

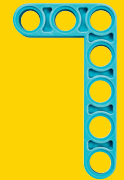
# Greetings, Earthling

Build a robot that greets people with a wave, a fist bump, a high-five or some other welcoming movement!



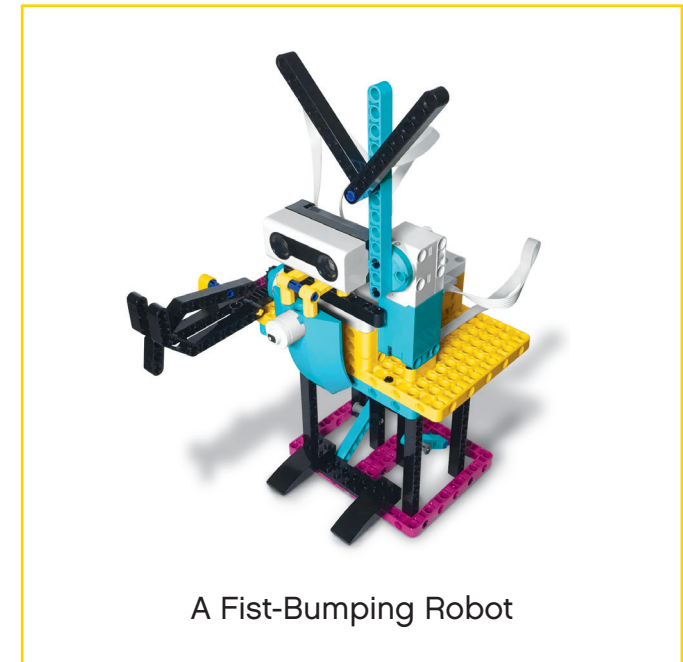
**Think Like an Engineer:**  
How can you position a motor so that the arm moves in a more natural way?

**Think Like an Artist:**  
How can you make the robot look more friendly and approachable?



## Example Ideas

How do you want your robot to greet you?



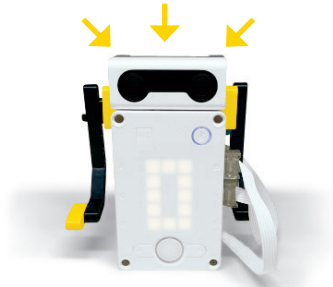
## Build It!

What elements do you want to add to the robot?

You can add a piece at the end of the arm to act as a hand.



The ultrasonic sensor looks like eyes and can automate movement.



This hand looks realistic with “fingers.”

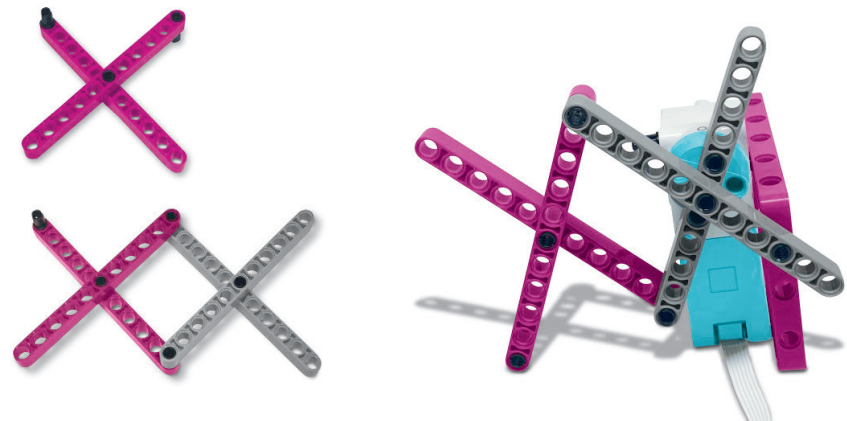


## Code It!

Think about how much you want the robot to move.  
Do you want to measure by time or rotations?

```
when program starts
  A set speed to 50 %
  repeat 10
    A run for 0.5 rotations
    A run for 0.5 rotations
```

You can connect “X” shaped pieces to make a scissor lift for the extendable arm.



## Challenge Yourself!

Try to use an ultrasonic sensor to have the robot move only when someone is in front of it.