



August 4, 2016

Arduino: The Next Frontier for Scratchers

Lesley University STEAM Team
MIT Media Lab Scratch Team

Who are we?

Kreg Hanning - Lesley University/Scratch Team

Carmelo Presicce - LLK Graduate Student

Ruby Eisenbud - Scratch Team Summer Intern

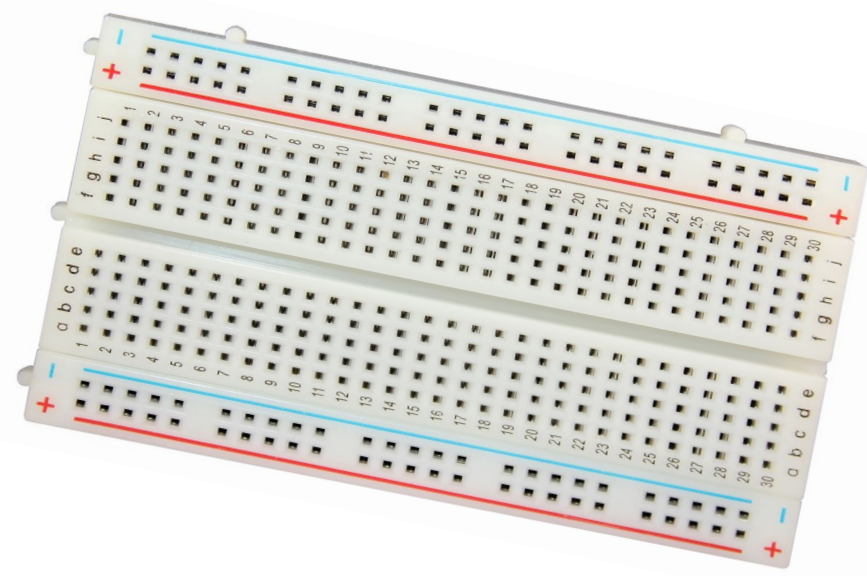
Sue Cusack - Lesley University

Jacy Edelman - Lesley University

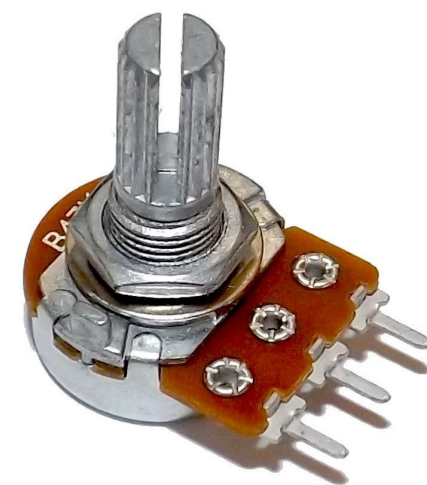
Agenda

2:00 - 2:05	Introduction to Arduino and ScratchX
2:05 - 2:20	Group activity (Hello, Arduino!)
2:20 - 3:20	Free play activities
3:20 - 3:30	Reflections / Share Out

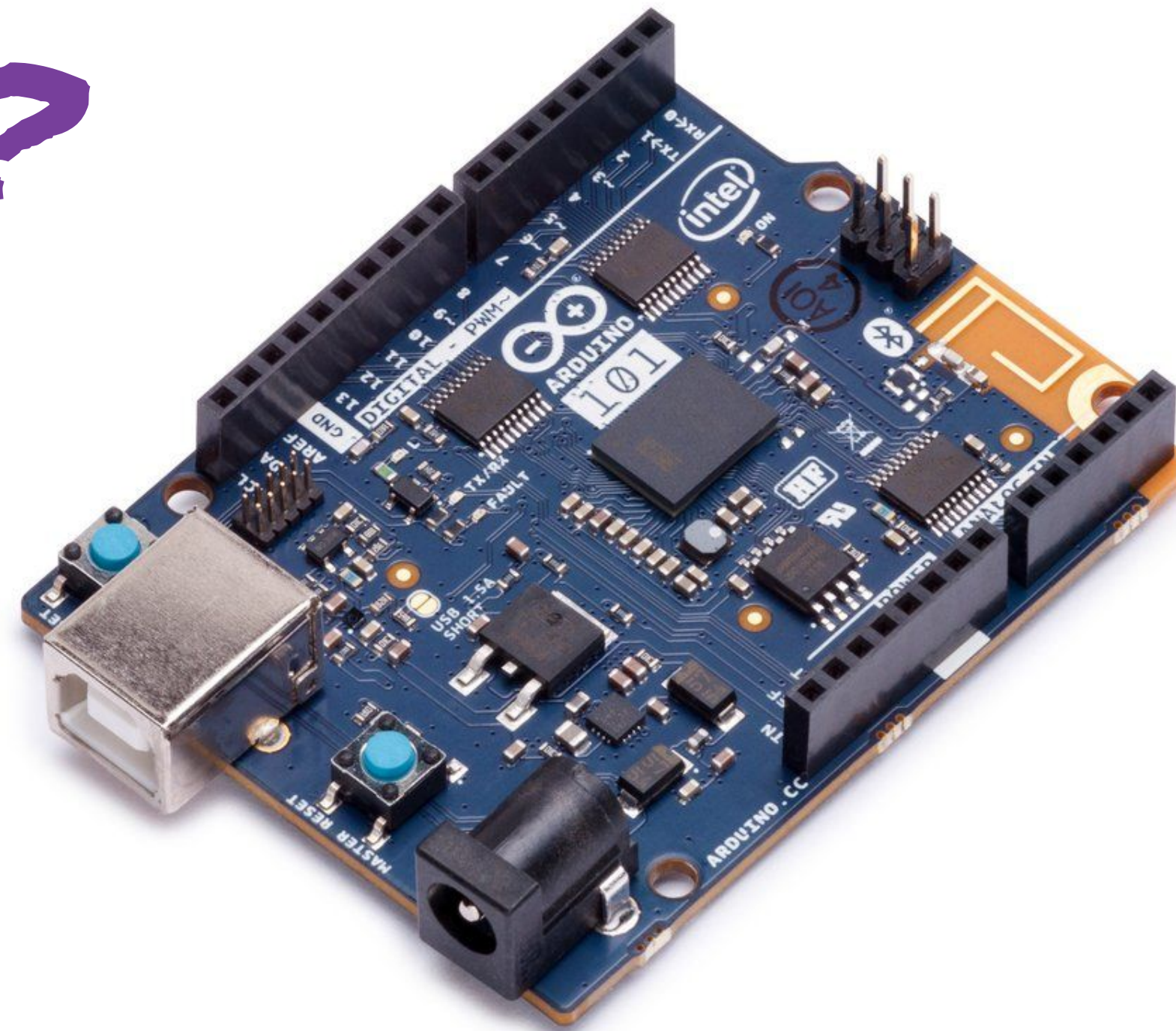
What is Arduino?



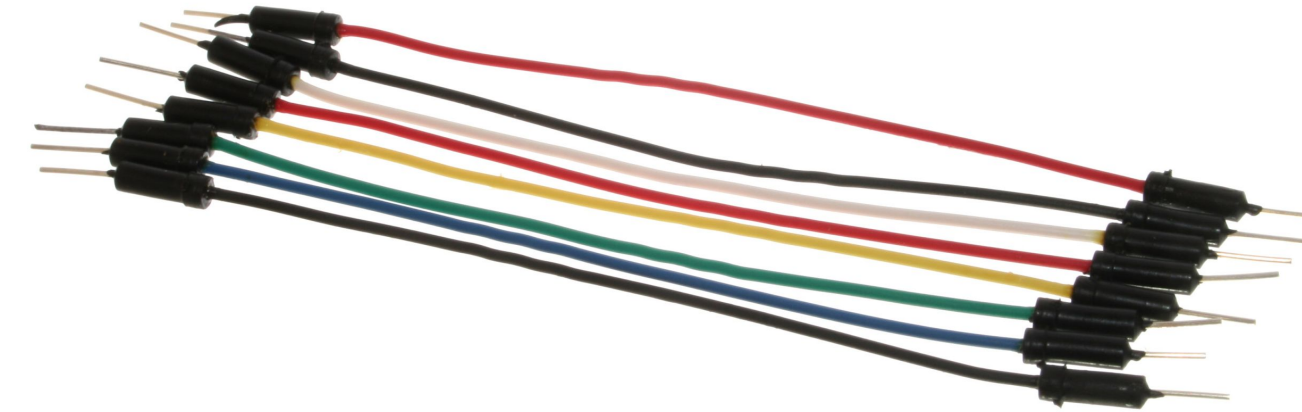
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ScratchX

<http://scratchx.org>

 Beta

[FAQ](#) [See all Extensions](#)


Gallery of Experimental Extensions

With Experimental Extensions, you can create Scratch projects that connect with external hardware and online resources. Try examples below to see the wide variety of things you can do with Experimental Extensions!

If you are a developer with an extension that you'd like to submit to our gallery, read more about the [submission process here](#).

Warning: all extensions are experimental and not a product of the Scratch Team. [Find out more](#)


Arduino
Kreg Hanning, David Mellis



Control Arduino boards
[Sample Project](#) [Documentation](#)

Requires Hardware


Arduino 101
Kreg Hanning



Control Arduino/Genuino 101 boards
[Sample Project](#) [Documentation](#)

Requires Hardware

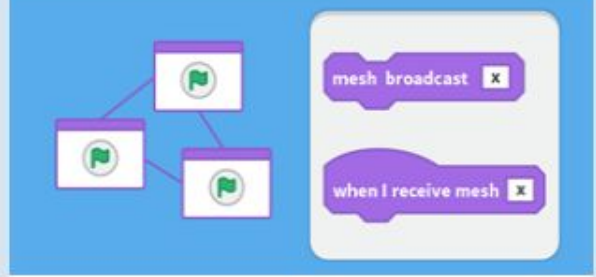
EV3+Scratch
Ken Aspestagh




Control LEGO EV3 robots wirelessly
[Sample Project](#) [Documentation](#)

Requires Hardware

Firestore Mesh
Connor Hudson




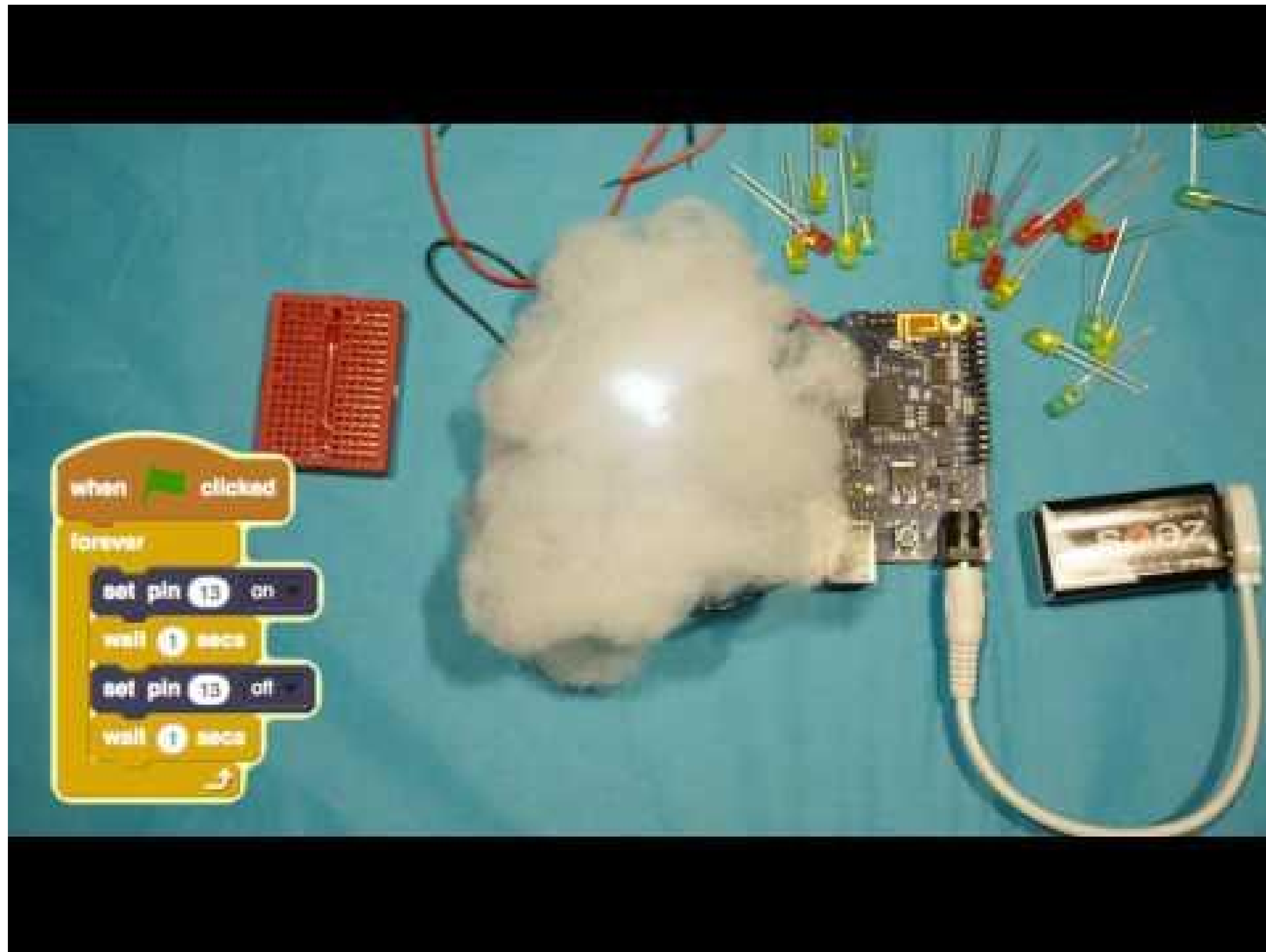
Intel® RealSense™
Shachar Oz, Yaron Yanai, Yotam Salmon



CREATE SOMETHING AMAZING
INTEL® REALSENSE™ EXTENSION FOR SCRATCH

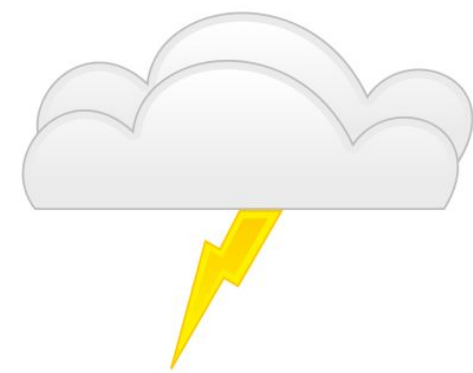
iRobot® Create® 2
iRobot





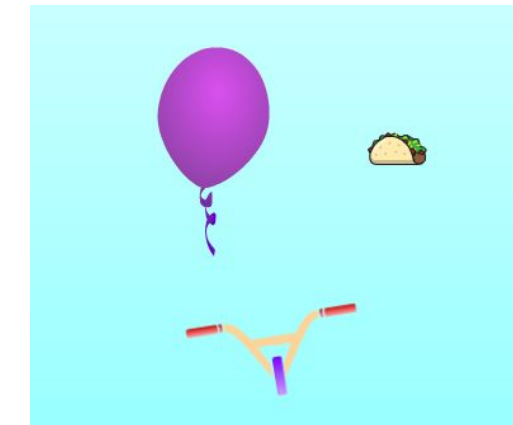
Let's Play!

LED Cloud



Design and build an LED powered lightning cloud complete with sound effects.

Tilt Controller



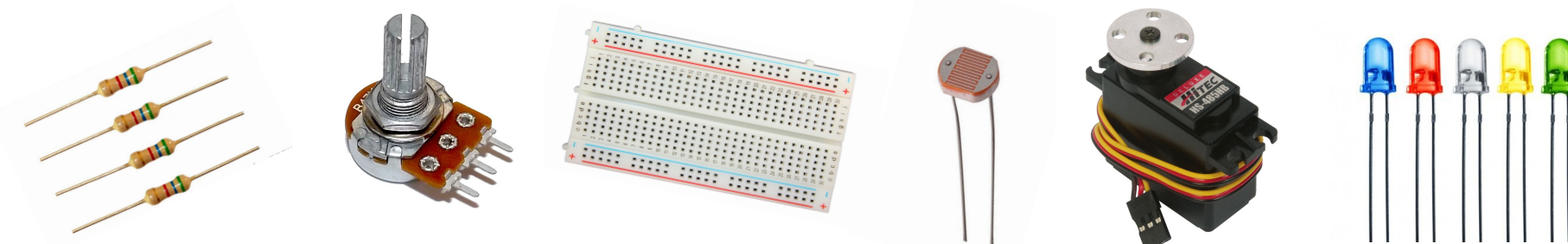
Build a tilt controller to control a flying bicycle Scratch game.

Magic 8 Ball



Program a Magic 8 ball to respond to shake gestures and add your own phrases.

Open Exploration



Check out some advanced Arduino projects and explore more advanced inputs and outputs.