Robotics Learning Series

Smart Curtain



Developed by ZMRobo, this building-block robot uses modular parts to construct its body, while programming software and sensors enable a range of interactive functions.

Learning Target

01

Knowledge goal

Learn to use it.

02

Ability goal

Familiar with the ultrasonic module, master the basic usage of the ultrasonic sensor.

03

Emotional attitudes and values

Learn about things that are not easily accessible, and keep curious and exploring about the unknown.

Learning Target

01

Learning focus

Master the basic usage of ultrasonic sensors.

02

Learning difficulties

Understand the flexible use of [repeated execution until].

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Course Introduction



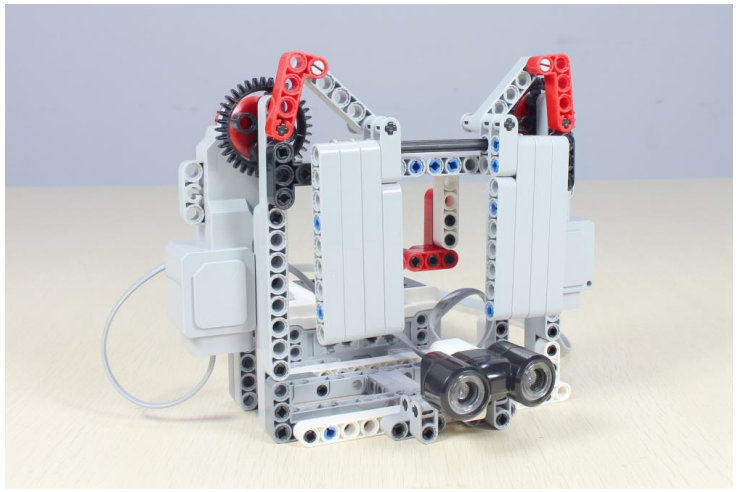
Course Introduction



What does your home curtain look like?

The main function of the curtain is to isolate it from the outside world and keep the privacy of the room. At the same time, it is an indispensable decoration for home decoration. In the winter, the curtains divide the interior and exterior into two worlds, adding warmth to the house. Modern curtains can reduce light and shading to meet people's needs for different light intensity. They can also prevent fire, wind, dust, warmth, noise reduction, heat insulation, radiation protection, UV protection, etc., and improve the climate and environment of the living room.

Course Introduction



Smart curtain

Know about Smart curtains

This robot is designed with a focus on the switch part design, allowing the curtain to be smoothly opened and closed. It can be referenced according to the physical reminder device. After the completion, the programming is combined with the characteristics of the crawling part. You can challenge it!

Teaching New Knowledge



Teaching New Knowledge

Smart curtain

1. type: daily life
2. Direction: Item
3. Structure: pulley structure
4. Appearance: curtains

Teaching New Knowledge

Equipment matching:

1. electronic components: RCU, motor

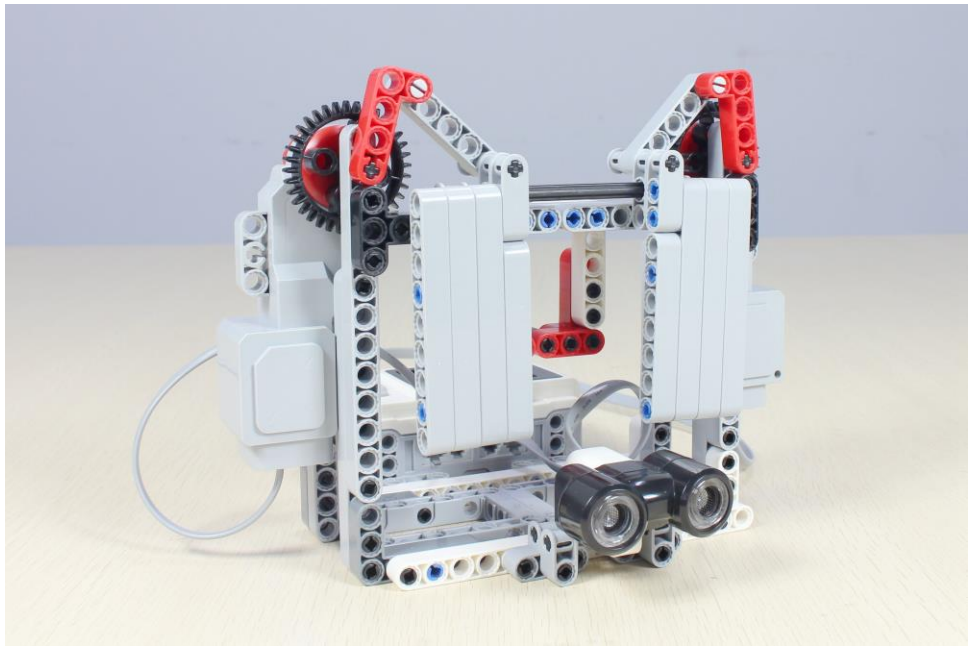
2. structure: pay attention to the design of the pulley structure

3. other: RCU because of the larger size, can be used as a base

Design Assembly



Design Assembly



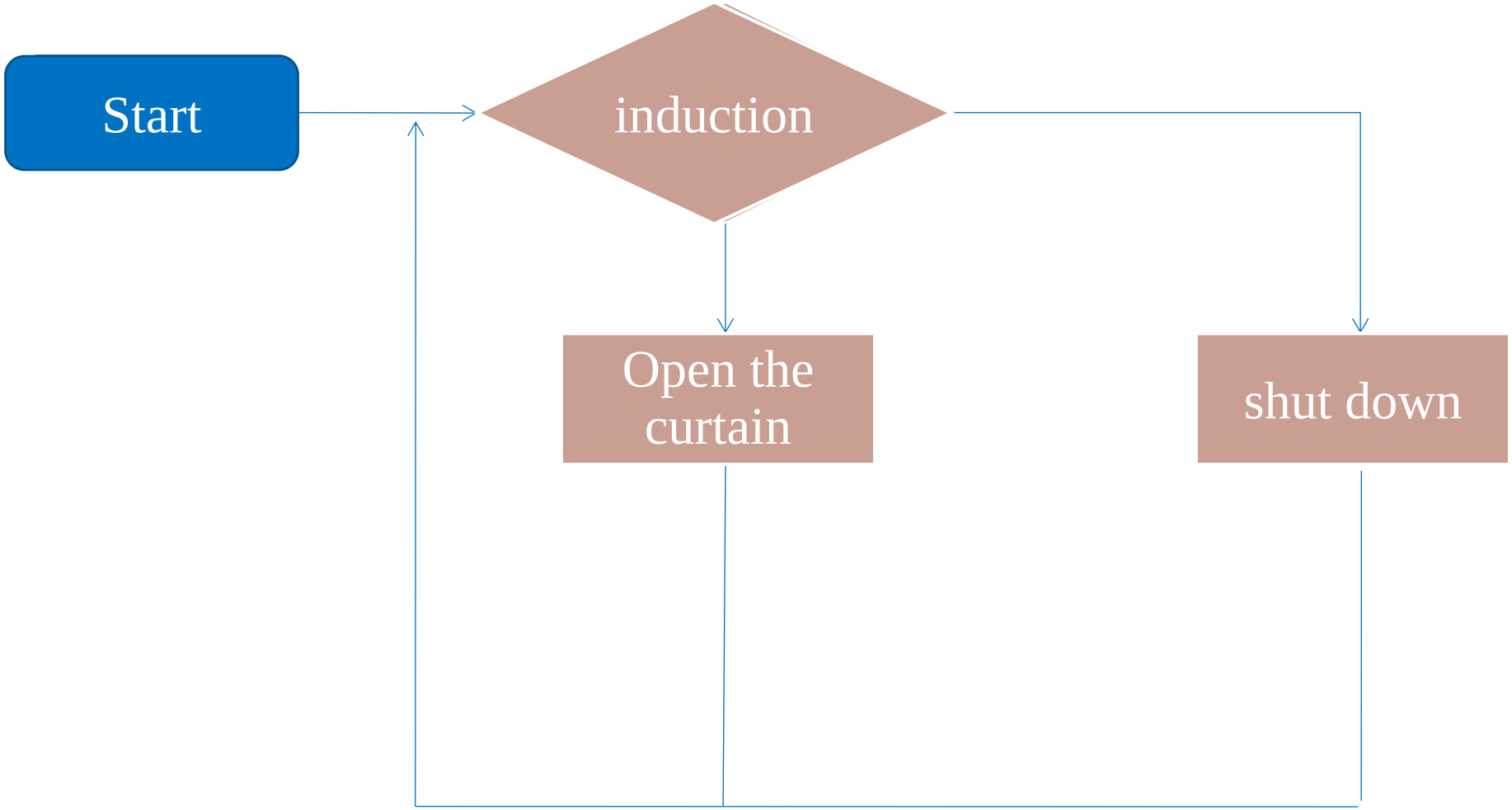
Assembly requirements

1. stable structure
2. focus is right
3. shape match

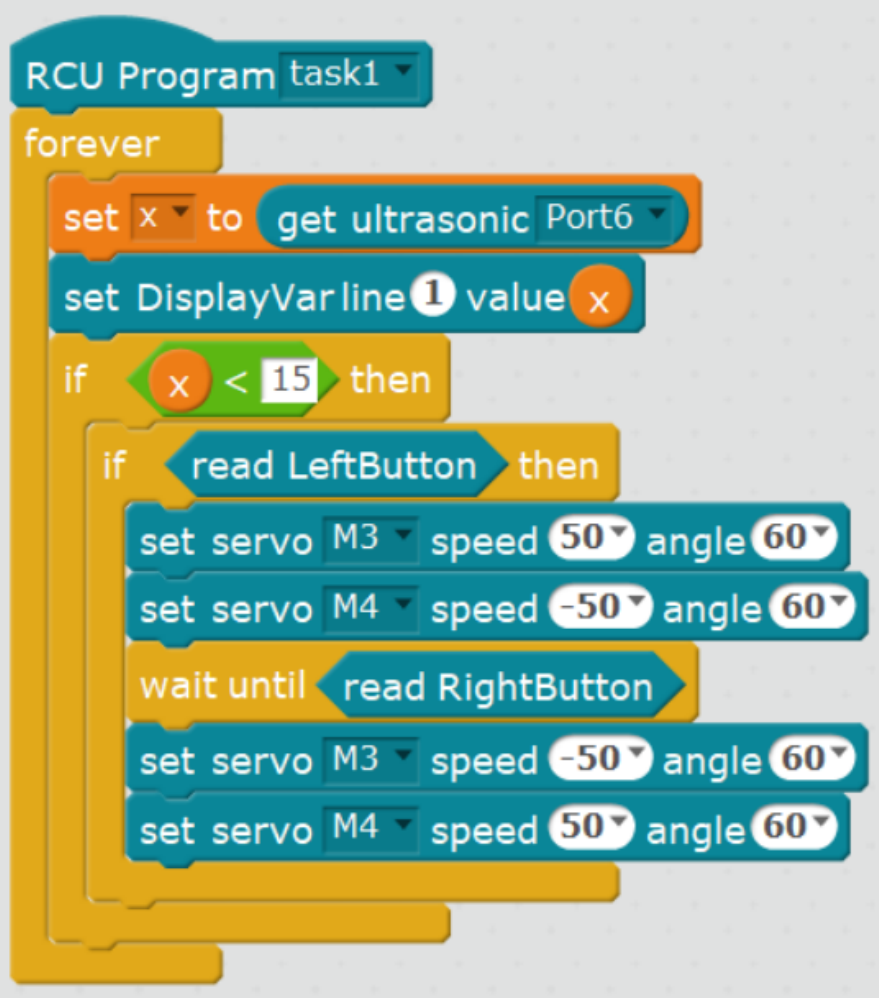
Programming and Debugging



Programming and Debugging



Programming and Debugging



1. Complete its program debugging according to the characteristics of the robot.

Checking Effect



Test Effect



Review the learning content and deepen your impression.

Question 1

What is the name of the robot made today?

Question 2

What hardware does the robot use today?

Question 3

What is the design part of the pulley?

Thank you for watching

