**19. Case17：Gesture-controlled TPBot**

19.1. Purpose

- Control the movement(forward, back, turn left/right) by your hands gesture.

19.2. Material

1 x TPBot



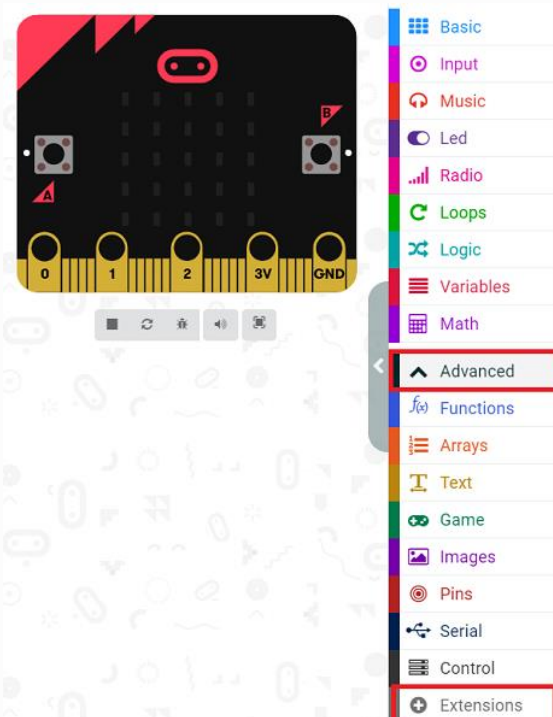19.3. Hardware connection

Connect gesture sensor to IIC port on TPBot.



19.4. Software

MicroSoftmakecode

19.5. 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.
- We need to add a package for programming. Click "Extensions" in the bottom of the drawer and search with "PlanetX" in the dialogue box to download it.
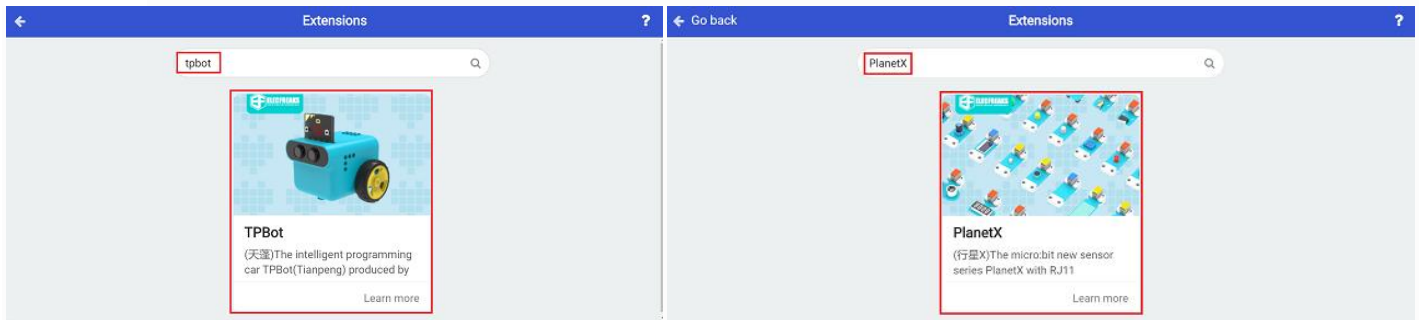


## 19.6. Sample

- Drag the show icon brick into on start.
- Detect the hands gesture through the gesture sensor, set the car to move forward at the speed of 40% for 1s while detecting your hand waving upward.
- Code with a similar way for the gesture of waving downward, left and right.



## Link
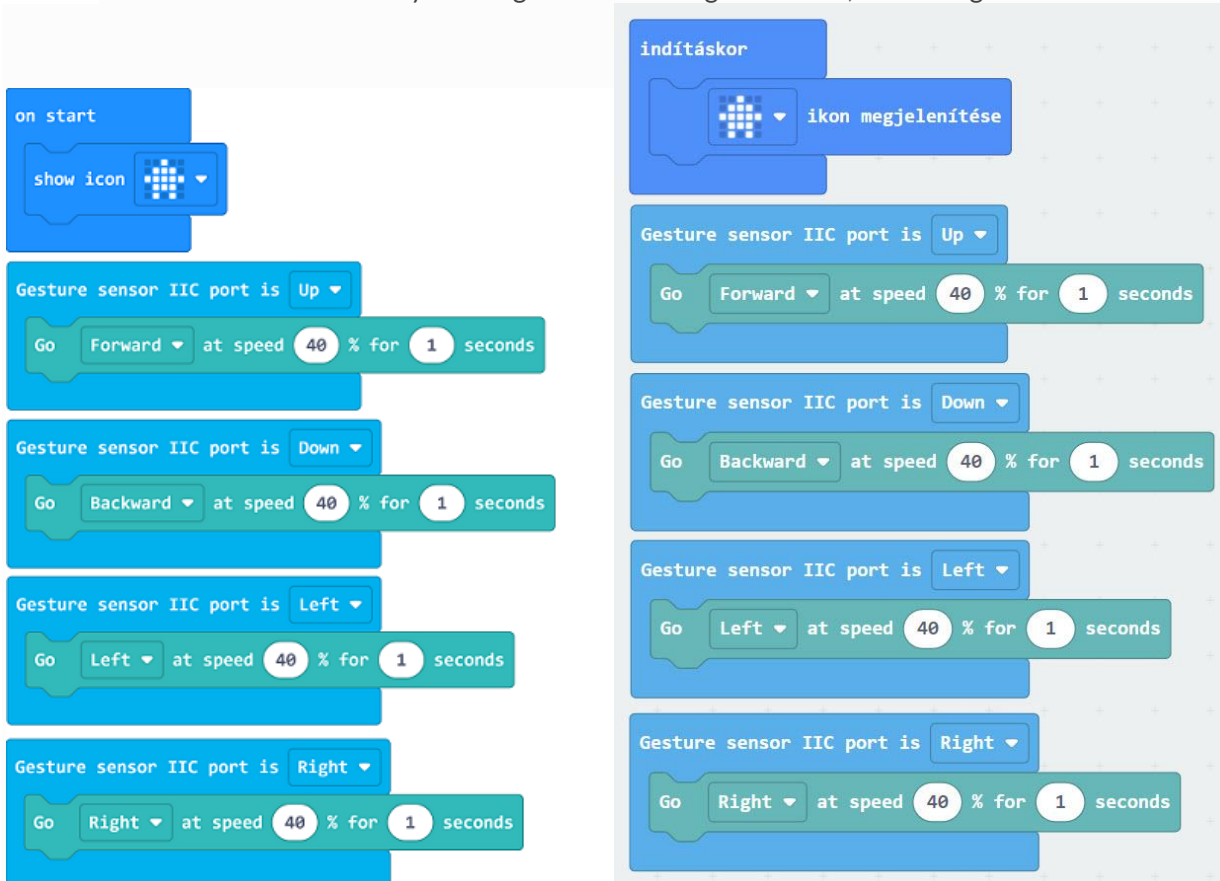
- Link：https://makecode.microbit.org/_PqAPVDY7hDRR
- You may also download it directly below:

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## 19.7. Conclusion

- Face your hands onto the gesture sensor, control TPBot's movement with your hands gesture.

## 19.9. FAQ

Q: While operating this case, why the car might not work properly?

A: It might be the low power of the batteries, please try adding the value of TPBot's speed and test again.