

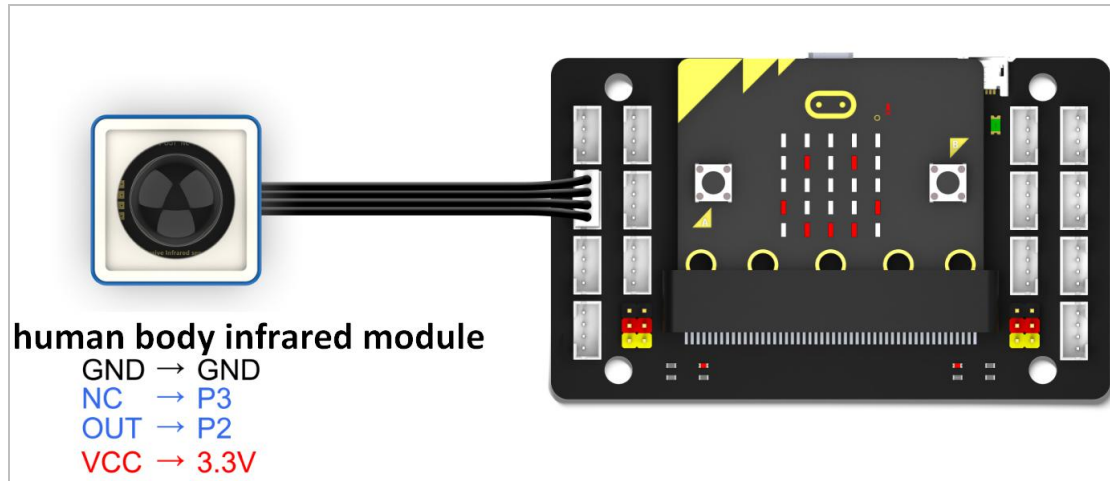
Human body warning device

1. Learning target

In this course, we will learn how to use Micro:bit, human body infrared sensor module and buzzer module to achieve human body detection function.

2. Preparation

Connect the module to Micro:bit board by expansion board, as shown below.



3. Programming method

Mode 1 online programming: First, we need to connect the micro:bit to the computer by USB cable. The computer will pop up a USB flash drive and click on the URL in the USB flash drive: <http://microbit.org/> to enter the programming interface. Add the Yahboom package <https://github.com/YahboomTechnology/Module-World> to program.

Mode 2 offline programming: We need to open the offline programming software. After the installation is complete, enter the programming interface, click 【New Project】 , add Yahboom package: <https://github.com/YahboomTechnology/Module-World> , you can start programming.

4. Looking for blocks

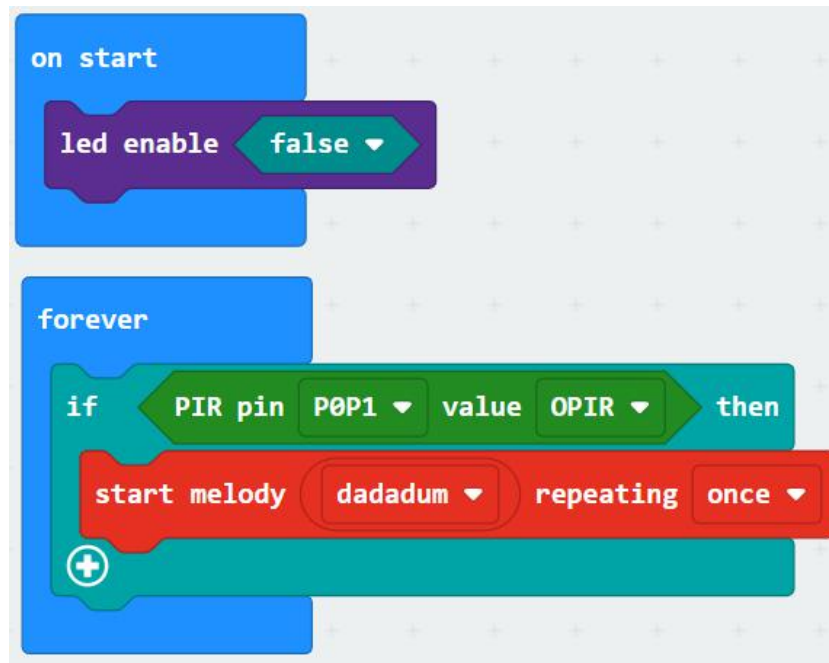
The following is the location of the building blocks required for this programming.

The image shows four sequential steps of building a program in a block-based editor:

- Step 1:** A block from the **ModuleWorld_Digatal** category is added to the script area. The block contains: `point x 0 y 0 brightn`, `brightness`, `set brightness 255`, and `led enable false`.
- Step 2:** A block from the **Logic** category is added to the script area. The block contains: `if true then` and a plus sign (+).
- Step 3:** A block from the **ModuleWorld_Digatal** category is added to the script area. The block contains: `PIR pin P0P1 value NoPIR`, `IR pin P0P1 value Obstacle`, and `Button pin P0P1 value Press`.
- Step 4:** A block from the **Music** category is added to the script area. The block contains: `start melody dadadum repeating once`.

5.Combine block

The summary program is shown below.



6. Phenomenon

After the program is downloaded successfully. When a human body is detected, the buzzer will make a sound.