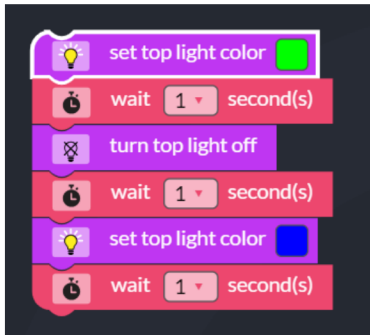
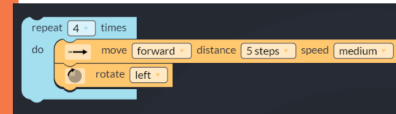




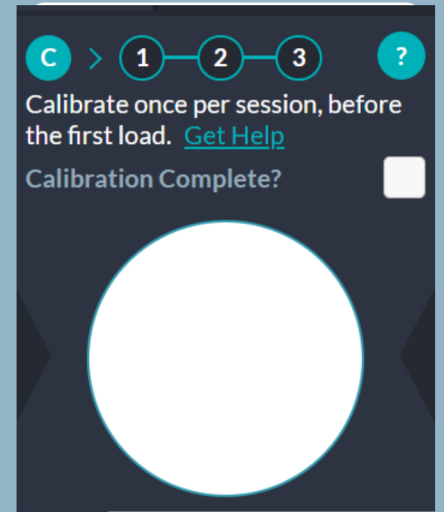
Program

```
robot.movement.move_mm(50,
45)robot.movement.rotate_deg(90,
45)robot.movement.move_mm(50,
45)robot.movement.rotate_deg(90,
45)robot.movement.move_mm(50,
45)robot.movement.rotate_deg(90,
45)robot.movement.move_mm(50, 45)
```

Code



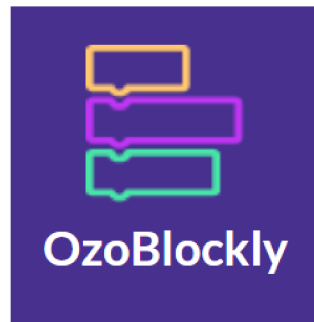
Loops



Calibrate

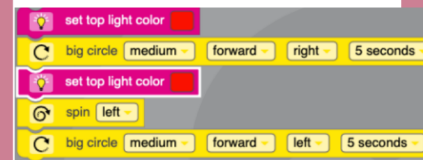


Download

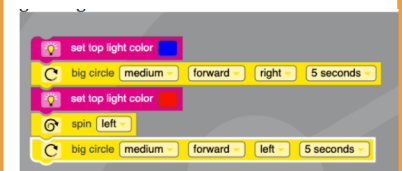


Software

Evo should turn blue
while drawing
one loop of a figure eight
shape, and
turn red while drawing
the other loop



Bug



Debug

Download

Transferring a program from OzoBlockly to your computer.

Software

The set of coded commands or instructions that tell Evo what tasks to perform.

Bug

Problems in an algorithm or program that won't allow Evo to run properly.

Debug

Finding and fixing problems in an algorithm or program

Program

An algorithm that has been coded into something that can be run by a machine.

Code

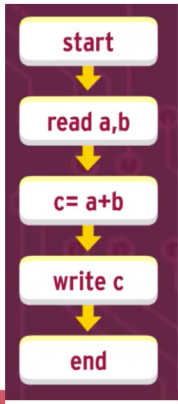
The language that programmers create and use to tell a computer what to do. Evo can read color codes, OzoBlockly code in the form of Javascript code, and is testing Python code.

Loops

Used when you want Evo to repeat an action or command.

Calibrate

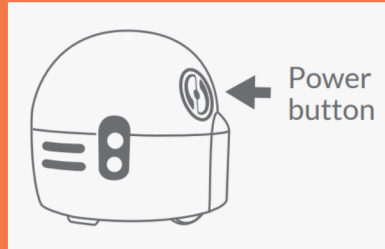
Calibration prepares your Evo to read your program. You only need to calibrate once per session, before the first load.



Algorithm

Connect

Loading



Double Click

Run
Program



Conditional



Variable

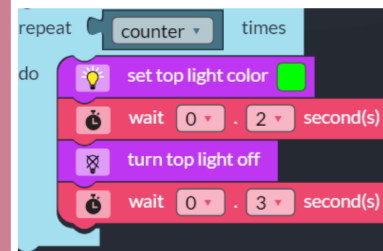


Pause (3 sec.)



R B R

Timer



Counter



Random

Variable

A placeholder for a piece of information that can change.

Timer

Timer codes tell your Ozobot to pause or count seconds.

Counter

Counter codes are variables that tell Evo to count (a number of) intersections, turns, or line color changes.

Random

With no determined order or is chosen in a way that is unknown beforehand.
Ex: Evo's default intersection behavior is random.

Algorithm

A written or typed list of steps to finish a task.

Loading

Loading transfers the program from the editor to your bot.

Run Program

To run a program that you've loaded to your bot, place your bot on a table or desk and double-click the power button.

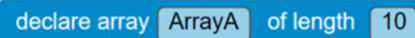
Conditional

Statements that only run under certain conditions using if-then logic.



get surface color

Boolean
Logic



declare array ArrayA of length 10

Array



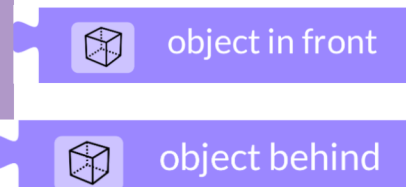
```
to goNorth
  set top light color green
  say direction forward
  move forward distance
```

Functions



```
set top light color purple
set light color black white black white black
play happy
DRIVE TO BLUE with:
  SPEED 40
spin left
police car lights
```

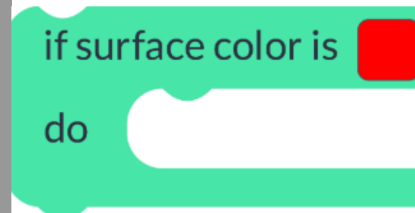
Autonomous



object in front

object behind

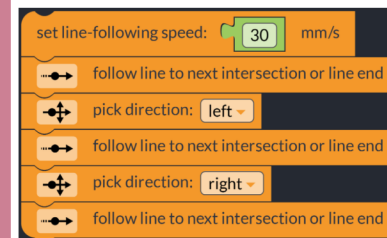
Proximity
Sensor Logic



if surface color is red

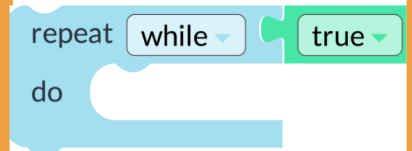
do

Color Sensor
Logic



```
set line-following speed: 30 mm/s
follow line to next intersection or line end
pick direction: left
follow line to next intersection or line end
pick direction: right
follow line to next intersection or line end
```

Line
Navigation
Logic



repeat while true

do

Repeat
While

Proximity Sensor Logic

A placeholder for a piece of information that can change.

Color Sensor Logic

Evo's color sensor operates by emitting light and then measuring the intensity of the light reflected back in RGB values, enabling the robot to recognize different colors.

Line Navigation Logic

Line navigation blocks control basic functions of line following

Repeat While

This block continues to execute the instructions within it as long as a specified condition remains true.

Boolean Logic

Statements that can only be true or false. When more than one statement needs to be evaluated, use Boolean operators like AND, OR, NOT.

Array

A special object that stores a list of variables that are all the same data type. An example is storing colors that Ozobot encounters while following a line.

Functions

Blocks of reusable and organized code.

Autonomous

When a robot can perform tasks and operating in an environment independently