Make, Map, Blink: Creating Data-Driven Projects for the Internet and the Physical World
Fall 2014

Course Timeline:
Class 1
LED throwies
Pin maps

Class 2
The cupboard: Places for your stuff
  - Tumblr
  - git pages
  - domain name
  - get arduinos
Conductive dough
Choropleth maps
  - evacuation map
  - Germans in the us

Class 3
Intro to Arduino
  - Blink
PIP with cartodb
  - pre-k

Class 4
Sensing with Arduino
  - Make a working reference card for sensors
  - Build a light sense -> show the values in the serial monitor
Mapping Big Data
  - Points-in-polygons with QGIS
  - projections
  - taxi rides

Class 5
Making homemade sensors with cool materials
  - stretchy wire + LED
  - welcome mat
  - folding sensor
Crafting Beautiful Maps
  - Tile-based
  - Mapbox
  - Taxi data

Class 6
Introduction to Soft Circuits (wearables)
- Twinkle
- demo Bluetooth

Turning data into online charts
- 90° days
- use highcharts
- all in jsfiddle

Class 7
Feeding data from sensors onto the web
- feed data to data.sparkfun

APIs:
- getting data out of other computers
- nytimes congressional api
- show data.sparkfun
- weather.io

Class 8
LED lightstrips
- Building multicolored objects that respond to data

APIs (continued):
- What's possible with the Twitter API

Class 9
Blending lightstrips + live data (tethered)
- distance
- twitter

Intro to scraping
- uses for journalism
- awesome scraping tools
- writing your own

Class 10
We love Bots
- how code "robots" can watch things for you
- doing journalism with bot data

Class 11
Servos - turning data into motion
- another reference card
- demo

If this than that
- tweet -> read later
- checkins-google spreadsheet
- temperature -> email

Class 12
Internet of Things
  - Tweet bell
  - Ice Cream Bot