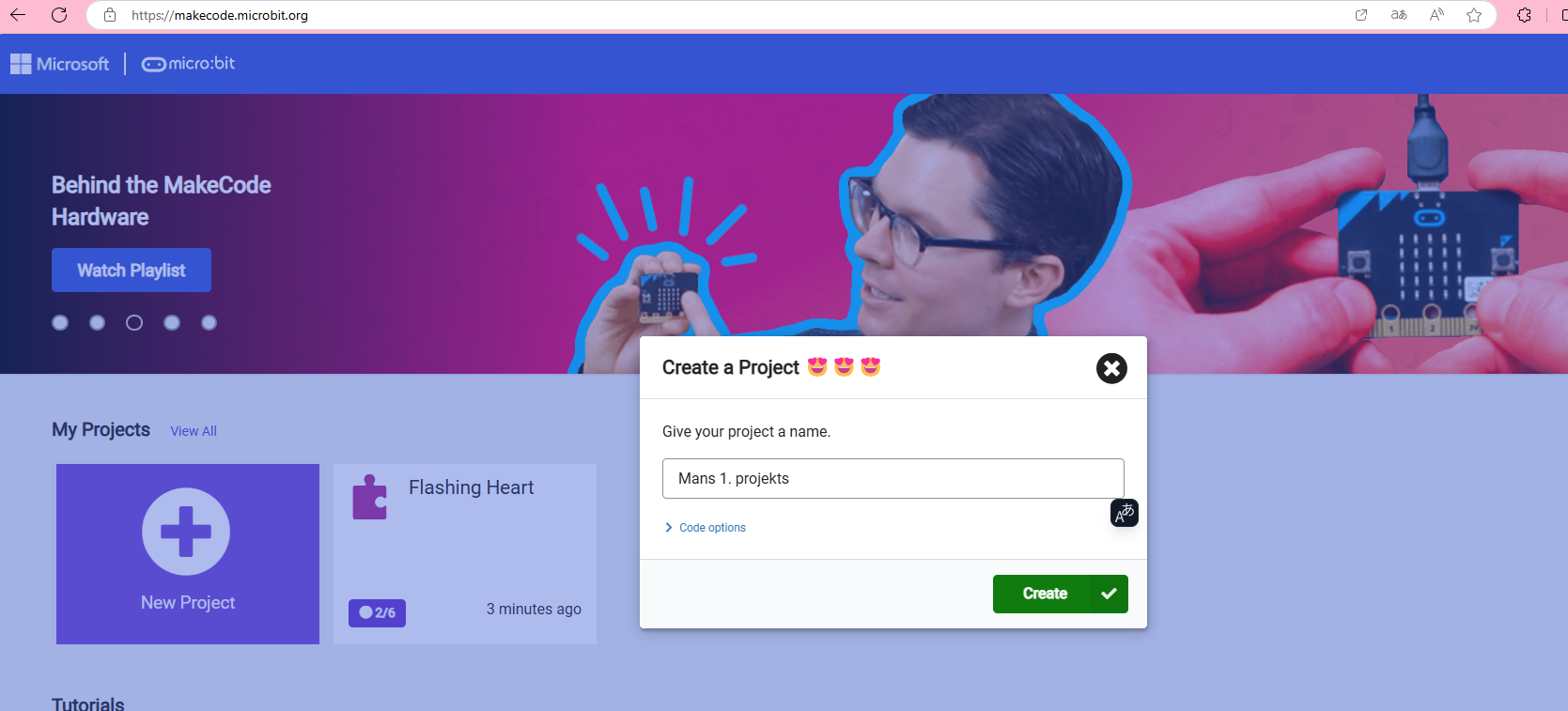
* Micro:bit controller
* USB cable
* Micro:bit program or internet link in which to do programming

# Process!

1. Follow the link:

[Microsoft MakeCode for micro:bit (microbit.org)](https://makecode.microbit.org/)

1. Choose a new project:
2. A window will pop out in which you need to type the name of the project, then press the Create button:



1. Next, a window opens in which you can already start programming. The program offers three types of programming: block programming, JavaScript and Python programming languages.

A screenshot of a computer

Description automatically generated

1. Create any image and save the project.
   1. From the **basic** choice, take the command **on start**
   2. from the same **basic** choice take the command **show leds.**
   3. LED lights can be lit by **pressing** on the corresponding **LED square** directly in the **Show Leds** command

A screenshot of a computer

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1. In turn, in the **Python code language**, it looks like this:

To depict a drawing, it is necessary to create an array that represents the entire LED block. Burning LED lamps are denoted by a hashtag, but non-combustible ones by a dot. In the first line, the command basic.show\_leds is recorded, which means that the controller will show the burning lights all the time. Behind the command, open the parentheses and form an array in parentheses.

**A screenshot of a computer

Description automatically generated**

1. When you press the "save" button, the project is automatically saved on the computer, but the program also offers the ability to connect the micro:bit controller with a USB wire to the computer and create a pair, thereby allowing you to immediately put the code in the controller.