15. Case 13: Remote Control with micro:bit Accelerometer
15.1. Purpose

- Programme to control the TPBot with the accelerometer.
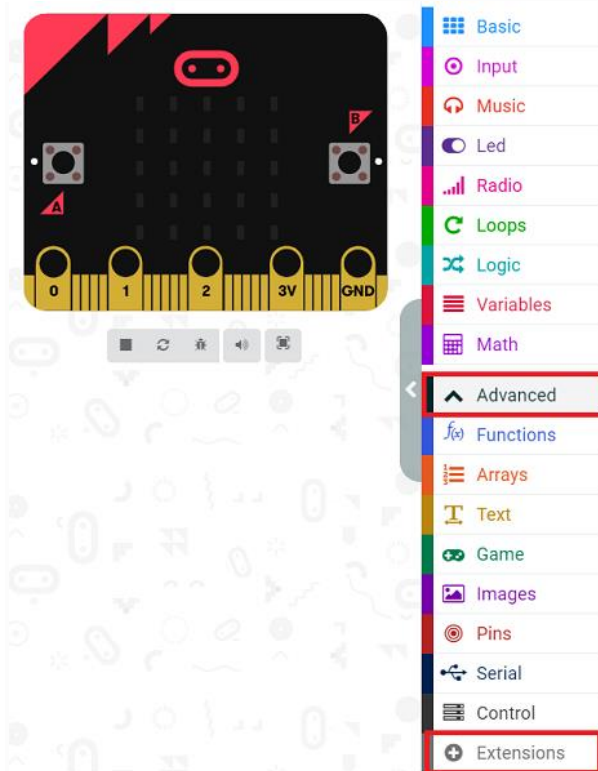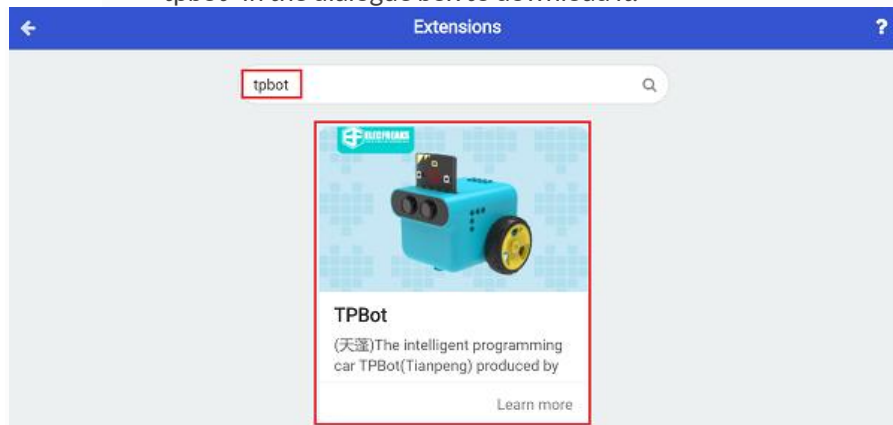
15.2. Material

- 1 x TPBot

15.3. Software

MicroSoftmakecode
15.4. Programming

- Click "Advanced" to see more choices in the MakeCode drawer.

- We need to add a package for programming. Click "Extensions" in the bottom of the drawer and search with "tpbot" in the dialogue box to download it.

Remote Control Part

- Set the micro:bit showing a set icon and the radio group as 1.
- Radio send x which is given by its acceleration dividing 10 in the forever brick.
- Radio send y which is given by its acceleration dividing 10 in the forever brick.

Link

- Link: https://makecode.microbit.org/_11kPTbbxM9Mf
- You may also download it directly below:

--- ### Receiving Part - Set the micro:bit showing a set icon and the radio group as 1. - Drag two" if...else..." sentences to the "on radio received..." block, judge if the received name is x or y. - If it's x, save it as the variable as the accelaration from the x. - If it's y, save it as the variable as the accelaration from the y. - Set the speed of the left wheel being y+x and the right wheel being y-x.

Link

- Link: https://makecode.microbit.org/_a6LLFsMfDT7K
- You may also download it directly below:

--- ## Conclusion ---

- Power up to show the set icon on the micro:bit display, and the movement of TPBot is controlled by the changing angel from the micro:bit.