

# Collab: Originate

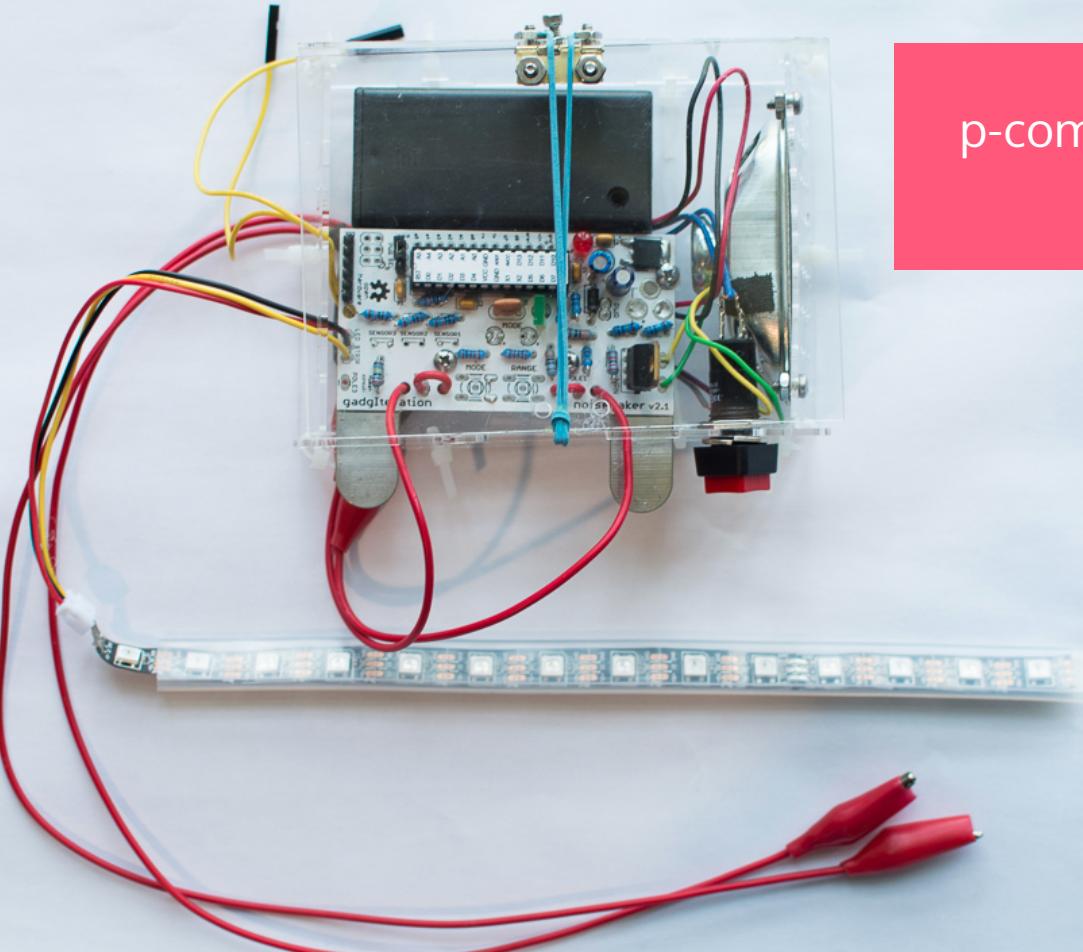
## Web Development



# GADGIGATION

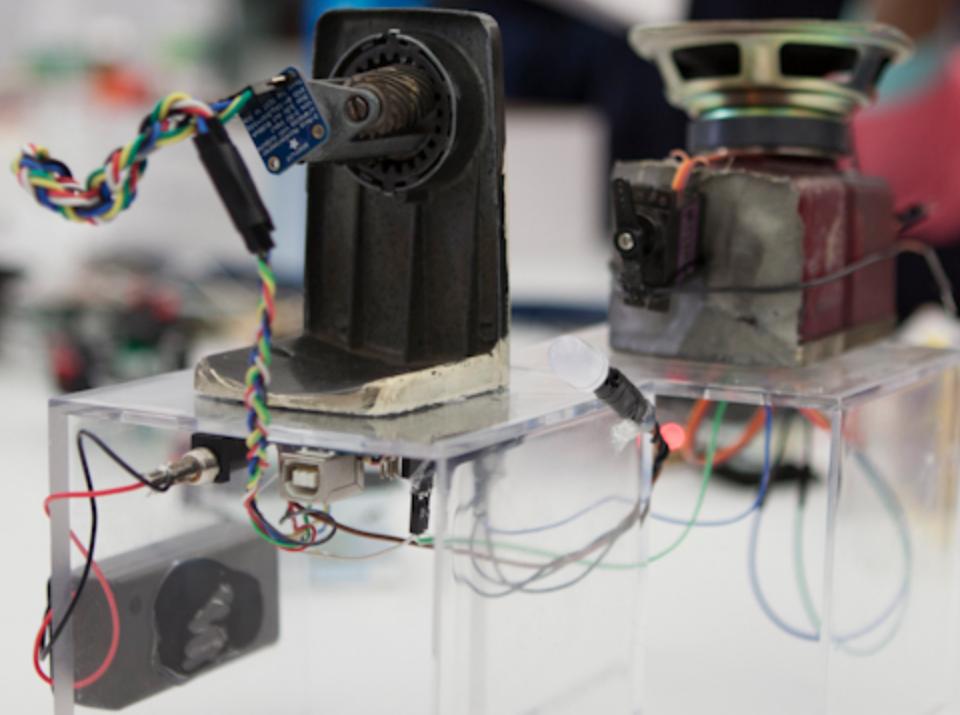
A large group of children and young adults are gathered around a long wooden table in a workshop or classroom setting. They are all focused on various electronic components and tools spread out on the table. Some are wearing white t-shirts with "GADGETATION" printed on them, while others have different designs like an American flag. One boy in a red shirt is holding up a blue plastic bag. Another boy in a white t-shirt with "OLD NAVY" is looking down at something in his hands. A girl in a white t-shirt is holding up a large sheet of paper. The background shows more people and shelves, suggesting a busy, creative environment.

workshops for underserved communities -  
6th-12th grade



p-comp platform for novices  
with room for growth

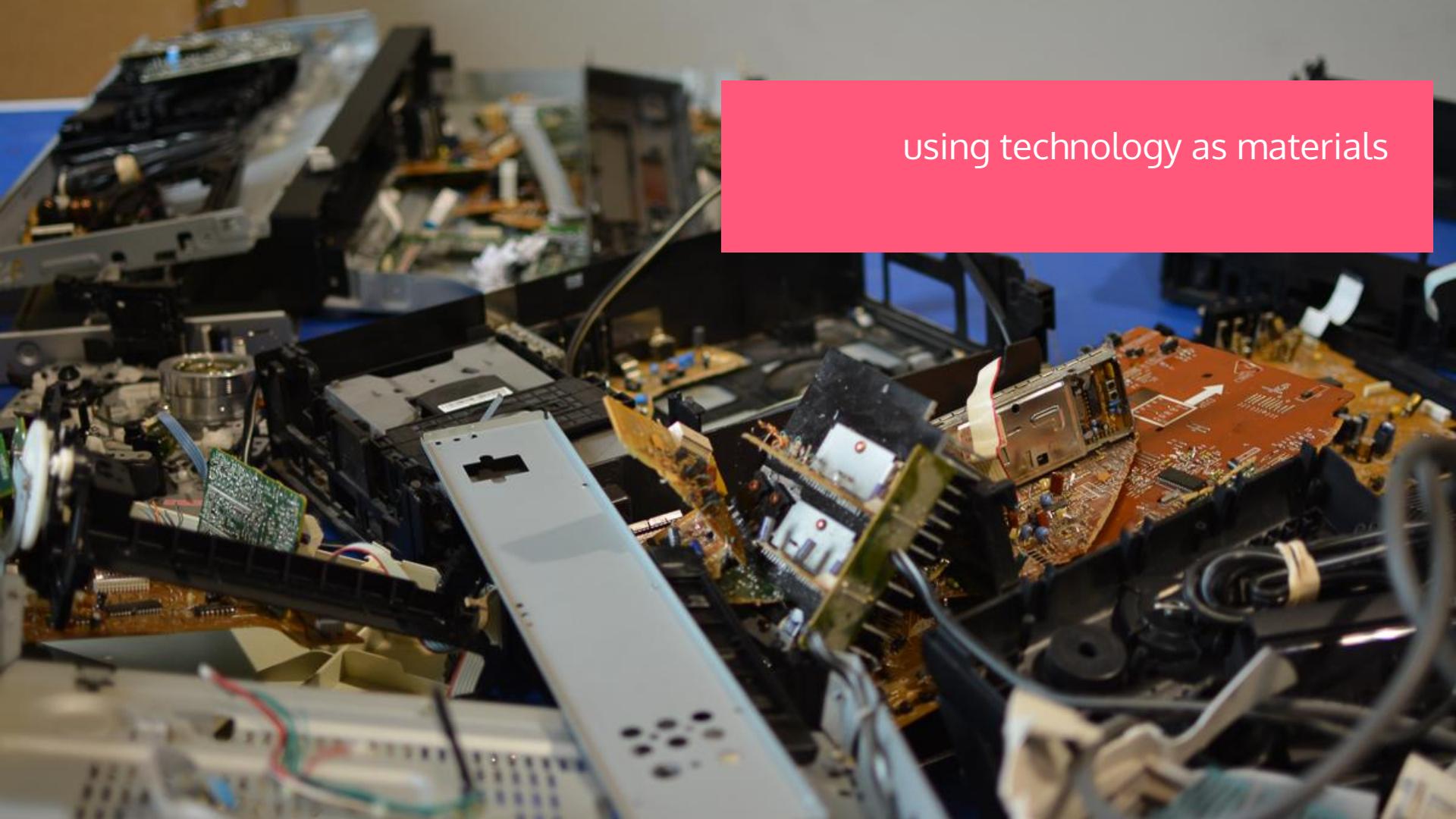
began with making noisy objects





creativity generation  
and the iterative design process

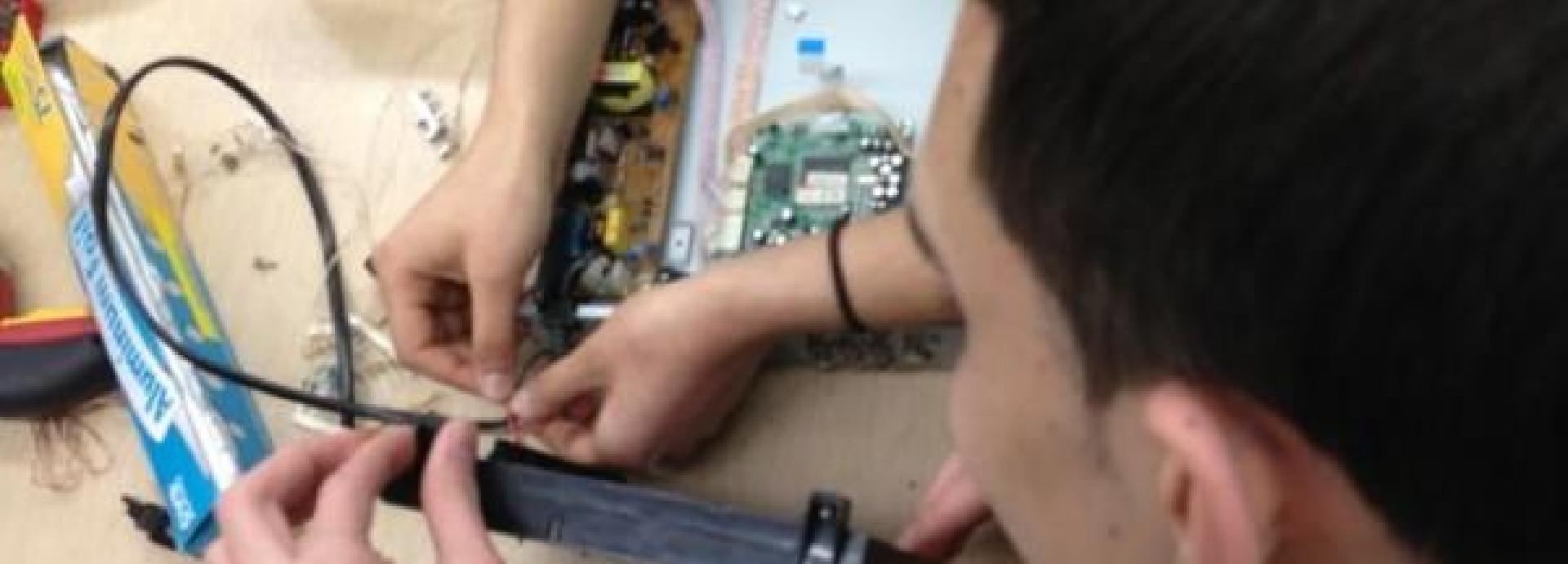




using technology as materials

# Teamwork

(2-4 per team: UI/UX, Coder/Programmer, Content)



## Originate:

Re-imagine an online community platform for  
gadgITERATION (<http://www.gadgitation.org/>)



about download documentation tutorials gallery community development  
> forum > addons > github > mailing list > IRC > blog

english / [japanese](#)

The screenshot shows a dark-themed video player interface. On the left, the text "OPENFRAMEWORKS SHOWREEL #1" is displayed in large white capital letters, with "SELECTED WORKS" below it in a smaller white font. On the right, there are three dark circular icons with white symbols: a heart, a clock, and a paper airplane. At the bottom left, a play button icon is followed by the text "01:35" and "Track: Way U Do - RL Grime Remix". To the right of the track name is a progress bar. At the bottom right, there are "HD" and "vimeo" logos.

openFrameworks is an open source C++ toolkit for creative coding.

## download

Grab the most recent release (0.8.3) and follow the setup guide to get openFrameworks running.

## documentation

Reference for openFrameworks classes, functions and addons. For guides and tutorials, see the [wiki](#).

## forum

Create stories, games, and animations  
Share with others around the world



A creative learning community with **6,268,251** projects shared

[ABOUT SCRATCH](#) | [FOR EDUCATORS](#) | [FOR PARENTS](#)

The image shows a Scratch script editor window. A yellow script is attached to a green flag sensor. The script uses a repeat loop (repeat 10) to move the cat 10 steps, change its color by 25, play a drum for 0.2 beats, and say "Welcome to Scratch!" for 2 seconds.

```
when green flag clicked
repeat (10)
  move (10) steps
  change color by (25)
  play drum [drum C v4] for (0.2) beats
  say [Welcome to Scratch!] (2)
end
```

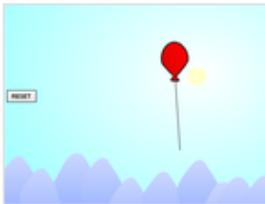
## Featured Projects



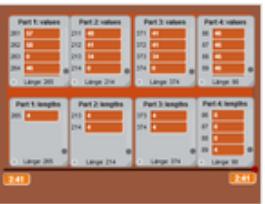
**Dropbox (v.2.0)**  
by PeaBrainProgram



**Shunting Yard Algorithm**  
by MasterOfArithmetic



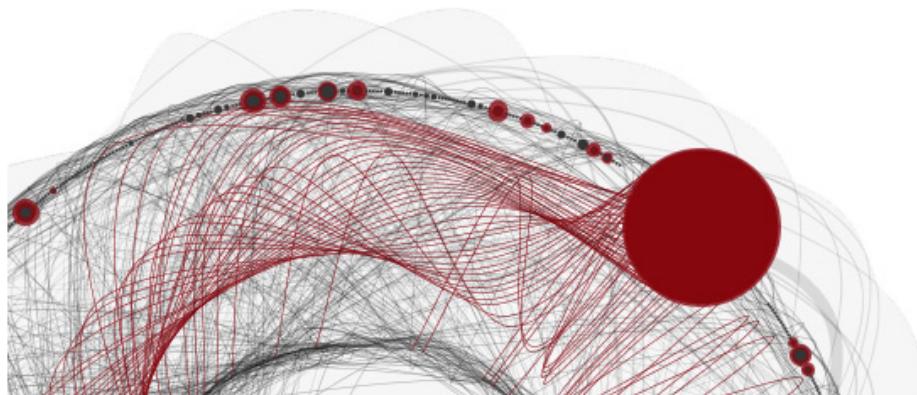
**Balloon Simulator**  
by Doodlebug450



**Forrest Gump - musicX...**  
by webdesigner97



**ゴーストハンツ - Ghost ...**  
by penguin\_nilsan

[login - sign up](#)

## featured sketches



Visualizing text  
by Diana Lange



sketch  
by Aris Bezas



Biomechanics  
by Asher Salomon

A website to share Processing sketches

**share** your sketches with others

**help** and **collaborate** with the community

**improve** and **polish** your programming skills

**follow** classes around the world teaching processing

## Introducing Plus+ Membership!

Enjoy the next level for your sketches while supporting OpenProcessing

Bigger uploads, no ads, custom license & private sketches

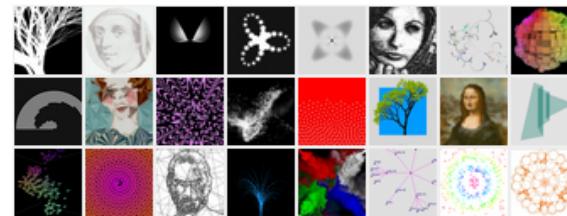


[create new sketch](#)

[upload from processing](#)

## favorites of the last 7 days

[browse all-time favorites](#)



## recent likes



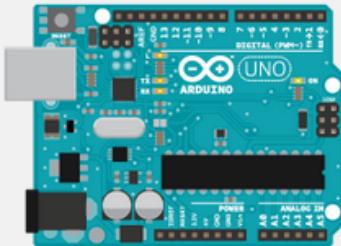
Search the Arduino Website



Home Buy Download Products ▾ Learning ▾ Reference Support ▾ Blog

LOG IN SIGN UP

## WHAT IS ARDUINO?



BUY AN ARDUINO



LEARN ARDUINO



VIDEO MIXING CHESS  
GAMES ON TV IN NORWAY  
USING ETHERNET SHIELD

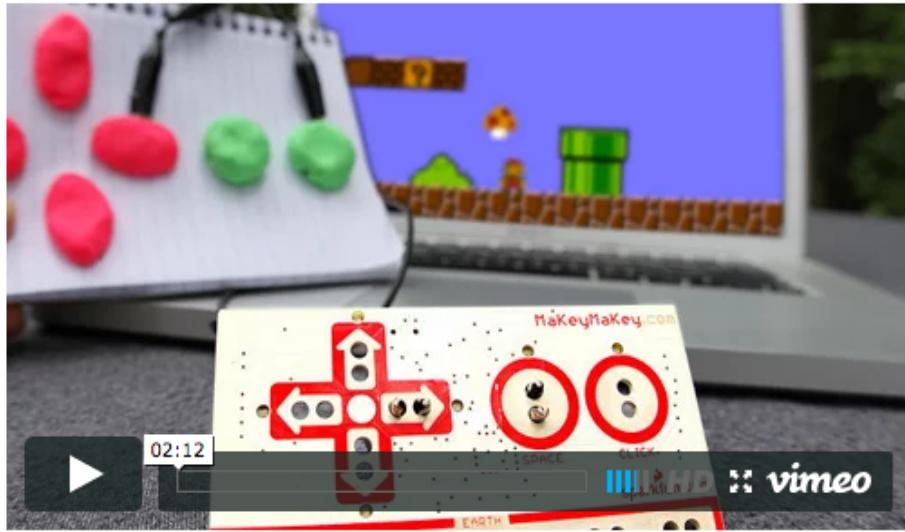




FORUMS ABOUT PRESS

BUY FAQ PROJECTS BLOG GUIDES HOW-TO

An Invention Kit for Everyone



## What Can I Make?

That's up to you! First, load up a computer program or any webpage.

Ever played Mario on Play-Doh or Piano on Bananas? Alligator clip the Internet to Your World.

**ORDER NOW**



**In stock! Ships immediately!**

Get Awesome Updates!

you@example.com

## PROJECTS



FEATURED PROJECT

# REAL-TIME WEATHER DASHBOARD

Monitor current and forecasted weather data with littleBits

**EXPLORE**  
our amazing projects below



**SHARE**  
your projects



Build internet-connected hardware. Spark gives you the tools to connect everyday electronics to the internet over Wi-Fi.

[DOCUMENTATION](#) [FORUMS](#) [BUY SPARK CORE](#)[+ Add project](#)[Sort by ▾](#)[Filter by ▾](#)

### [Building a WiFi Outlet](#)

by [Daniel Nordness](#)

I decided to build a wifi-enabled outlet with my Spark Core.

👁 4433    ⌂ 11    💬 1



### [The foobar](#)

by [Max Eusterbrock](#)

A Spark-powered, automated, cocktail dispenser

👁 623    ⌂ 9    💬 1    ⚙



### [An e-paper, wifi keypad](#)

by [Luka Birsa](#)

How Spark Core helped us make a Wi-Fi keylock with e-paper keypad for our office

👁 2311    ⌂ 10    💬 2

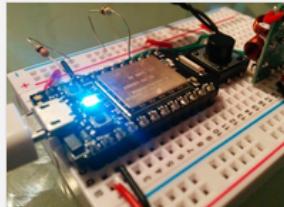


### [Spark Doorbell](#)

by [Chris](#)

Smart Doorbell plays polyphonic ringtone, connects to XBMC and sends an e-mail

👁 2188    ⌂ 7    💬 3    ⚙



### [LetterBot](#)

by [James Cadman](#)

Every Home Should Have One.

👁 1507    ⌂ 3    💬 0    ⚙

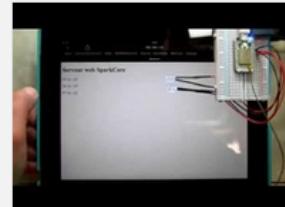


### [Spark Door access control system](#)

by [Dragonsshout](#) on [community.spark.io](#)

Open the door via web, Android app or RFID tag.

👁 1,705    ⌂ 15



### [sparkcore-local-http-server-rest-json](#)

by [Sébastien Joly](#)

Local HTTP server with REST and JSON for Sparkcore

👁 2688    ⌂ 3    💬 0



### [Open source Nest-alike learning thermostat](#)

by [Zach Supalla](#)

Start a \$3.2 billion company by building your own learning thermostat with the Spark Core.

👁 3974    ⌂ 11    💬 2

## Originate: Common Core

Set of curriculum developed by the states (not Federal gov't)  
Captures 21st century skills: collaboration, critical thinking, etc.

ex: New York State Learning Standards

## Originate: Users / Stakeholders

Educators (formal and informal)

Students (6th-12th grade)

Funders

## Originate: Schedule

### WK 02 - 04

Looking into documents and defining what gadgitation is, experimenting with hardware, Looking into precedents about collaborative platforms. Putting students as one of our stakeholders.

Materials: NoiseMakers, sensors

## Originate: Schedule

**WK 02 - 04**

Break down the site architecture of a precedent. Identify stakeholders/users. Analyze the flow (UX) and usability (UI).

# Originate: Schedule

## WK 05

Bring in Guest Speaker on creating successful online community + light lecture on case studies.

## Originate: Schedule

**WK06 - 10 (Midterm: WK08)**

Begin iterative process in web dev, form a team.

Outcome: Precedent, Experience Flow, initial sketch of look and feel

# Originate: Schedule

WK 11 - 14

Working towards the MVP

# Originate: Schedule

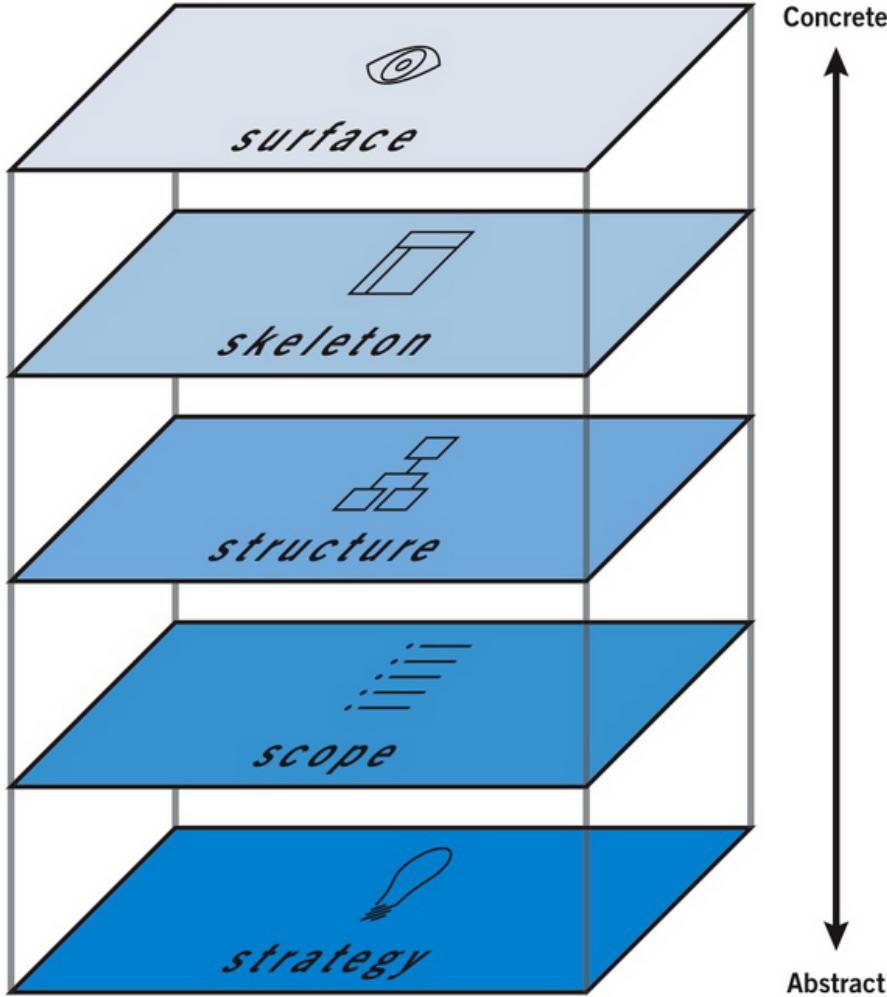
WK 15

Final Presentation

# What will I learn in this class?

- Gain understanding of an online community as platform for collaboration
- Realistically develop a website/web app as a team
- Learn to set goals and reach them through design sprints
- Create a curriculum/instructable from scratch
- Acquisition of tech skills: UX/UI, Front-end development, HTML5, CSS3, JavaScript, Database

# How do we begin?



**Surface** brings everything together visually: What will the finished product look like?

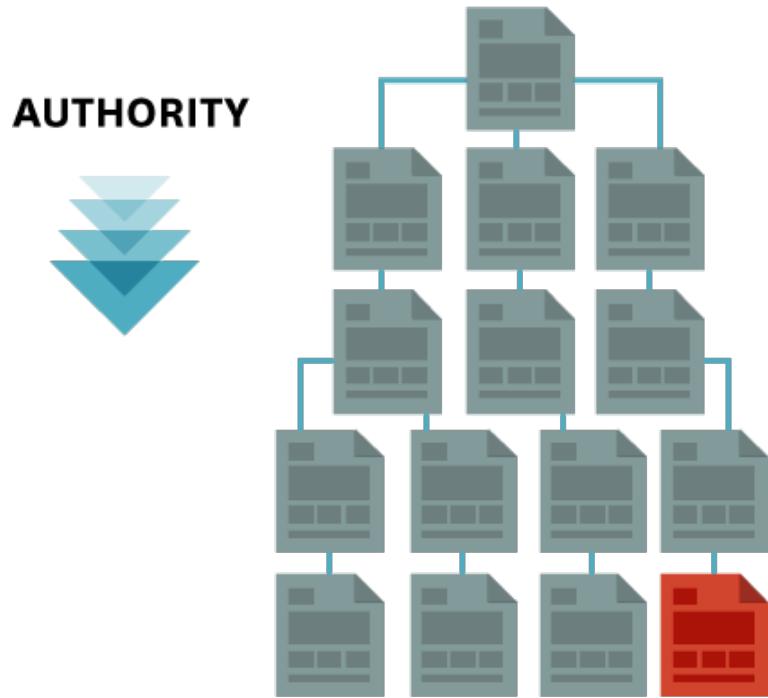
**Skeleton** makes structure concrete: What components will enable people to use the site?

**Structure** gives shape to scope: How will the pieces of the site fit together and behave?

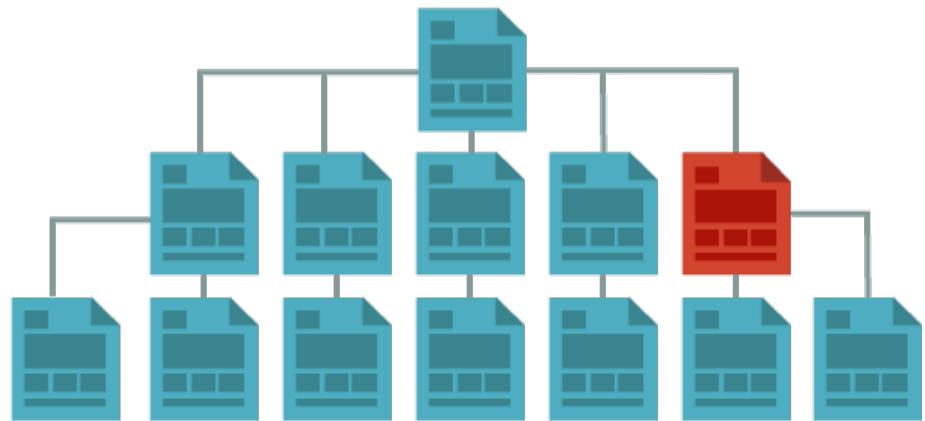
**Scope** transforms strategy into requirements: What features will the site need to include?

**Strategy** is where it all begins: What do we want to get out of the site? What do our users want?

**DEEP SITE  
ARCHITECTURE**



## **FLAT SITE ARCHITECTURE**



Very weak pages at the bottom  
of the architecture.  
Low indexation and poor long tail