# Hack the Mic: IoT with Kinoma

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# The Internet of Things (IoT)


## Most Recent Customer Reviews

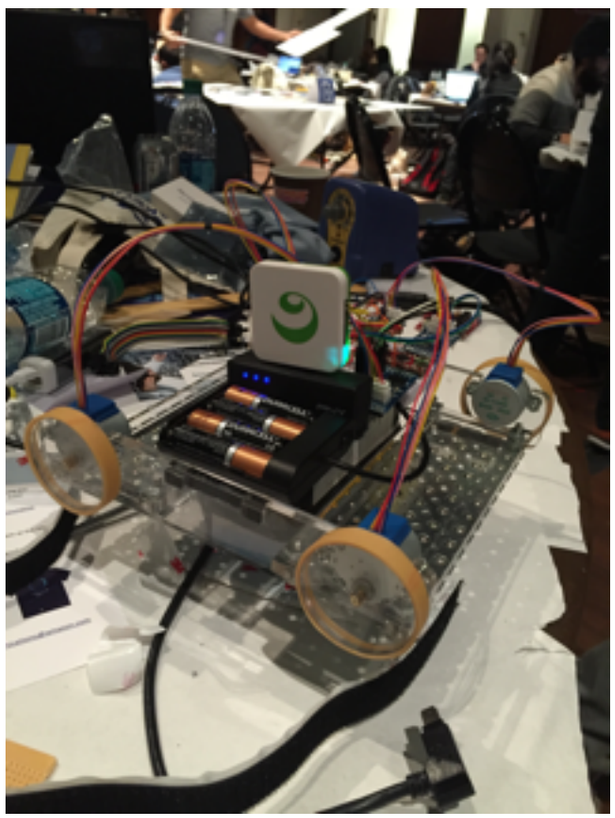
★★★★☆ **Essential in life**

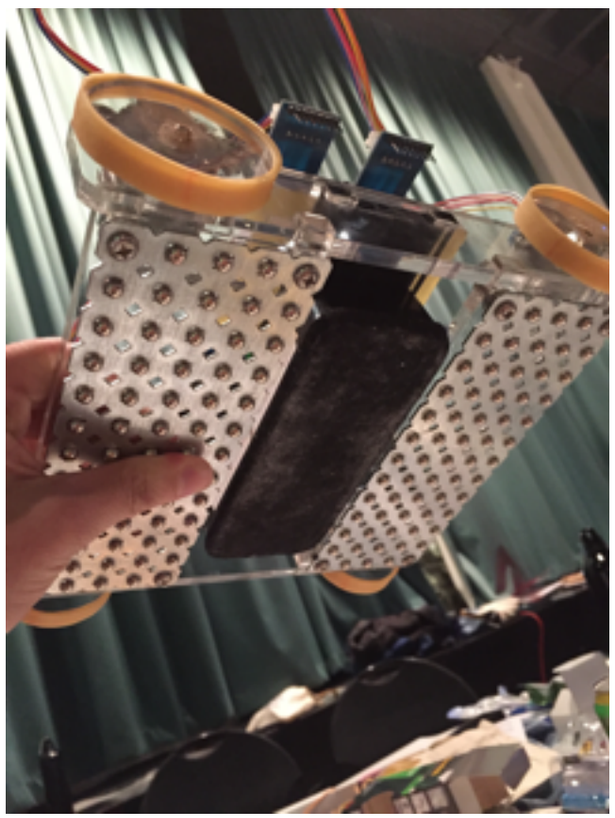
I used to walk around asking myself, "How many eggs are in the fridge?" I no longer have to worry, it is always at my fingertips.

Published 4 days ago by JR


# “Never lose your page again”

# MakeMIT





# Making without a cause

# The Maker Movement

- DIY meets tech
- Computers, robotics, 3-D printing, metalworking, woodworking, etc.

# Maker media

Make: Make Magazine

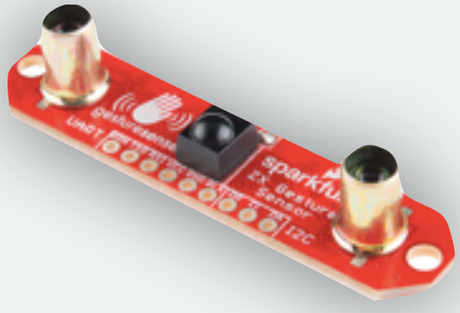
Maker Faire Maker Faires

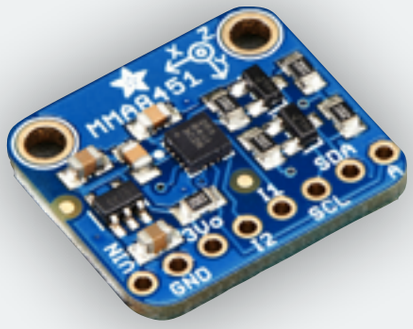
# Noisebridge Hackerspace

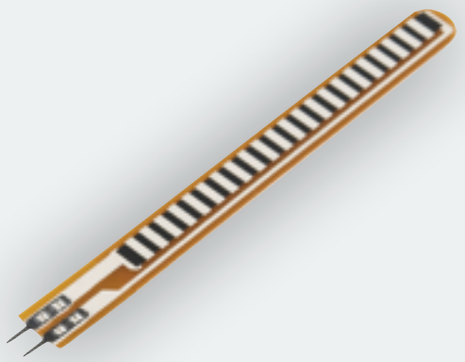
- Beginner friendly events with many materials provided
- www.meetup.com/noisebridge

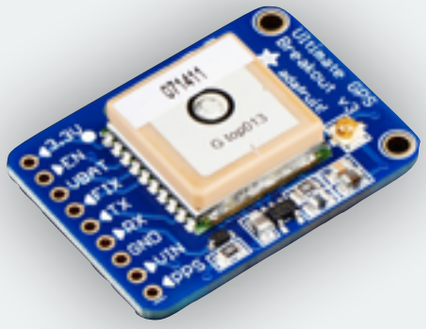
sparkfun™ ELECTRONICS

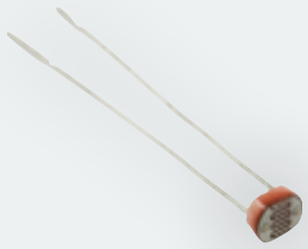
adafruit

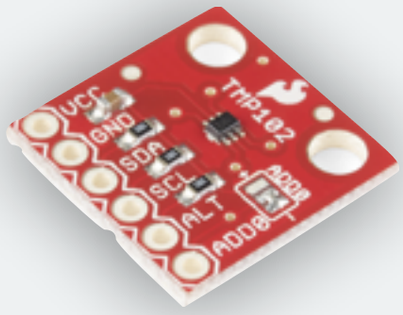


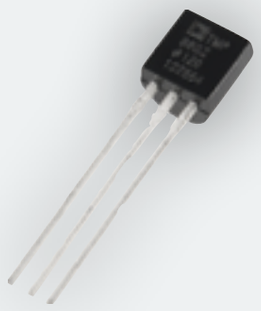





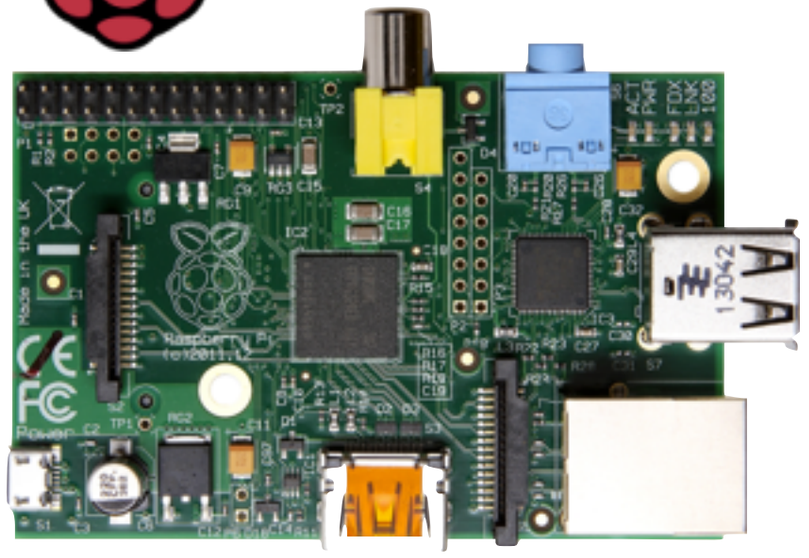





ARDUINO

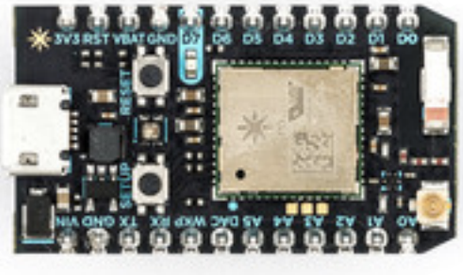

RaspberryPi



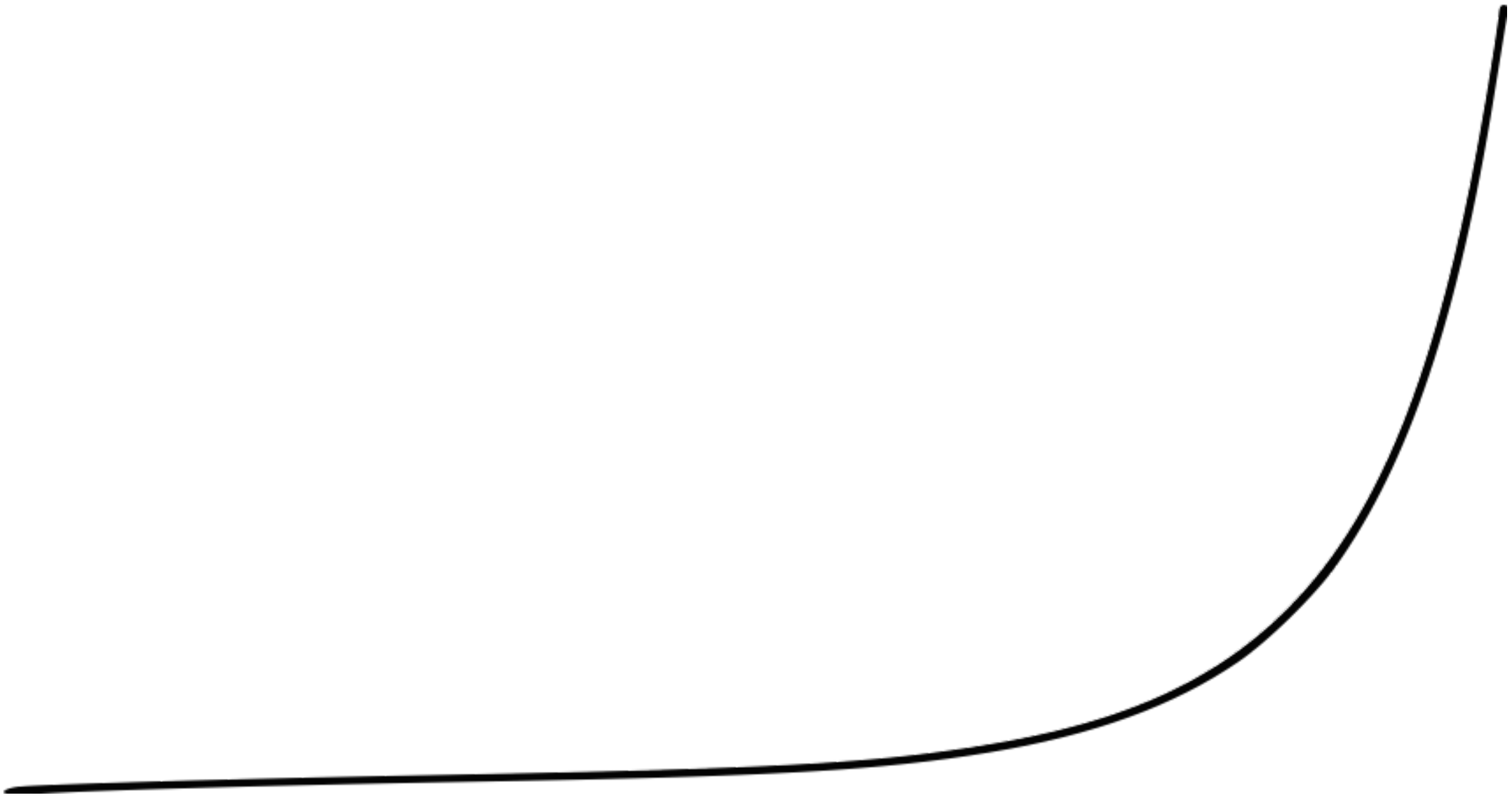

intel Edison


electric imp

Particle



# Getting started is hard

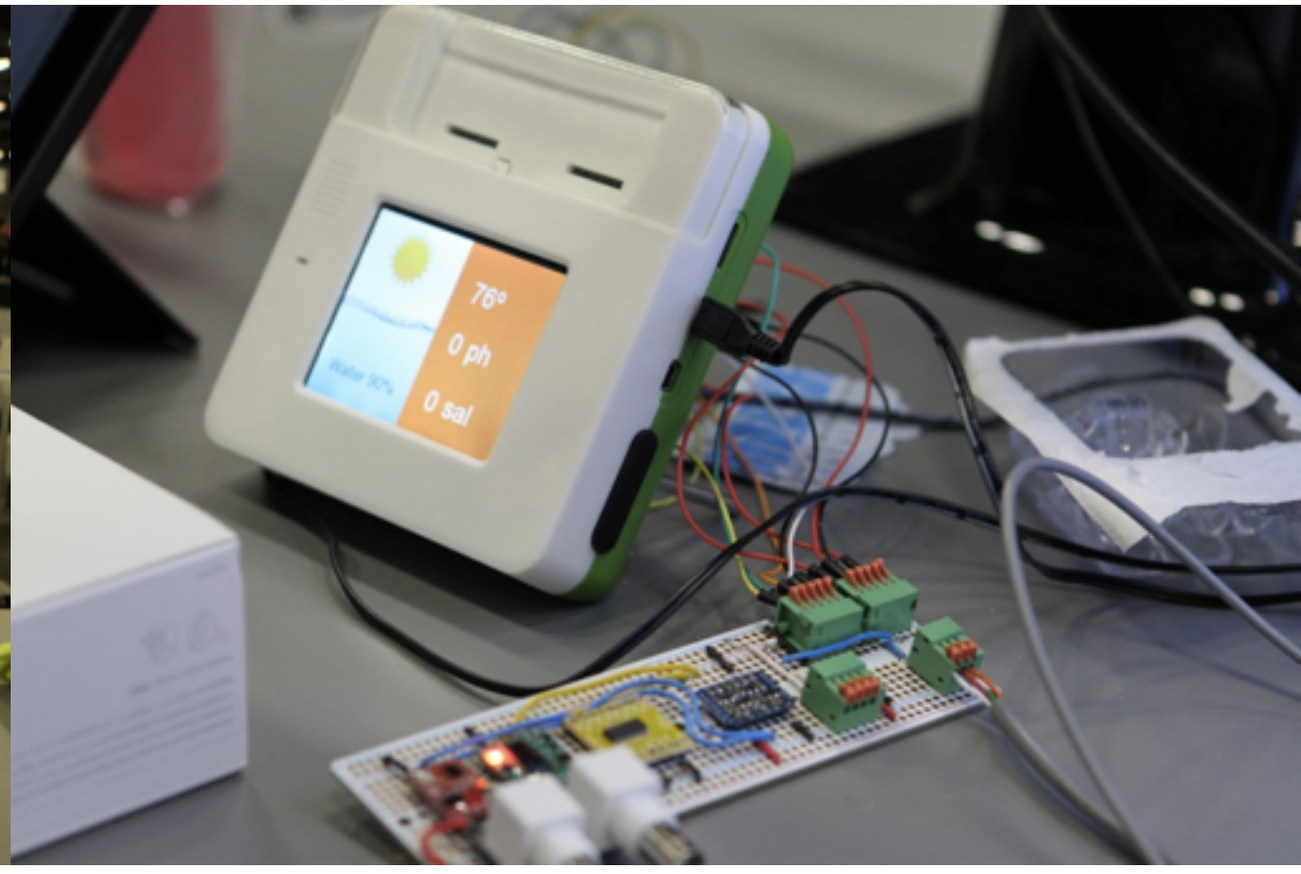



Kinoma

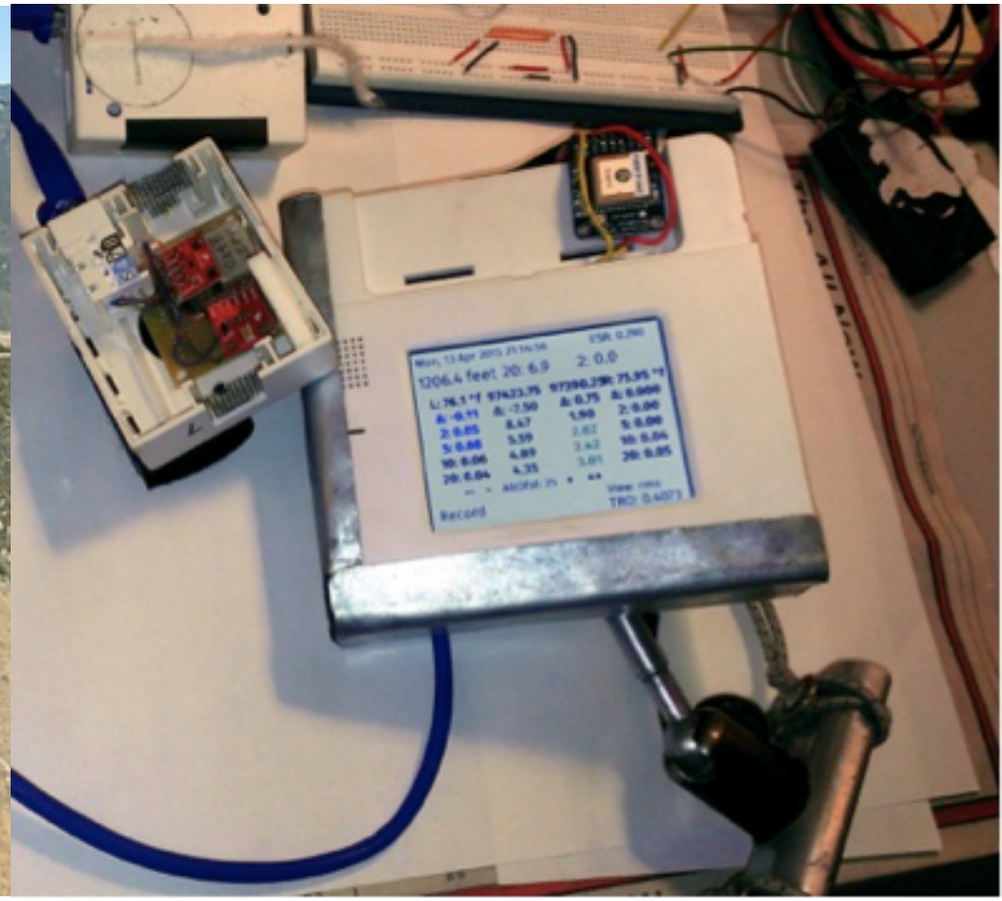
# Kinoma Element and Kinoma Create

# Not your average prototyping boards

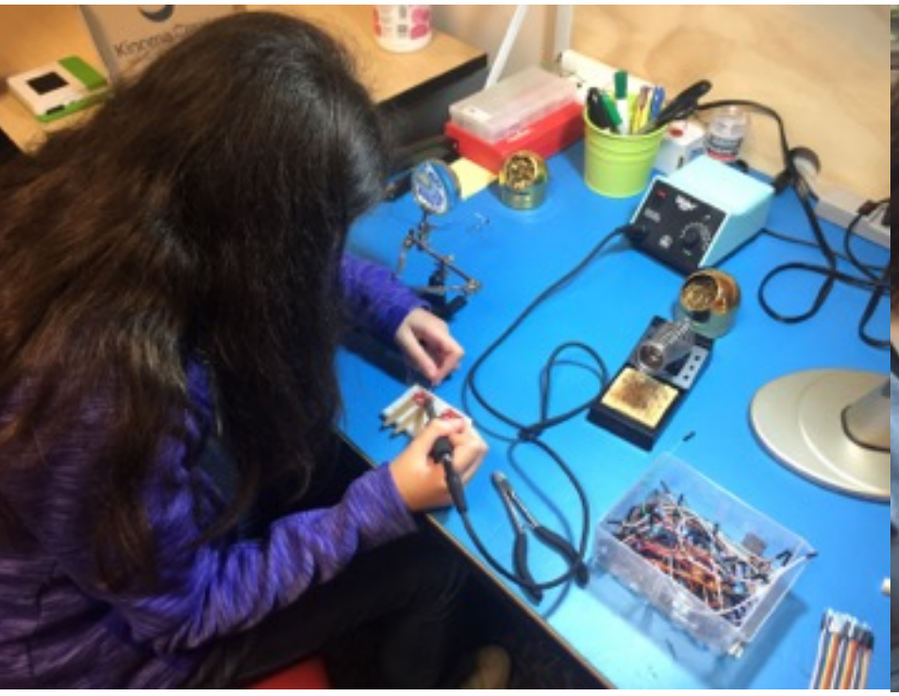

# Aquarium monitor

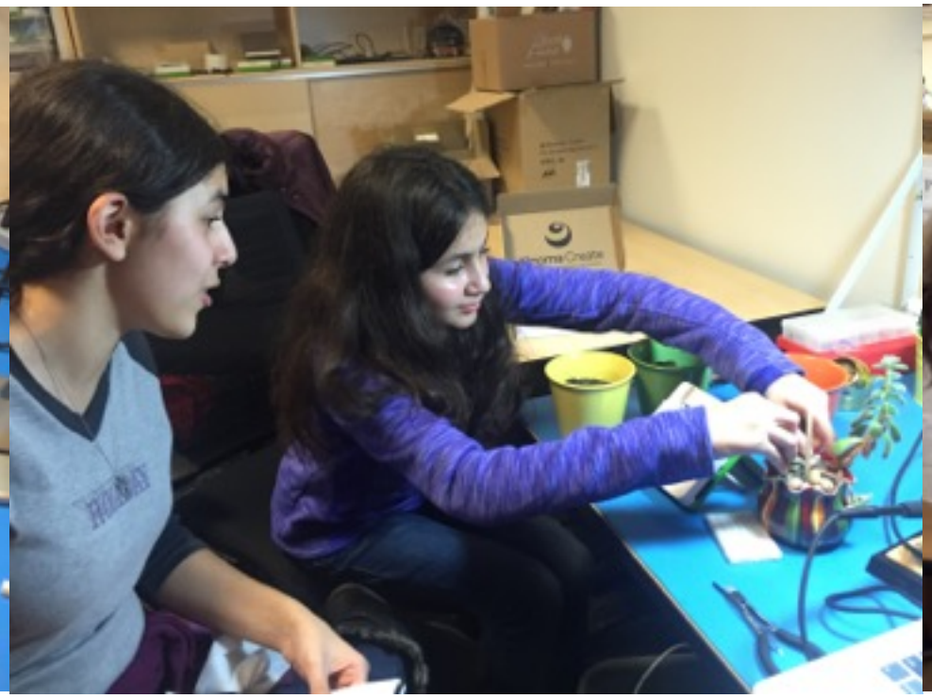


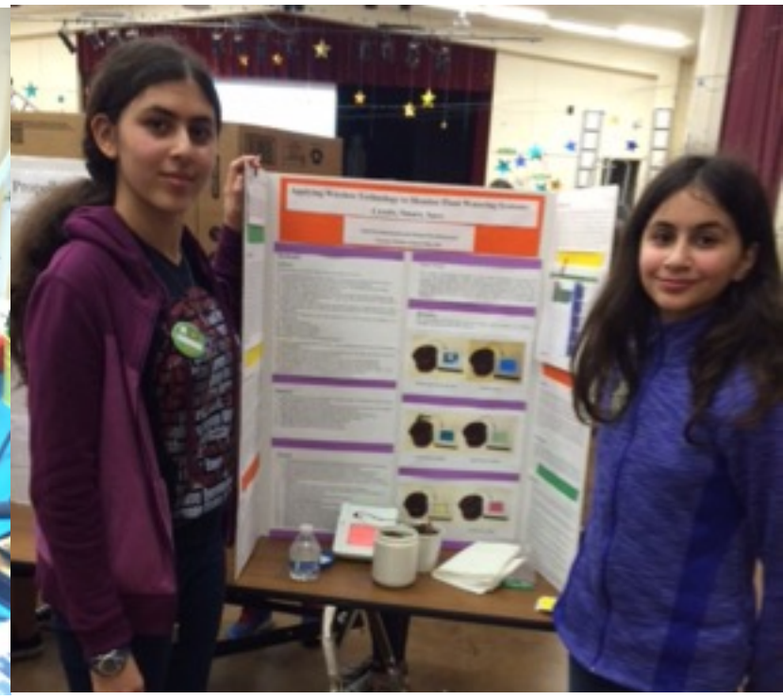
# Hang gliding helper

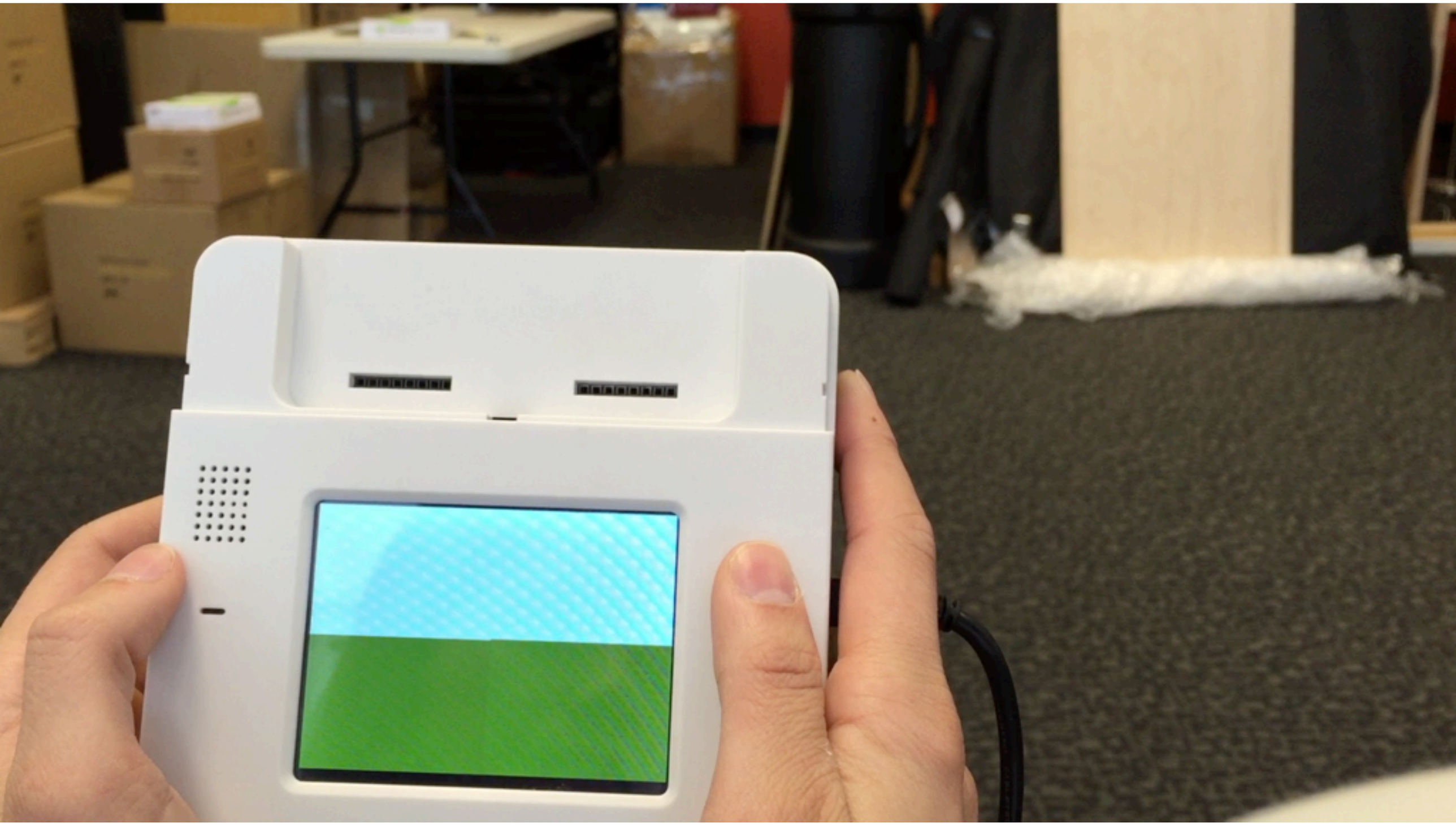


# Plant monitor









(video)

# Tri-color LED

# A note to new makers

- Never view projects at face value
- Prototyping kits let you decide what to make with them

# The Kinoma platform

- Prototyping devices
- Our own programming language
- Tools for developers to program them

# JavaScript has proven to be accessible to designers, students, and engineers

```
var redSkin = new Skin({ fill: 'red',});
var blueSkin = new Skin({ fill: 'blue',});

var labelStyle = new Style({ color: 'white', font: 'bold 36px', horizontal: 'center', vertical: 'middle', });

var MainContainer = Container.template($ => ({
    left: 0, right: 0, top: 0, bottom: 0,
    active: true, skin: blueSkin,
    contents: [
        Label($, { left: 0, right: 0, top: 0, bottom: 0, style: labelStyle, string: $.text })
    ],
    behavior:  Behavior({
        onTouchBegan: function(container, id, x, y, ticks) {
            container.skin = redSkin;
        },
        onTouchEnded: function(container, id, x, y, ticks) {
            container.skin = blueSkin;
        }
    })
}));

application.add( new MainContainer({ text: "Hello, KPR" }));
```

# 4 hardware trends to watch in 2016

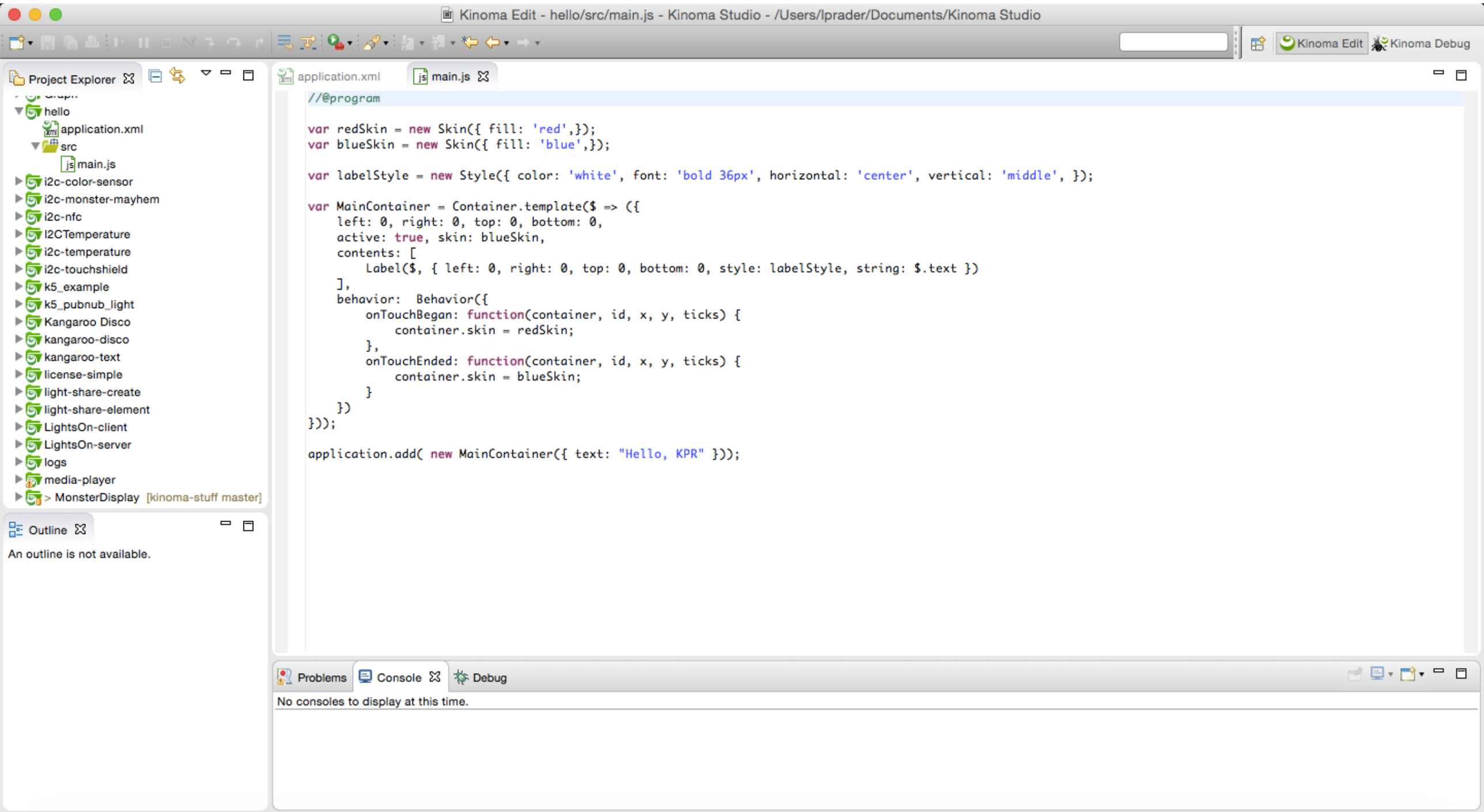
Early signals of what's to come in the hardware world.

O'REILLY®

## High level programming languages on embedded systems

Relatedly, writing software to control drones, vending machines, and dishwashers has become as easy as spinning up a website. Fast, efficient processors . . . are turning JavaScript into a popular embedded programming language—unthinkable less than a decade ago.

# Kinoma Studio



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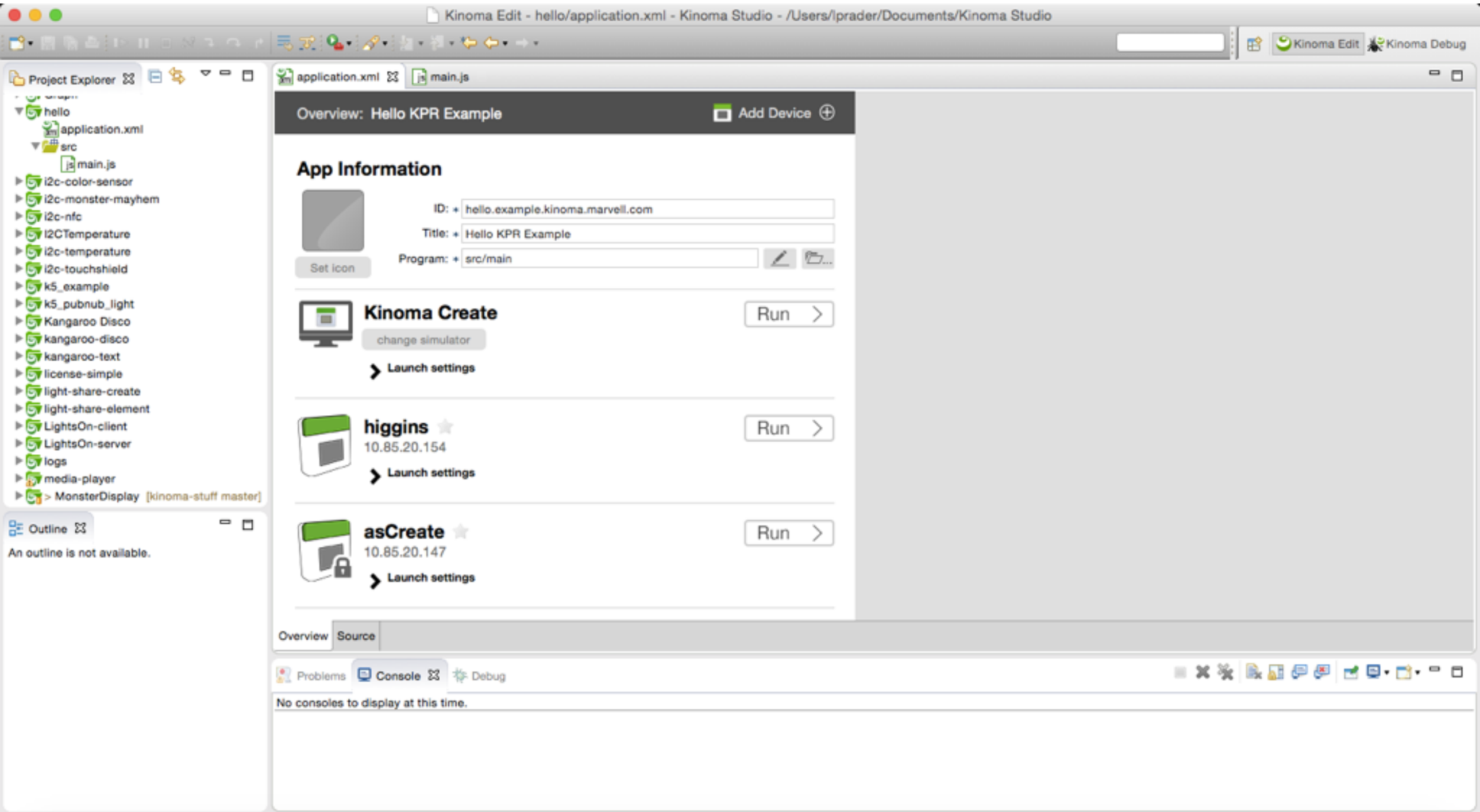
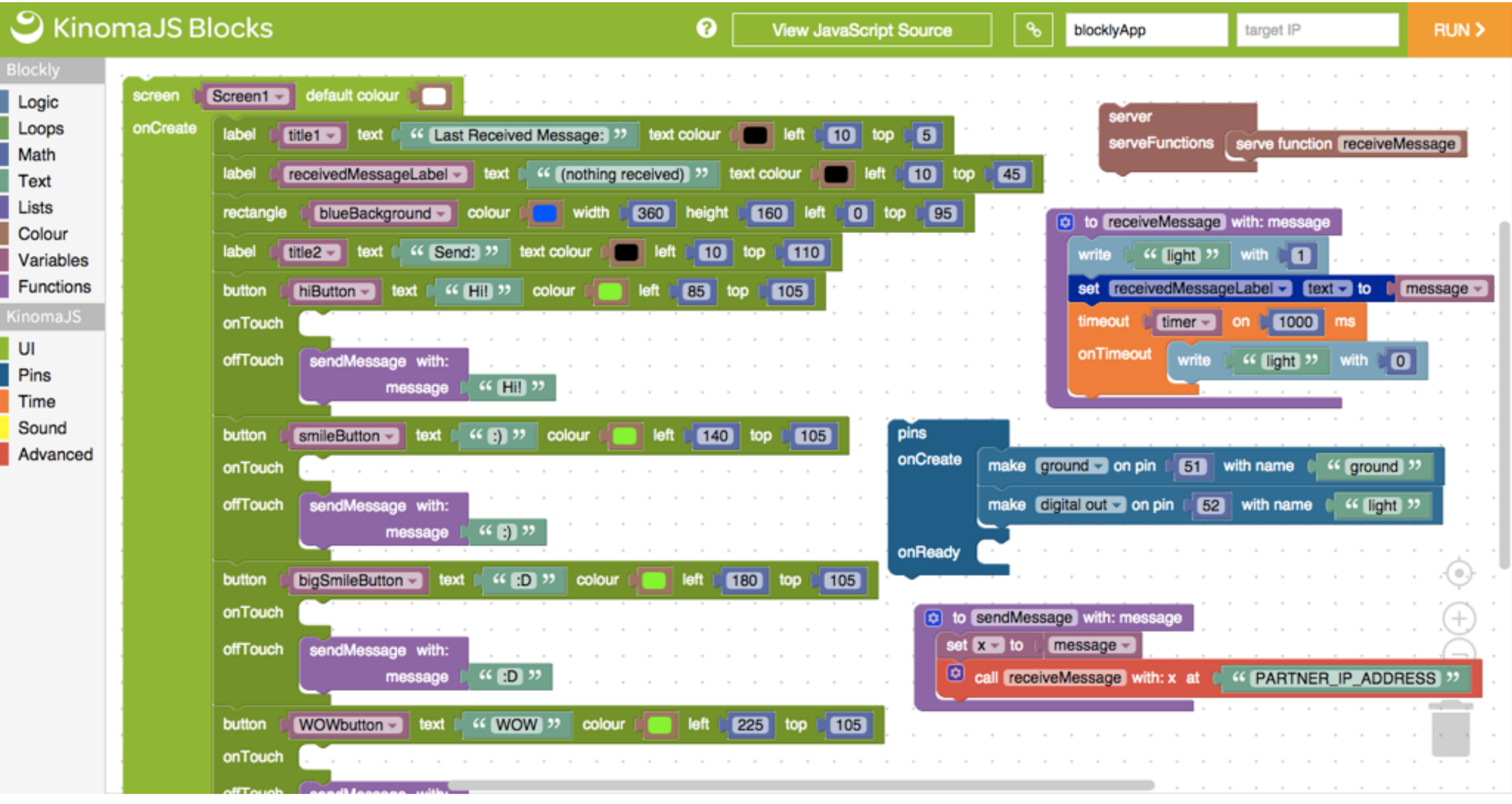


# KinomaJS Blocks




KinomaJS Blocks
View JavaScript Source
RUN
KinomaWPA
10.85.20.131
Settings

(video)

# KinomaJS Blocks

- As easy as it gets
- No downloading
- No wires

# Everyone can be a maker

# Thank you!

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# Questions?

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