

INFORMATION ORGANIZATION LAB

LAST TIME ON IOLAB

- **Node.JS**

TODAY

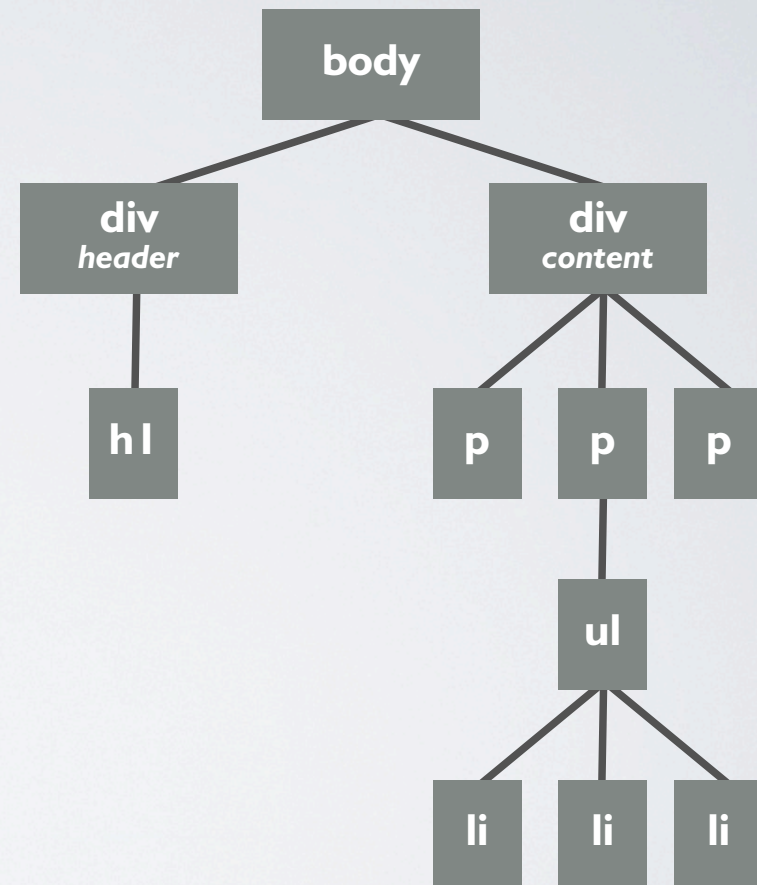
COURSE
REVIEW



I SCHOOL TOOLBOX

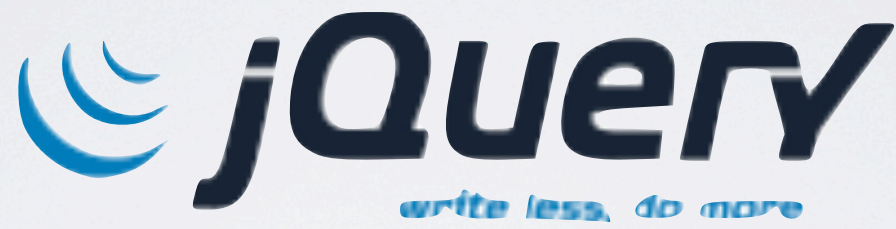
DOCUMENT OBJECT MODEL

```
<html>
<body>
<div id="header">
  <h1>Document Object Model</h1>
</div>
<div id="content">
  <p>This is my first paragraph</p>
  <p>My second paragraph has a list:
    <ul>
      <li>Item One</li>
      <li>Item Two</li>
      <li>Item Three</li>
    </ul>
  </p>
  <p>This is the third paragraph</p>
</div>
</body>
</html>
```





CASCADING STYLE SHEETS



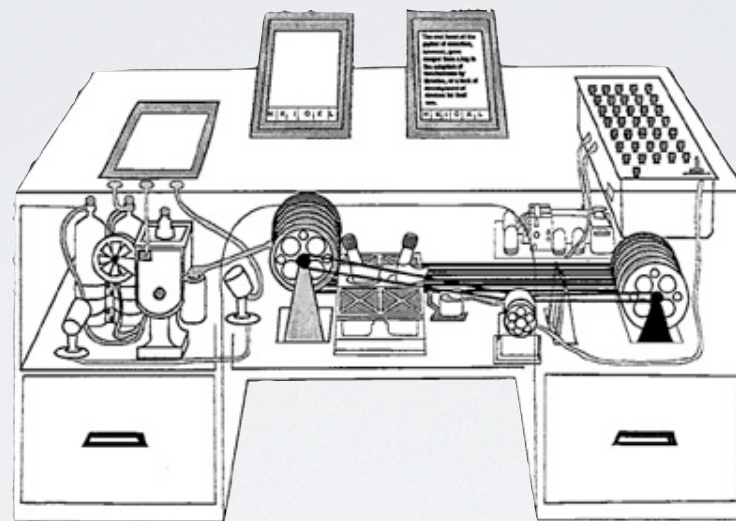
A large, stylized, red 3D-style logo for the word "AJAX". The letters are thick and have a slight perspective, giving them a three-dimensional appearance. The logo is centered on the slide.

AJAX AND CROSS-SITE SCRIPTING

Web 2.0 FTW

GIT IN REVIEW

- git add
- git commit -m
- git commit -a
- git rm
- git reset
- git reset --hard
- git checkout
- git diff
- git log
- git status
- git pull
- git push



MEMEX (PROJ I)

HTML



NEW TAGS & FEATURES

- header, footer
- menu, nav
- section, article
- figure
- new input types
- placeholder text
- localStorage
- GeoLocation API
- web video
- web audio
- 3D, graphics, effects
- web sockets

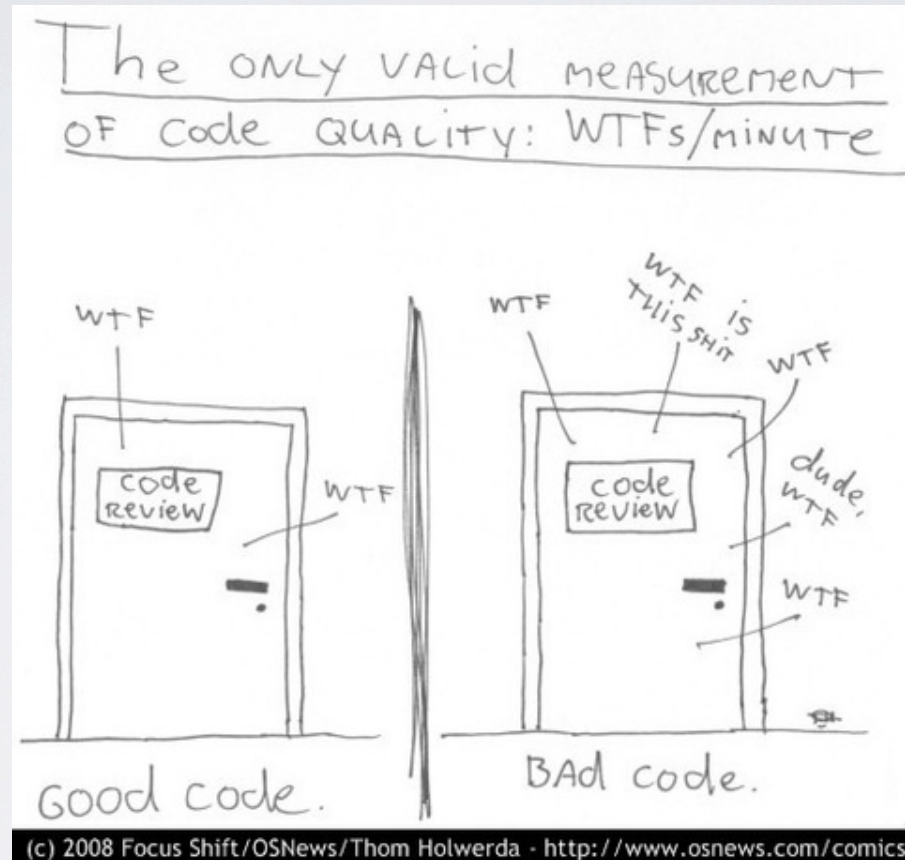
CSS



NEW FEATURES

- RGBA & opacity
- rounded corners
- image borders
- box shadows
- multi-column layouts
- multiple backgrounds
- text shadows
- word-wrapping
- @font-face
- pseudo-classes
- new selectors
- combinators

WHAT IS GOOD CODE?

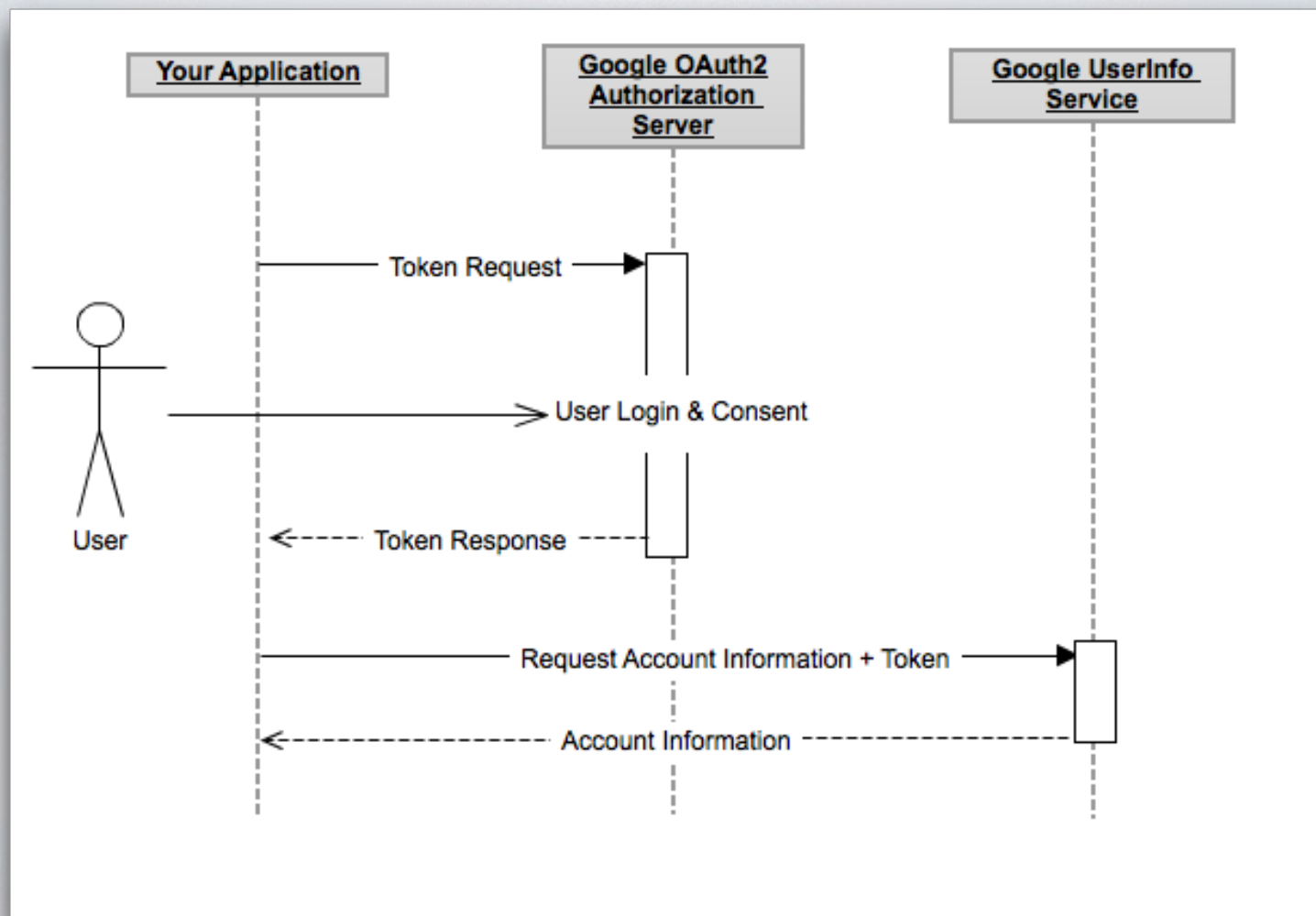


METACRAP (PROJ 2)

Cory Doctorow

- People lie
- People are lazy
- People are stupid
- Mission: Impossible -- know thyself
- Schemas aren't neutral
- Metrics influence results
- There's more than one way to describe something

OAUTH ROLES



<https://developers.google.com/accounts/docs/OAuth2>

MOBILE VS. NATIVE

Mobile Web	Native App
less overhead to get started	Access native functionality
accessible to more devices	Faster performance
HTML, CSS, Javascript	Objective C, Java

**PROGRESSIVE
ENHANCEMENT
VS.
GRACEFUL
DEGRADATION**

GRACEFUL DEGRADATION

Providing an alternative version of your functionality or making the user aware of shortcomings of a product as a safety measure to ensure that the product is usable.

PROGRESSIVE ENHANCEMENT

Starting with a baseline of usable functionality, then increasing the richness of the user experience step by step by testing for support for enhancements before applying them.

MOBILE FIRST

- Mobile is Exploding
- Mobile forces you to focus
- Mobile extends your capabilities

RESPONSIVE WEB DESIGN

- Fluid Grids
- Flexible Images & Media
- Media Queries

VISUALIZATION GOALS

Exploration

Communication

VISUAL VARIABLES

position	length	area
value	color	shape
orientation	texture	

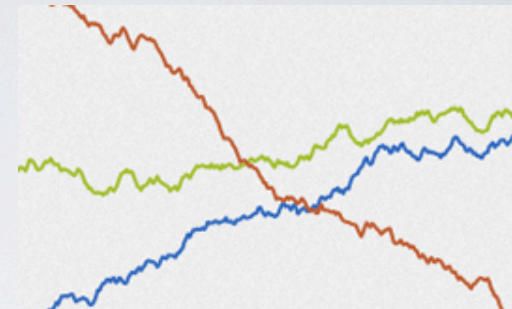
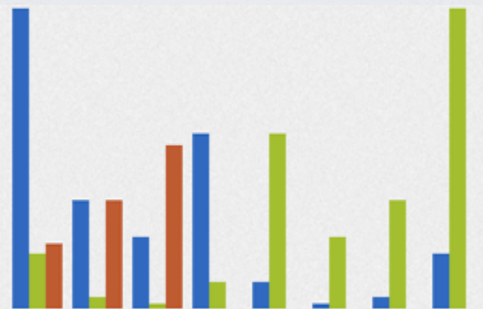
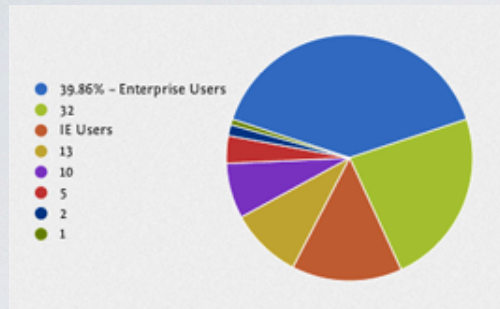
SEMIOLOGY OF DATA

Jacques Bertin, 1967

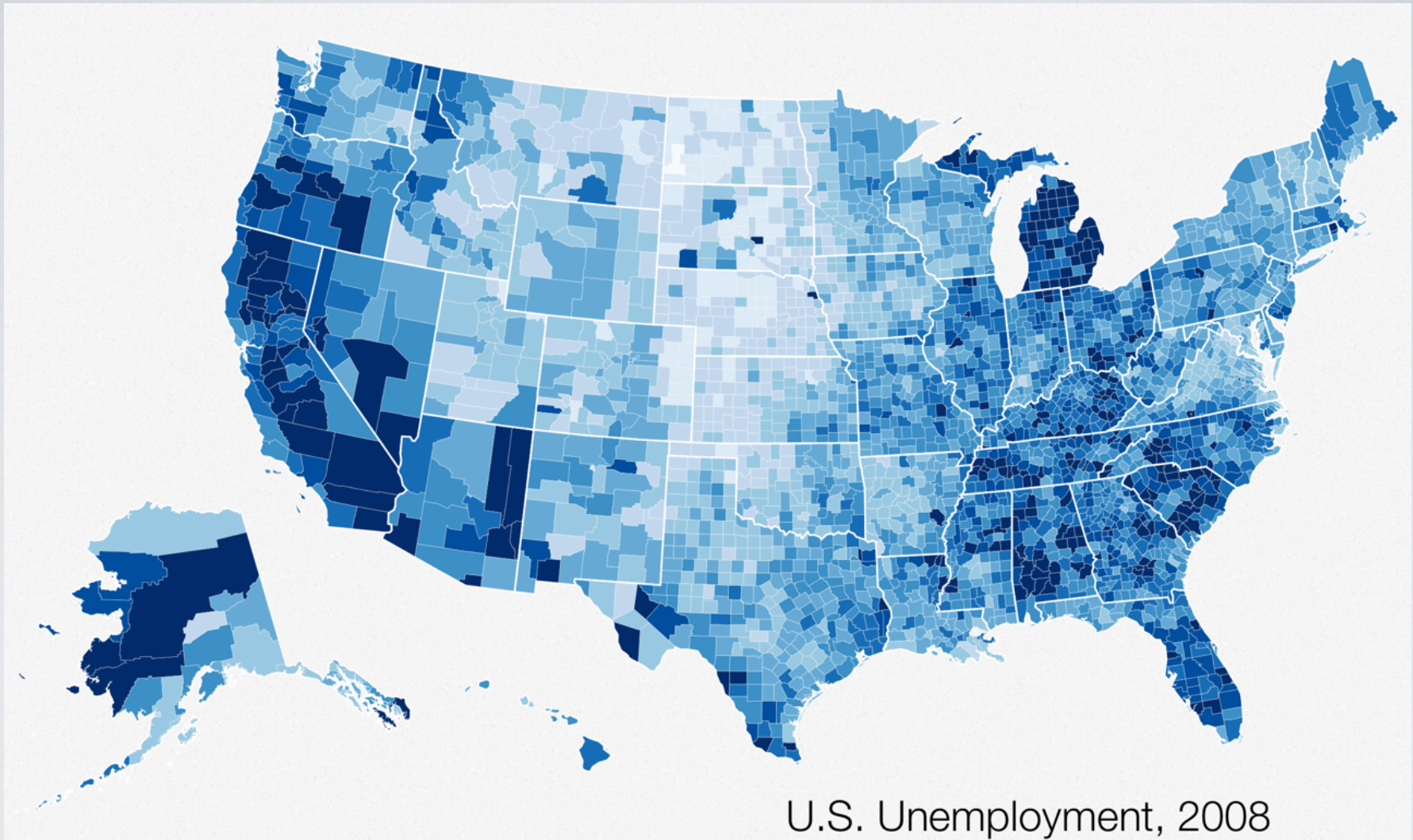
	<i>Points</i>	<i>Lines</i>	<i>Areas</i>	<i>Best to show</i>
<i>Shape</i>		<i>possible, but too weird to show</i>	<i>cartogram</i>	<i>qualitative differences</i>
<i>Size</i>			<i>cartogram</i>	<i>quantitative differences</i>
<i>Color Hue</i>				<i>qualitative differences</i>
<i>Color Value</i>				<i>quantitative differences</i>
<i>Color Intensity</i>				<i>qualitative differences</i>
<i>Texture</i>				<i>qualitative & quantitative differences</i>

PRE-ATTENTIVE PROCESSING

“unconscious accumulation of information from the environment”



gRaphaël



D3

Choropleth Map of U.S. Unemployment

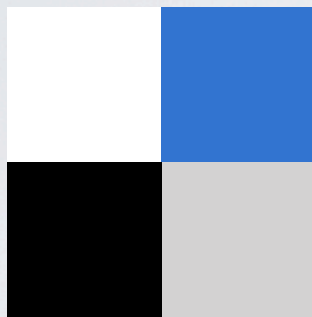
GOOGLE FUSION TABLES

Elliot Nahman

https://docs.google.com/presentation/d/1htRKjDzkd6iHIPSxzonlqs_BNn2Yrsd-XixrfP_qLro/edit

Instagram

You Tube



delicious



flickr

PROJECT 3

Social & Distributed Classification

tagging
folksonomy
tagsonomy

vs.

authority
vocabulary control

TEST DRIVEN DEVELOPMENT

Object-oriented programming (OOP)

a programming paradigm using “objects” consisting of “properties” and “methods” together with their interactions - to design computer programs.

- Modularity (eliminate task duplication & reuse code)
- Abstraction (trust the implementation)
- Encapsulation (isolate variables/functions from other code)

FLASK

A Python Micro-framework

- Routing (WSGI)
- Templating (jinja2)
- Database access (sqlite3)

NODE.JS

FINAL LAB: DOT VOTING

CLASS SURVEY

FOR NEXT TIME

Last Lab

Final Project

You can find links to help with all of these on the course website at
<http://courses.ischool.berkeley.edu/290ta-iol/f12>