Robotics Learning Series

Drop-proof Robot



Developed by Joinmax, this programmable building-block robot kit includes sound-sensitivity, color, touch, photoelectric, ultrasonic and camera sensors, colored lights, and modular parts. Students can design varied robots and use graphical programming software for hands-on creation.

Learning Target

01

Knowledge goal

Application

02

Ability goal

Be familiar with the photosensitive sensor module and use the new function.

03

Emotional attitudes and values

Learn to think in essence.

Learning Target

01

Learning focus

Master the basic usage of the photosensitive sensors.

02

Learning difficulties

Flexible use with new functions.

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Course Introduction



Course Introduction

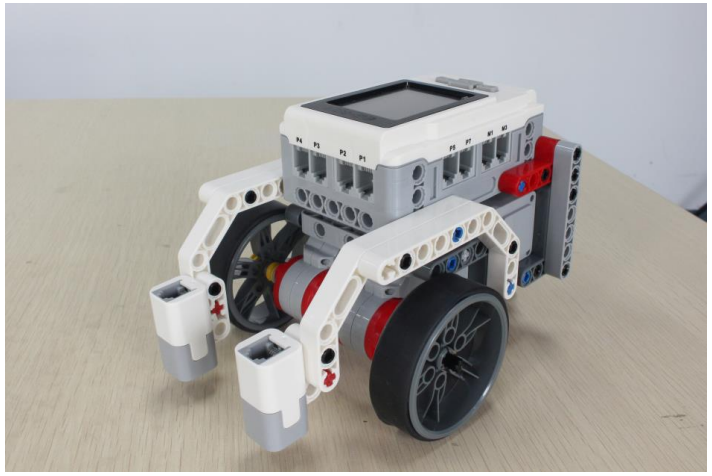


What are the anti-drop robots doing?

If the light emitted by the photosensitive sensor is not reflected back, the light value is low, and the intensity of the light is not strong enough.

At this time, we can use this situation combined with the electronic accessories to do a drop prevention device.Let's take a look together.

Course Introduction



Drop down robot

Understanding the Drop-proof robot

We have learned a few lessons of photoelectric modules and new modules, we will combine the learned modules and robots together, we try to do this lesson, the theme is "anti-drop robot"! Try the challenge!

Teaching New Knowledge



Teaching New Knowledge

Drop-proof

1、Type: Practical type

2、Direction: The Machine

3、Structure: Dual photosensitive sensor toward the ground

4、Outline: no limited

Teaching New Knowledge

Equipment matching:

1. Electronic components: RCU, light sensor

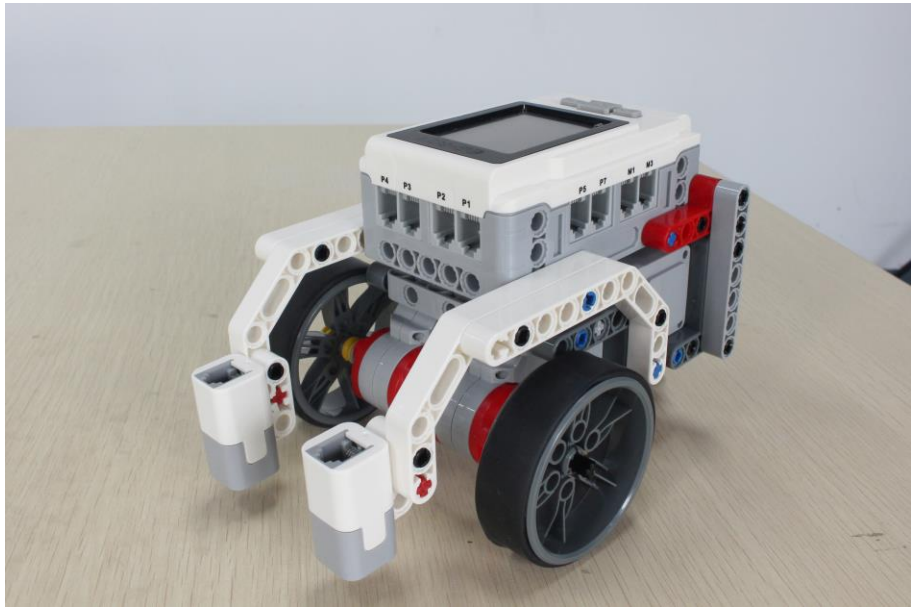
2. Structure: double photosensitive sensor must be in parallel to the opposite, vertical to the bottom

3. Others: none

Task Practice



Design Assembly



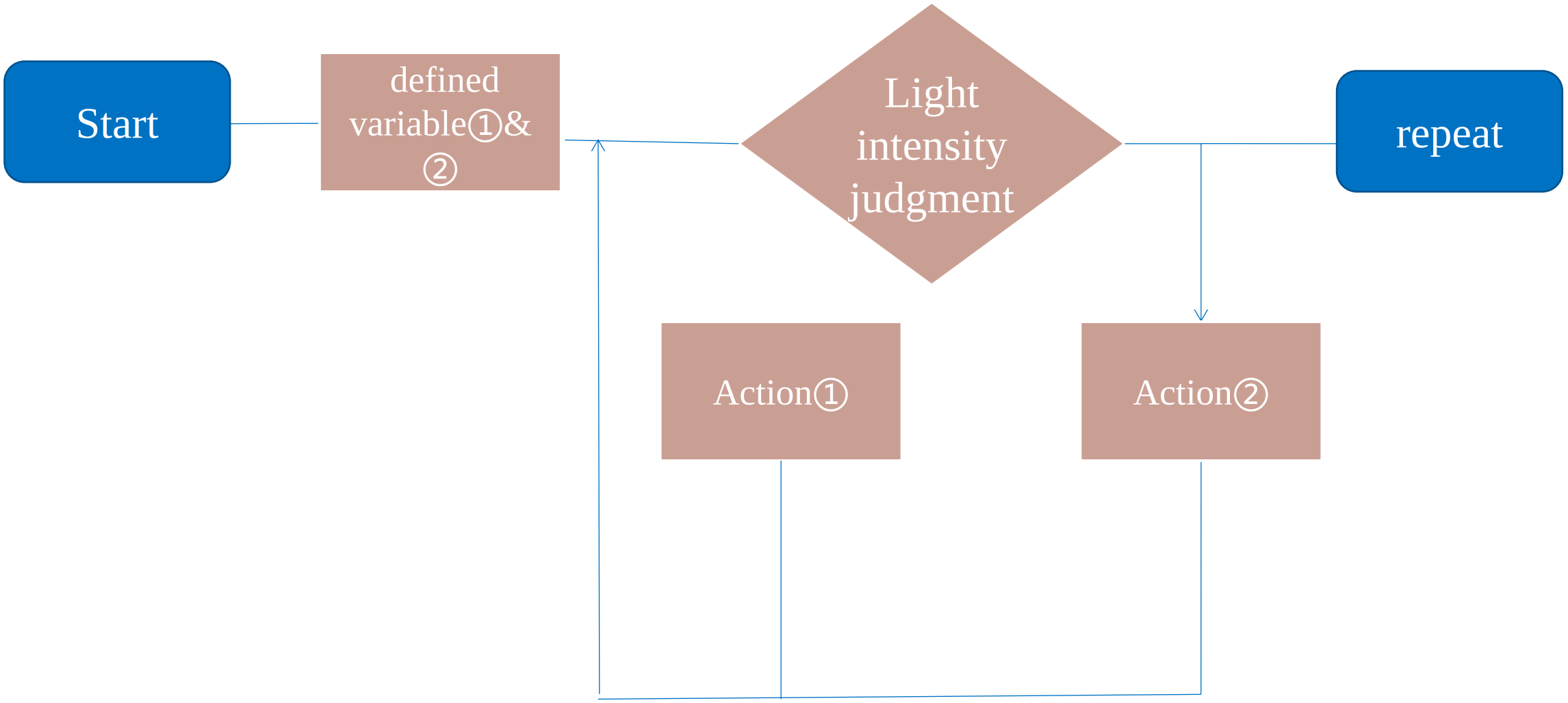
Assembly requirements

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

Programming and Debugging

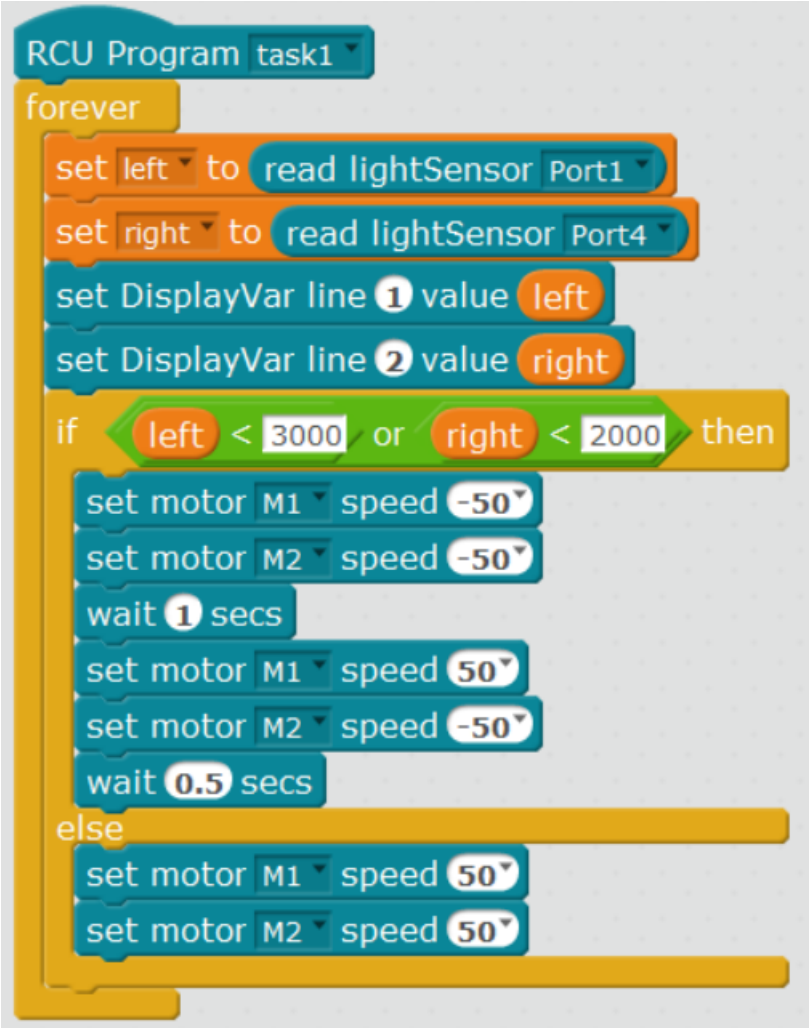


Programming and Debugging



Programming and Debugging

1. According to the characteristics of the robot to complete its program debugging.



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 materials are used in today's robots?

Question 3

What if the two photosensitive sensors have a front and a back motion?

Thank you for watching

