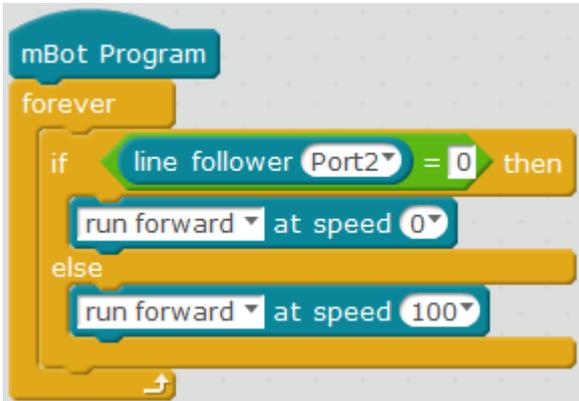


Cliff detection

Hardware requirements: mBot

Implementation: Upload the program to Arduino

Example programs



Script description

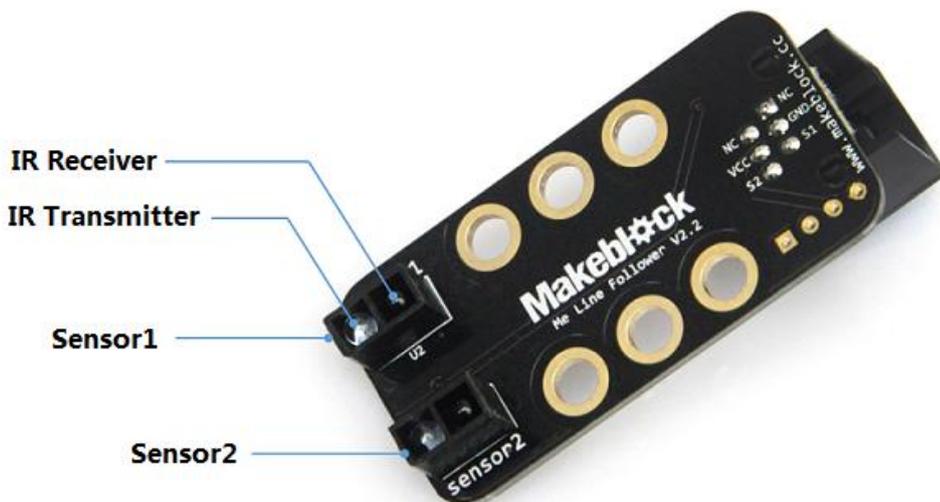
When mBot travels within the surface of the white table (or other light color table), the line-patrolling sensor can receive the returned infrared signal and the value is 3 (both Sensor1 and Sensor2 return 1); when mBot travels to the edge of the table surface, the line-patrolling sensor cannot receive the reflected infrared light and the value is 0 (both Sensor1 and Sensor 2 return 0). When the value of the line-patrolling sensor is 0, it is deemed to have reached the edge of the table surface and will be stopped.

Also if you use this program, mBot will stop moving forward when it detects black.

Extended tasks

Task 1	Modify the script to let mBot move back when it detects a cliff.
Task 2	Modify the script and use  block to achieve the effects of this example.

Attached – Line-patrolling sensor structure diagram



Related resources

Download: [Cliff detection.sb2](#)

Origin: <http://www.mblock.cc/example/cliff-detection/>