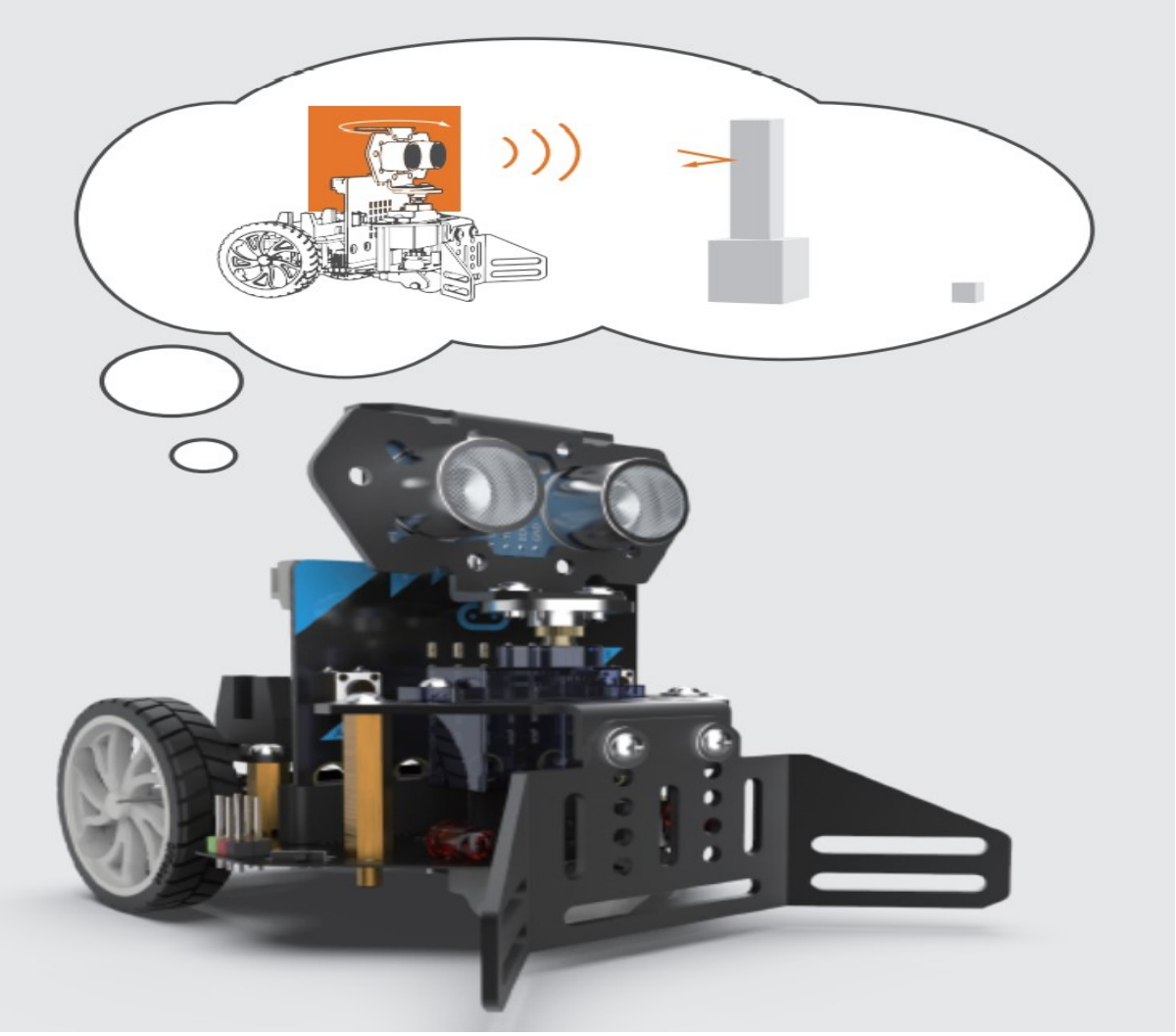
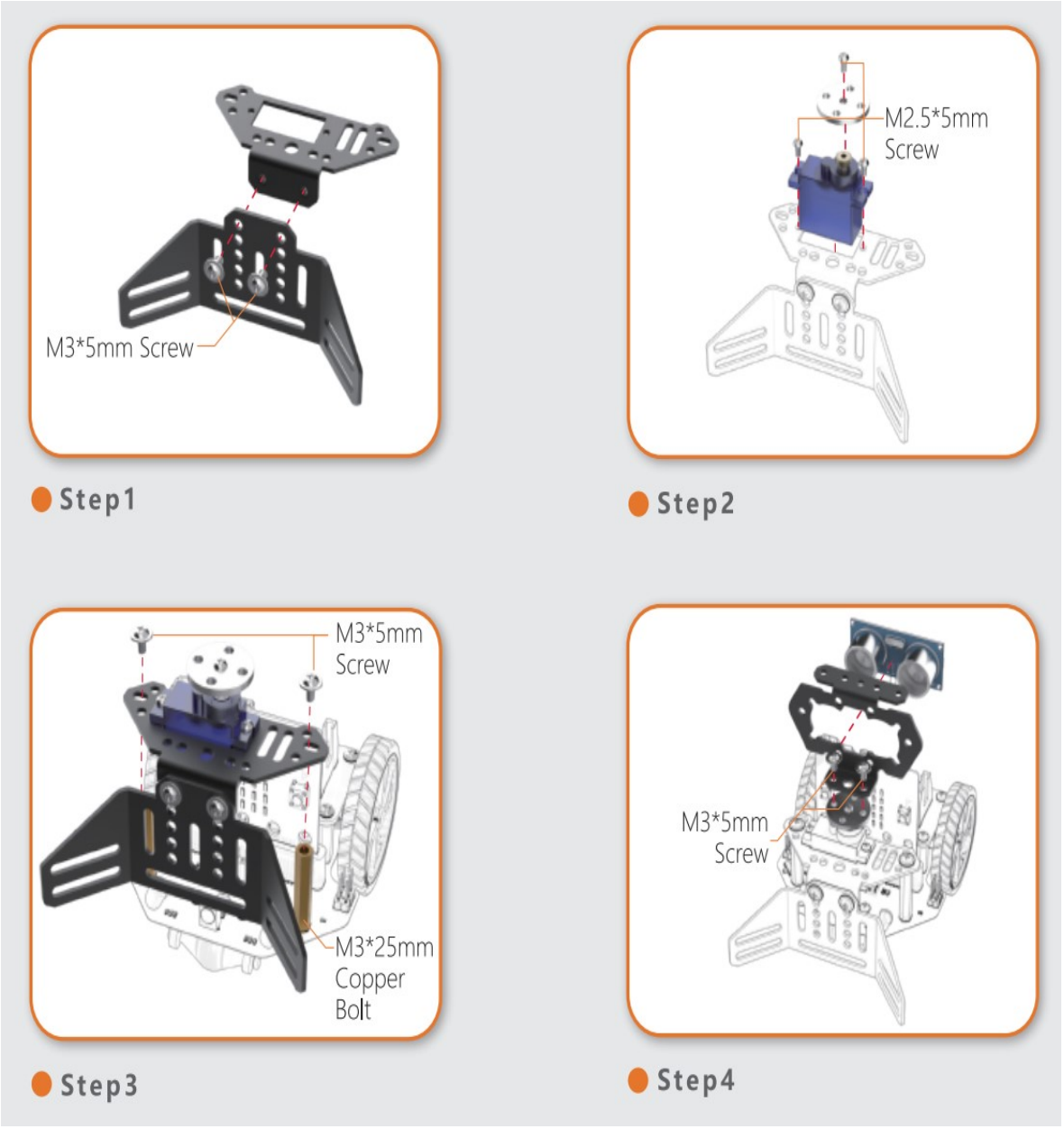
Bluguard Maqueen Mechanic - Push



Suggest Age: 9 +
Adult supervision is recommended for children under 9 years old.

Installation Diagram

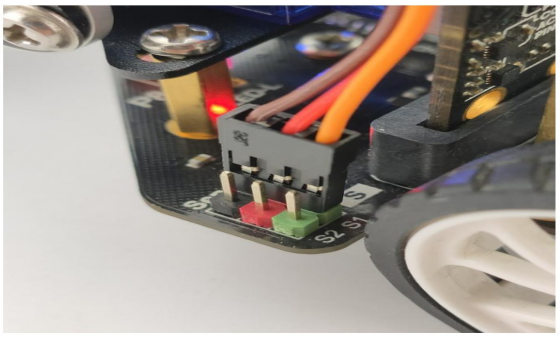


Method to Control

1. Wiring

I. Plug the 3 pins servo wire into port S1 or S2 of Maqueen, shown as below :

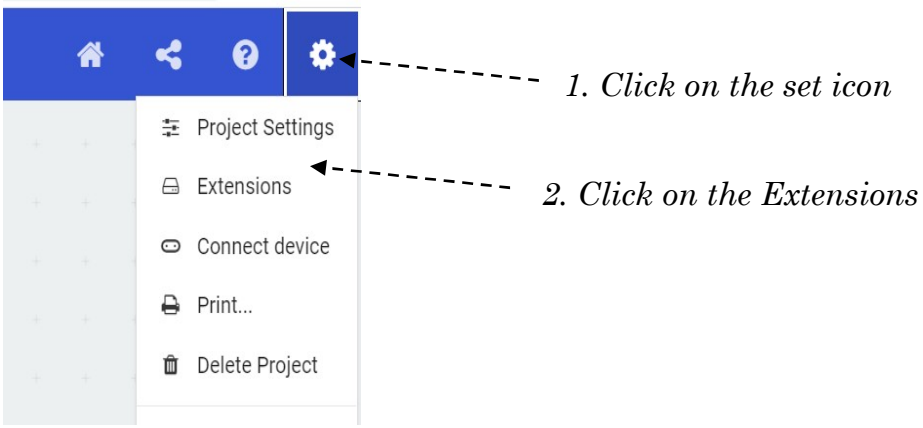
- Brown wire to Black pin
- Red wire to Red pin
- Orange wire to Green pin



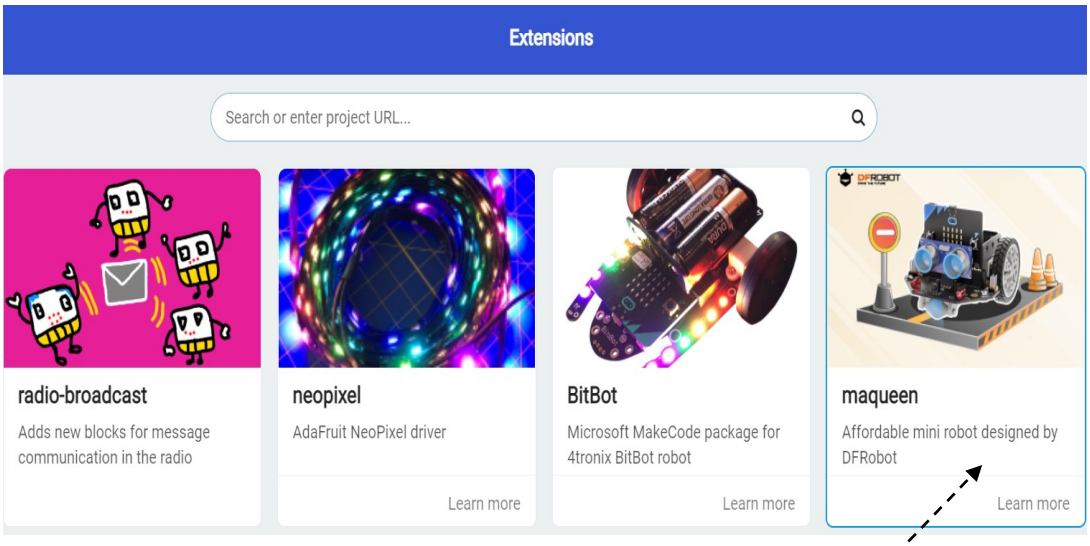
2. Makecode Tutorial

I. Click the link https://makecode.microbit.org, enter the makecode graphical online programming platform and create **New Project**. (Note: Loading will be slow the first time, please wait patiently)

II. Import the extensions.

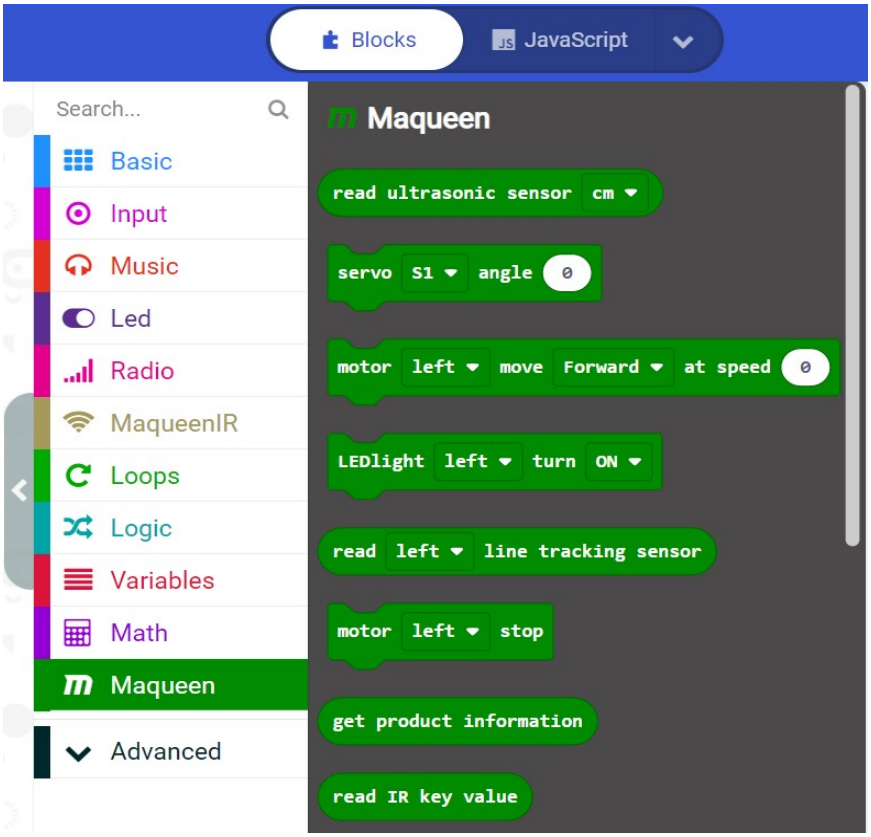


III. Click on the Maqueen's library.



Just click on it.

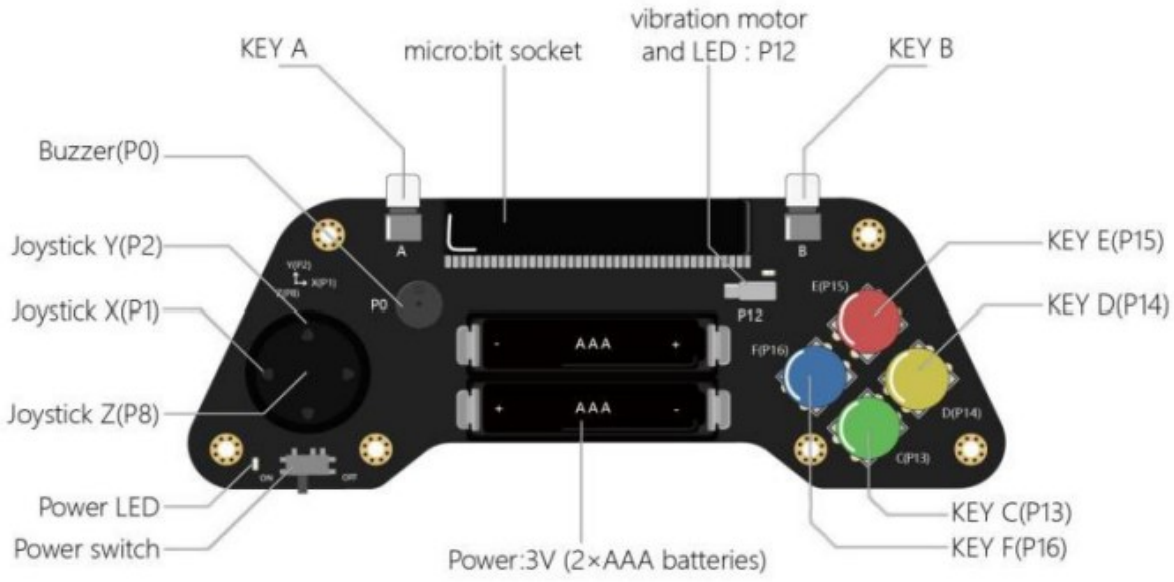
IV. Import completed.



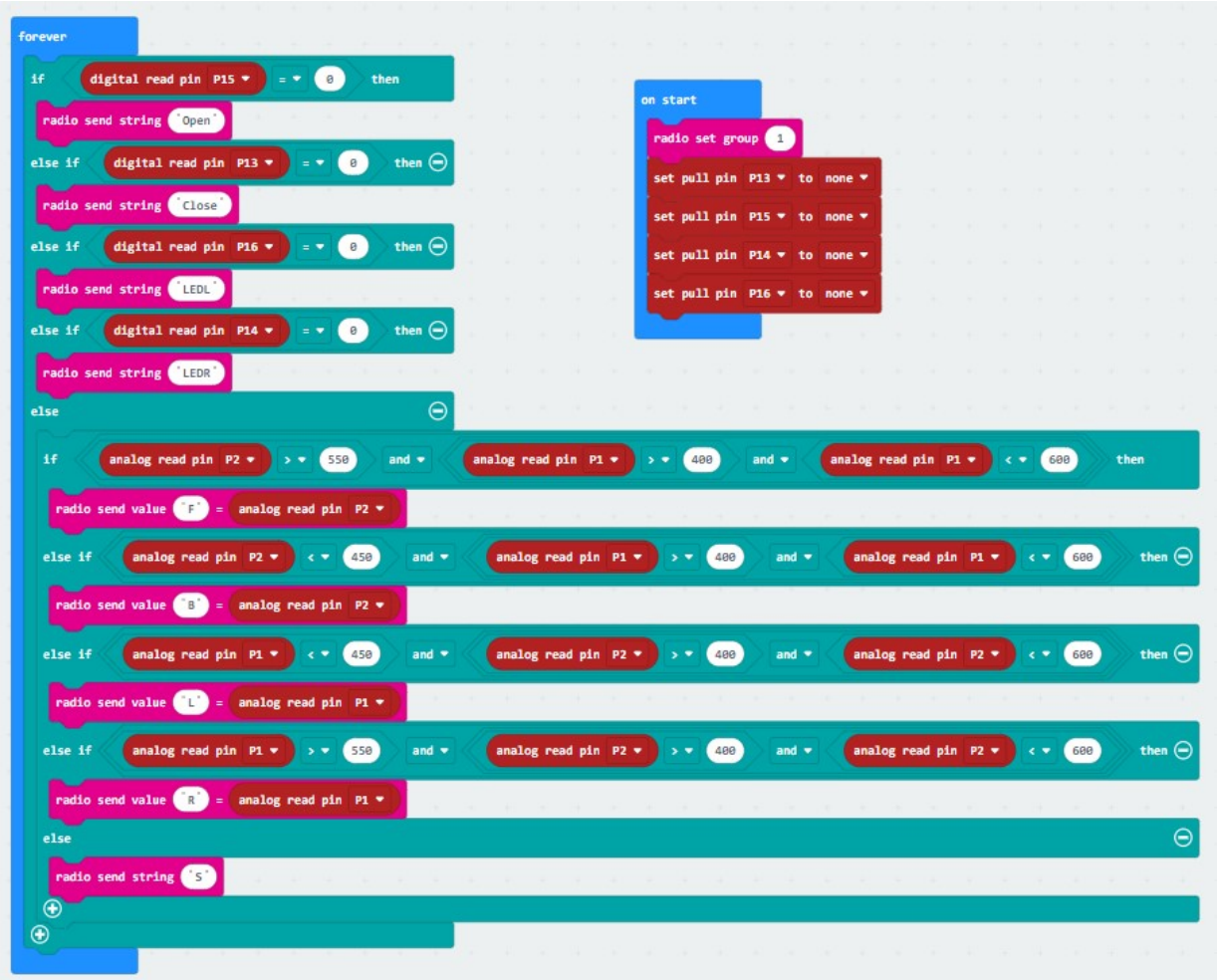
3. GamePad Remote Control Bulldozer

I. This program uses GamePad to remote control the Maqueen Mechanic-Push by wireless communication of two micro:bit boards. Through remote control, controlled-type Maqueen competition can be organized. In this sample, the joystick is set as an analog quantity

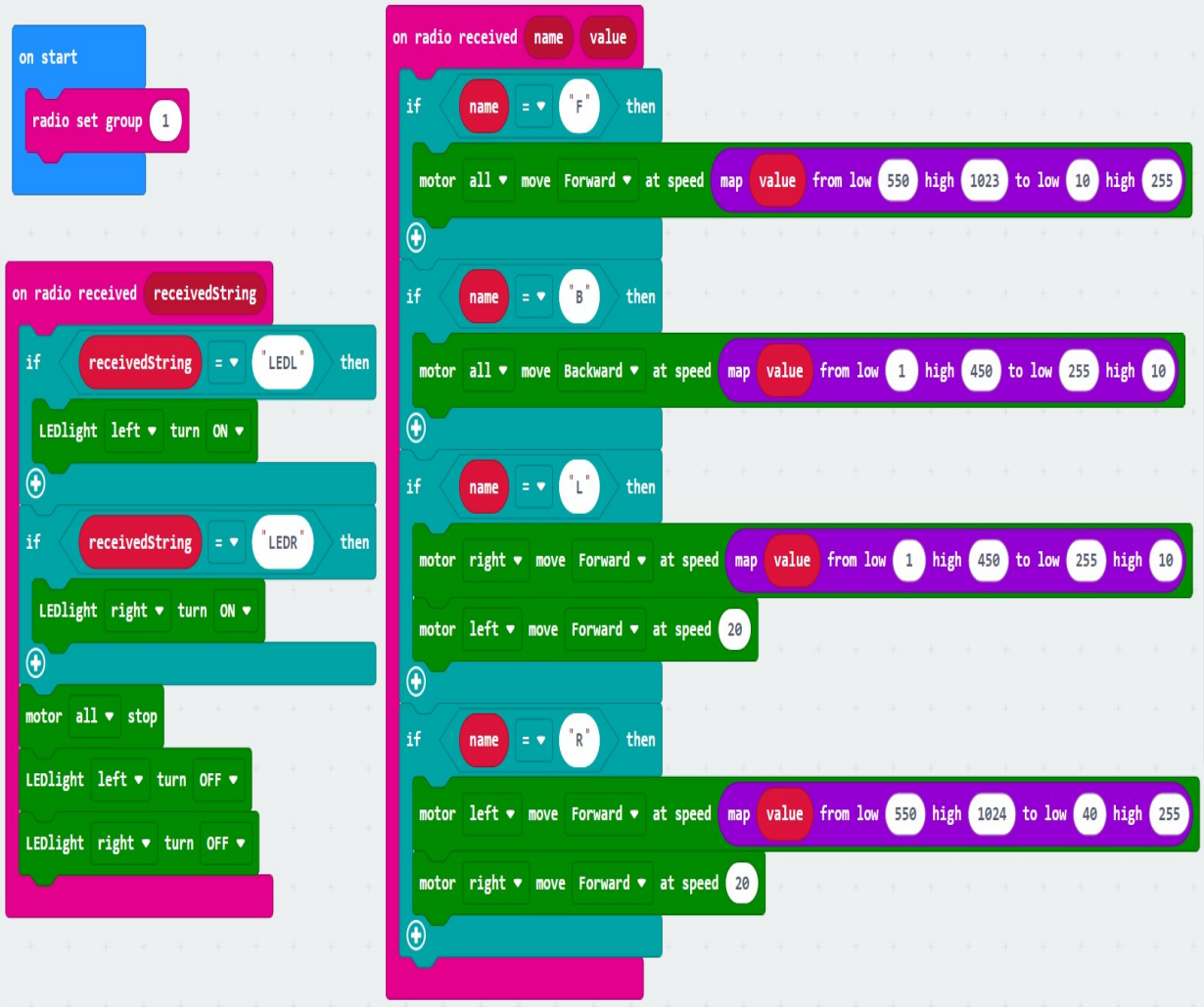
while controlling the car's speed and direction simultaneously. The more the joystick moves, the faster it goes. The left and right buttons control the lights on and off.



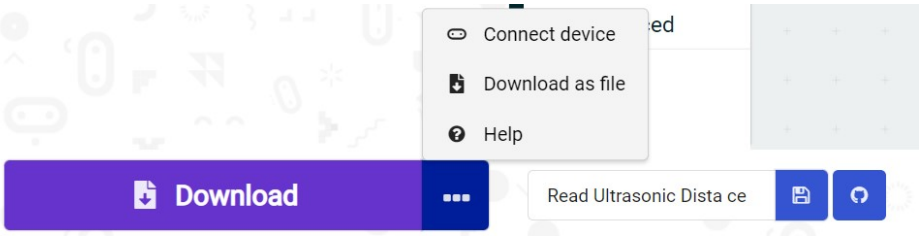
Program for GamePad : https://makecode.microbit.org/_5Fx1tPUP3U8g



Program for Maqueen : https://makecode.microbit.org/_bXTMmc3D5H5c



II. Go to 'connect device' after connecting the micro:bit with the cable. Just follow instructions and this step is just one-time setup. Click the 'Download' button to download the code to the micro: bit.



4. Ultrasonic Obstacle Avoidance Vehicle

In this sample program, the front ultrasonic sensors on Maqueen car will detect the distance between itself and the obstacle ahead. If the distance is less than 30cm, the robot car will turn left or right randomly to avoid the obstacle.

Program Link :

https://makecode.microbit.org/_7Ay2qVeUUPi0