



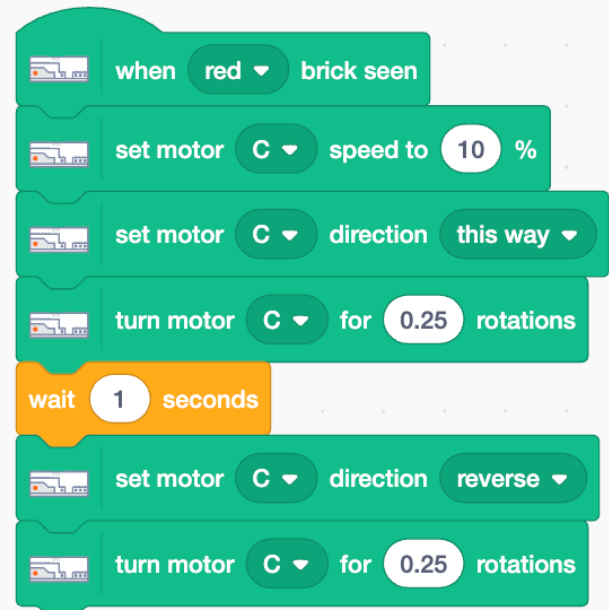
Colour Selector

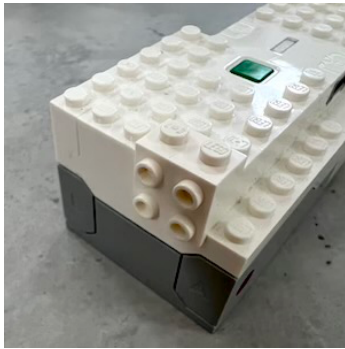
Register/login at <https://scratch.mit.edu>

Select Lego bricks by colour. When it sees a coloured brick it swings out an arm to push it off the conveyor belt, then the arm swings back.

1. Create a new Scratch project and add the **LEGO BOOST** extension.
2. Connect to the **BOOST** like last time.
3. Plug a **motor** into socket C on the BOOST.
4. Plug a **colour sensor** into socket D on the BOOST.
5. Add this code to any sprite to detect when a **brick colour is seen** (choose your colour). It **turns** the motor one quarter of a rotation then after a **wait**, **turns** it back.

Check that it works before building the Lego.





6. First add a 90 degree bracket to the end of the BOOST.

7. Attach the motor to the bracket with the hole facing upwards.

8. Create an arm long enough to push a brick off the conveyor. This fits into the motor.

9. Create a stack of bricks 7 blocks high and

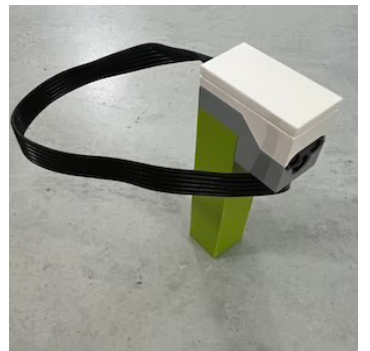
2 wide and put the colour sensor on top.

10. Install the BOOST next to the conveyor belt



11. Adjust the arm so it's angled back 45 degrees.

We'll start the conveyor belt to see if it selects bricks properly.



Save your code with a good name.

File > Save now