Finch Robotics

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What is a Finch Robot?

A Finch Robot is a small programmable robot that can come to life with code. It features sensors, LEDs, and a buzzer to create all various types of projects. It makes coding fun and enjoyable, enabling creative building, thinking, and problem-solving skills.

Goal for Today:

- Move the robot
- Write out “BI”
- Play a note

Feel free to play around, we’d love for you to show us something cool.

Setting Up

01

Open Google Chrome

Using the taskbar or Windows search bar, open up Google Chrome.

02

Go to NetsBlox Editor

Enter the url:
https://editor.netsblox.org/

03

Allow MIDI Devices

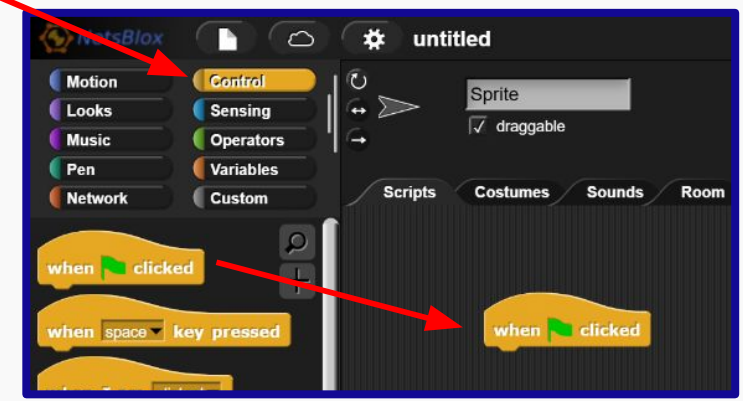
Click on “allow,” this will enable connection to the finch.

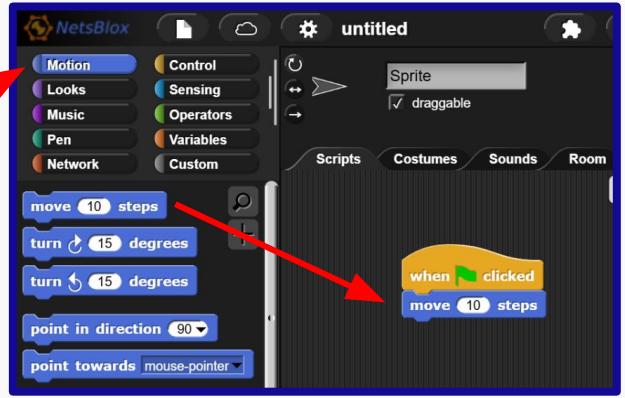
Goal #1: Making it Move

01

Green Flag

Under the control tab, drag the “when green flag clicked” block to your workspace.





02

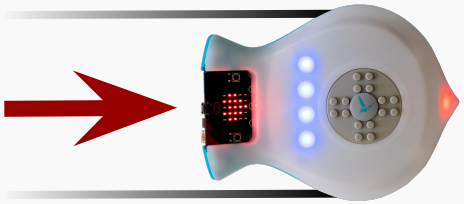
Move 10 Steps Forward

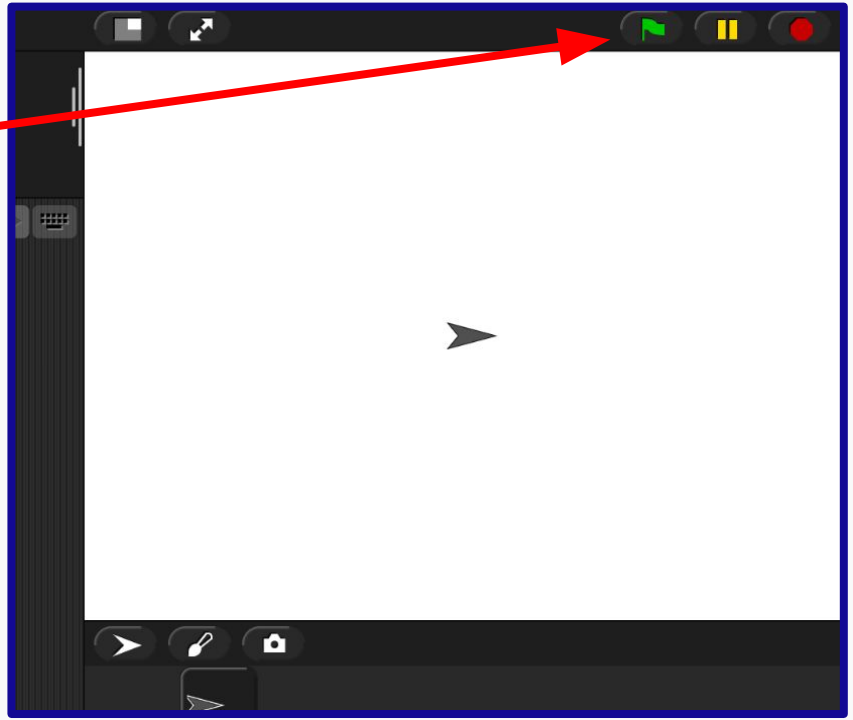
Under the motion tab, drag the “move 10 steps” block to under the green flag block.

Try Running It

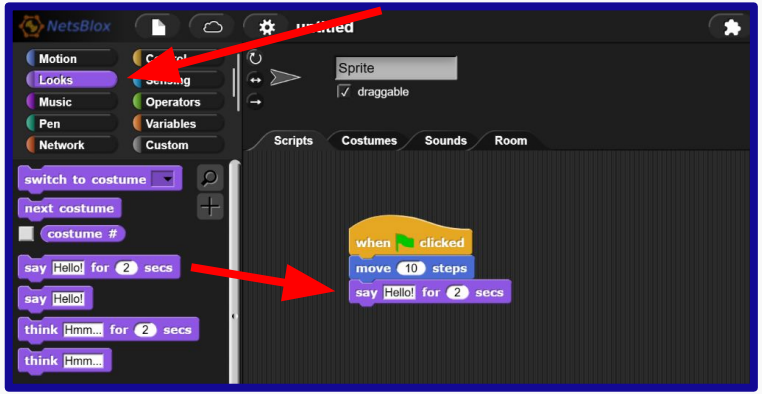
On the top right of the webpage, click on the green flag to run the script on the finch.

Your finch should move forward for a short distance.





Goal #2: Write Out “BI”



01

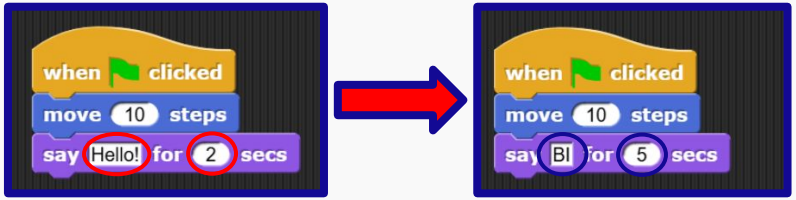
Drag Say Block

Under the looks tab, drag the “say Hello! for 2 secs” block to your workspace under the previous move block.

02

Change Text

In the say block, change the text from “Hello!” to “BI” and the seconds from 2 to 5.



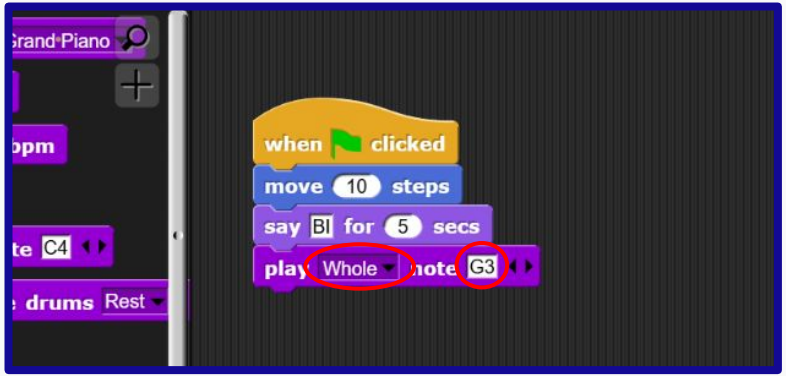
Try Running It…

Goal #3: Playing a Sound

01

Drag Play Note Block

Under the music tab, drag the “play `Quarter` note `C4`” block to under the last block.

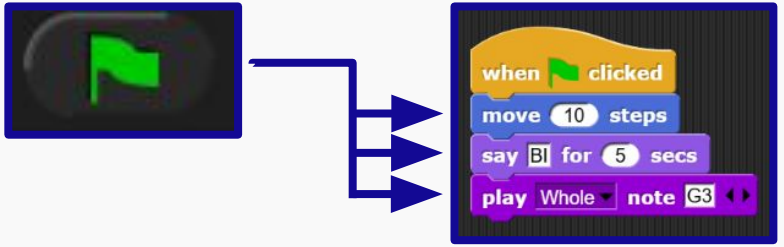


02

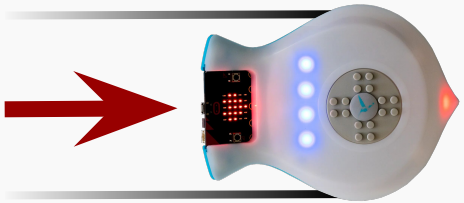
Change the Note Options

Set the duration to a `whole` note, and change the note from `C4` to `G3`.

Now Run It!



Move

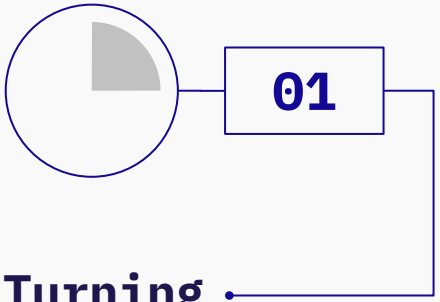


Say “BI”

BI

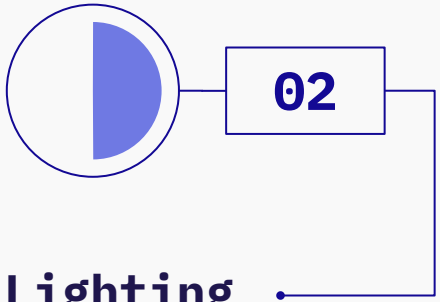
Play Sound

Some ideas to try with your finch…



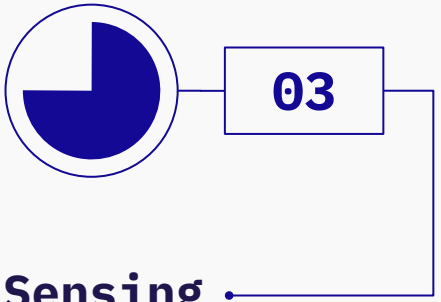
Turning

Try making it rotate and move in multiple directions.



Lighting

Play around with the lights located on the front and beak of the finch.



Sensing

Try using the light sensors or ambient sensors on the finch.