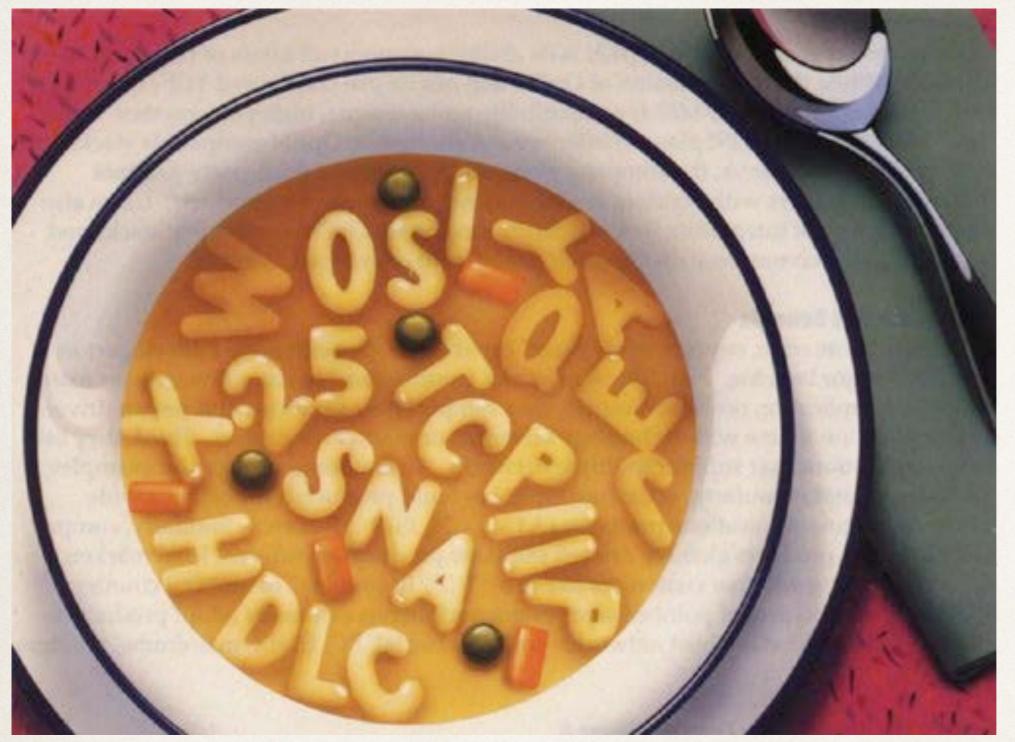
## Intro to web coding & news development



HTML CSS JS PHP SQL JSON...

Prof. Peggy Bustamante [ANN 310E]
pbustamante.usc@gmail.com | @newsdevchix

## Today's timeline

- Informal skills survey
- \* Why are we learning this stuff?
- Journalism story forms: Some historical perspective
- \* How the web works. It's easy. Really.
- Overview of HTML & CSS
- \* Break
- Setting up your text editor and downloading basic web template
- Hands-on practice: Let's build a photo gallery
- Overview of profile page template

Who has experience or is comfortable with HTML and CSS (and JavaScript)?



Who has experience with just HTML?



Who has heard of HTML

but does NOT know how to spell it?



Who has never heard of HTML and is getting **PANICKY** just thinking about writing code?

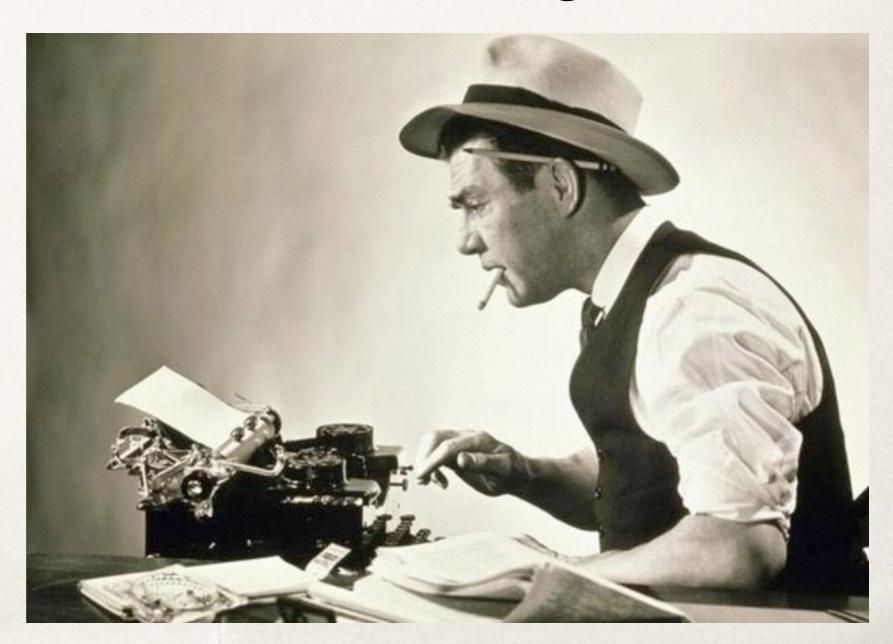


## Who would rather **schedule** a **root canal** than learn to code?



Who still thinks this interweb thing is a

passing fad?



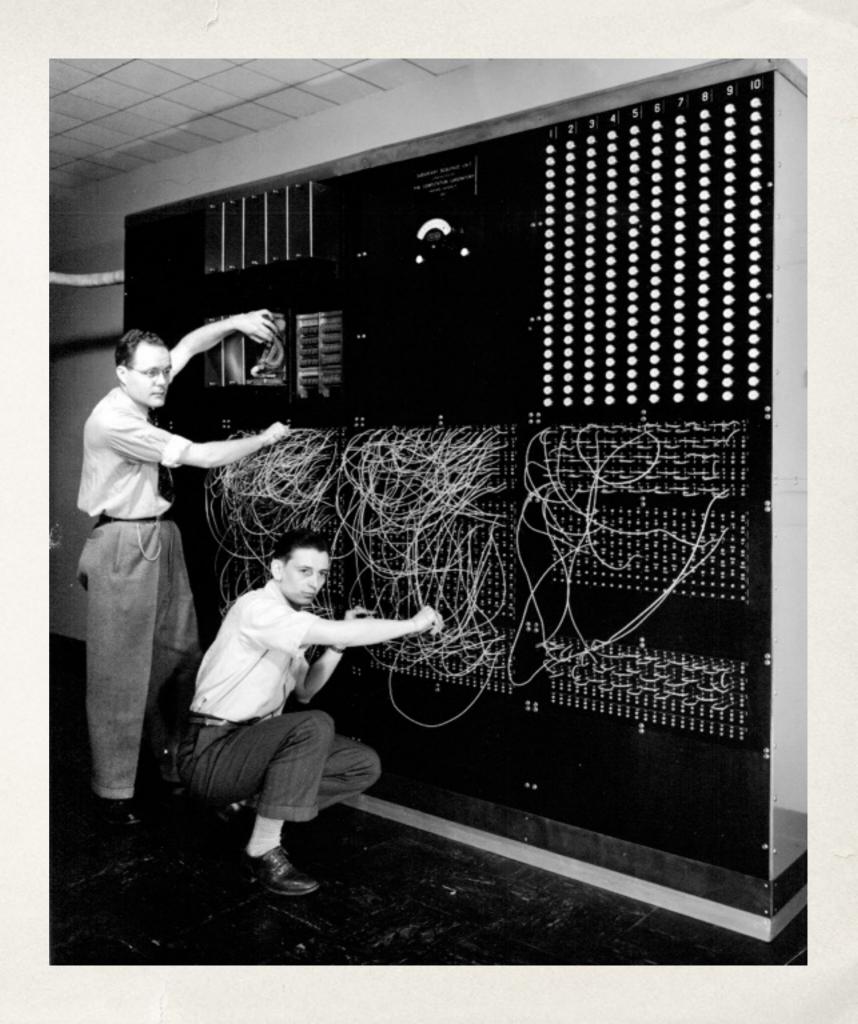


## NOT to become a software engineer

[we'd send you to Viterbi if that were the case]



NOT so you can build a CMS for the next news org that lets you through the door.



YES! because journalists are creating a wide variety of media and need HTML, CSS and JS to pull them together into an engaging story package.

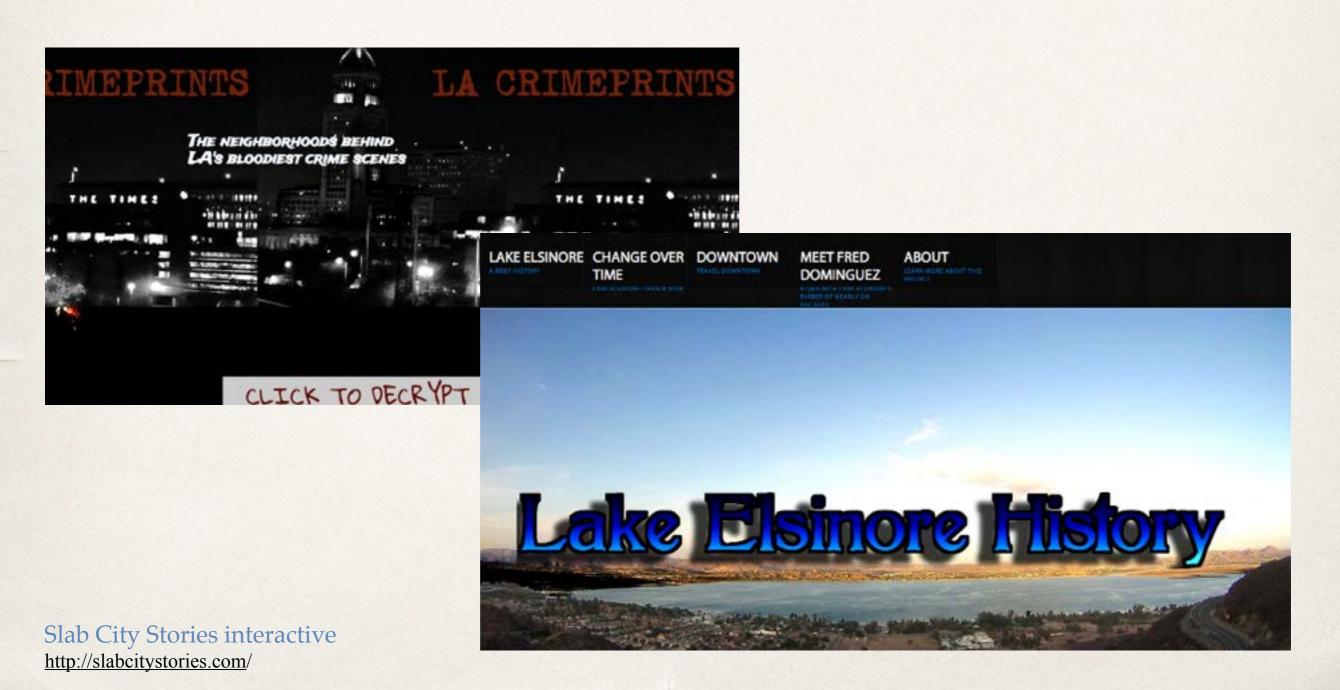


# YES! because users expect to interact with your story

[Imagine if you went to a website with nothing but text... you'd probably hightail it out of there.]



YES! because you need to know at least some HTML and CSS to do your final project and other work throughout the year.



YES! because, at the very least, you need to understand what's possible and be able to talk to the developer who will be building your vision.



## Journalism story forms: Some historical perspective

## A long time ago news looked like this

## The New-York Time

VOL, XII-NO, 3680.

NEW-YORK, FRIDAY, JULY 10, 1863.

#### THE RETREAT OF LEE.

Increased Prospect of Another Great Battle.

Lee Marsing the Rennant of Ills Army on the Antietam Battle.

His Augunition Believed to be Nearly Exhausted.

His Escape Across the Potemac Considered Impossible.

Buford and Kilpatrick Engaged Near Boonsbore on Tuesday and Wednesday.

The Rebels Driven Back to Antietam Creek.

Over 500 of Their Wagons Destroyed.

Fully one-Taird of the Rebel Transpertation Gene-

SPECIAL DISPATCH FROM MIDDLETOWN. Muncusway, Mrt., Thursday, July &.

The remains of wagons duringed by our careby

pitis. The Potomar is yet too high for him to altempt a crossing at his infautry.

NEWS RECEIVED IN BALTIMORE.

RACTIFORN, Thursday, July 8. The American has the following special dis-

FRITZUCE, Md., Wednesday, July 8-P. M. Our questir herr lad a stary fight with the rebris

The minis were in heavy force. Our caralry were coef to fall back to Bunnaboro, with some loss first. Entrarrolly by propertied billed, though make

The particulars of the fight have not us yet been re-

The reliant are still to plusted of the steer, manual ear Hagaratown, andrewering to get their wagon and planeler across the elega,

who arrived at the Monacary Junesion this afternoon. was straining the elect at Williamsport. If this he so, we need look for no fight in Maryland,

The impression at bradiquariers, before it left have was that the relate had no means of vecesing enroys some score, as which they were sending unit that

A day will probably show where the rebels are, and be probable fromtien of the next builts-fail. Conto direction of Hagerstown. It was probably our country engaging Gee. Stream. Gen. Stream has been very hard to find during the roted extrest. According to all accounts, his cavalry have had the dark and cavificance that opin exactled them to sure

Our Stores at Bottobers report that the enemy's philate are being thrown out nearly to that paint, in-riveing within their lines the aid Autistam bette-Said and Educartenews mountag. The main force bewerer, he considerably went of this, and owners the three roads that meet at Wikingsquark

The movement's of our army are such as will to

Sough still prowind by the followers of a great

the Proof, explored by our active curairy sleeg the

neate and every equales of equivers! that could foul a made a better Faverneer's buttery for made a better of the transport of the equality agent.

In exchanged the order of the found to Widelansport and the early's has been sent that every the extensive and the early has been sent that every the extensive as to be after the entire their greenest.

REPORTS FROM CHAMPERSBURGH.

right has been confirmed by a complimentary neigh rem the commanding officer to Gen. Knowner and his man, asknowledging the service routered. The loss of Gen. Grane's command will probabl not warred 100 men.

Capt. H. C. Pursons, 1st Versical—side ; also be allo possed through his skirt. Sergt. L. H. Margun, Co. H., 1st Versionh—right are

THE NEW-YORK SECOND MILITIA.

the Editor of the New York Tonce !

durit.

— Women'ed-Licute. J. H. McDonell, John et H. W. Smare, Was. McLes.
her of officers killer, I. wandert, 14 minhotel, W. Cu, bilt Commanding Engineers.

THE LATE GEN. PAUL.

LATE NEWS FROM

Nothing Known on the Whereabouts of

Ignorance of the St Vicksburgh

THE RETREAT OF BRA

A New Line of Defence nessee River

ALEX. IL STEPHEN

The Richmond Dispatch, of Ju-

red. It contains the tellewing:

Passengers who have seried longh were laid by Mossay's mon t that Lar's army was marching The blood of the speaky have eller

PERM TRANSPRES

havon with the eyer of thes. Hopsey Beauty, writer, but if he not proud

Ged. Excus's benchmarters are at It is exposed that Husbelds and

APPAIRS IN THE REAL OF T

## We only had columns of text to tell a story

## Then eventually photos were added





Though they tended to be just head shots

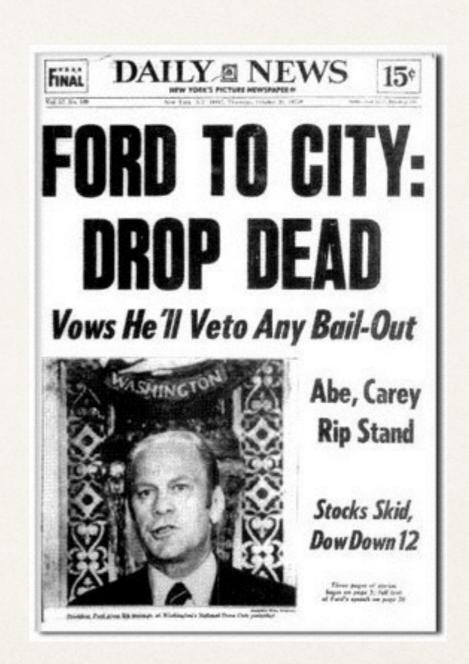
# By the 70s: photos were playing a more substantial role



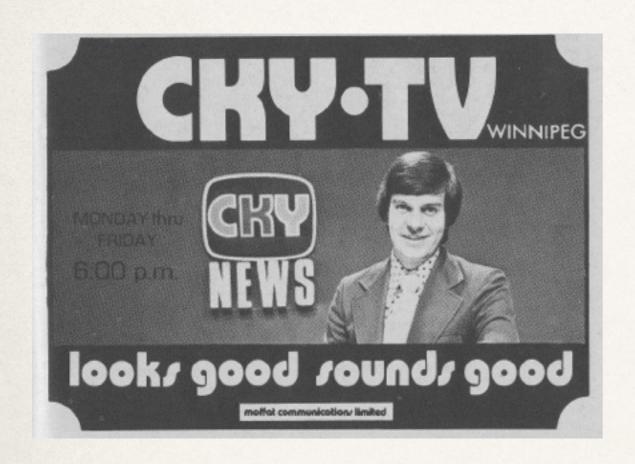


# By the 70s: photos were playing a more substantial role





## And TV news was... well, TV news







When I started in news in the 80s, Atex terminal had replaced typewriters



# Vintage Atex machine

During the '80s and '90s we all pounded away at Atex machines. They generally had at least one key missing from the keyboard.



A beautiful thing: Proportion wheel and pica pole

These were the height of technology.





Where are not going to be in 30 years? Being Wall tells.

## ENGINEERING THE FUTURE

THE REST COLUMN TO SELECT THE PROPERTY OF THE

The supplies of the property of the first of the content of the co

Laborate State Country Country

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The financian is to the section of t



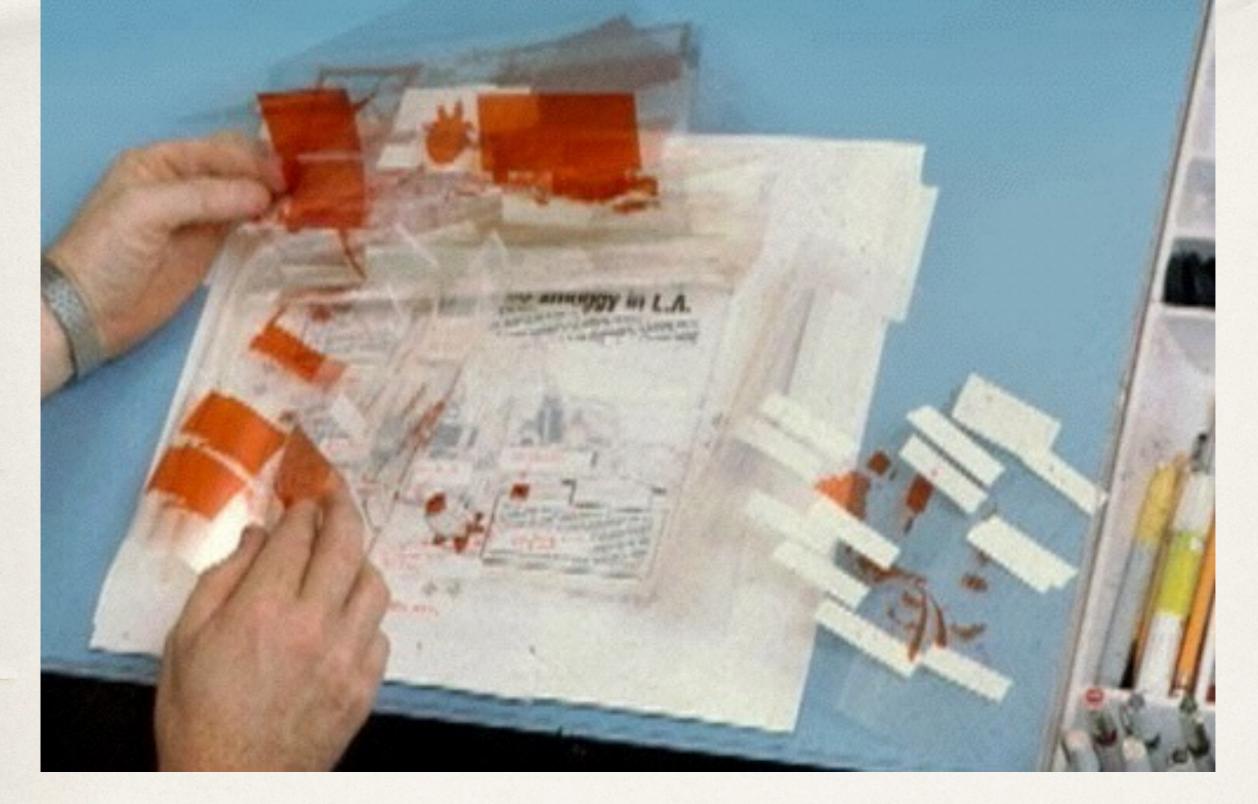
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Products in the property of the Principle of the principl

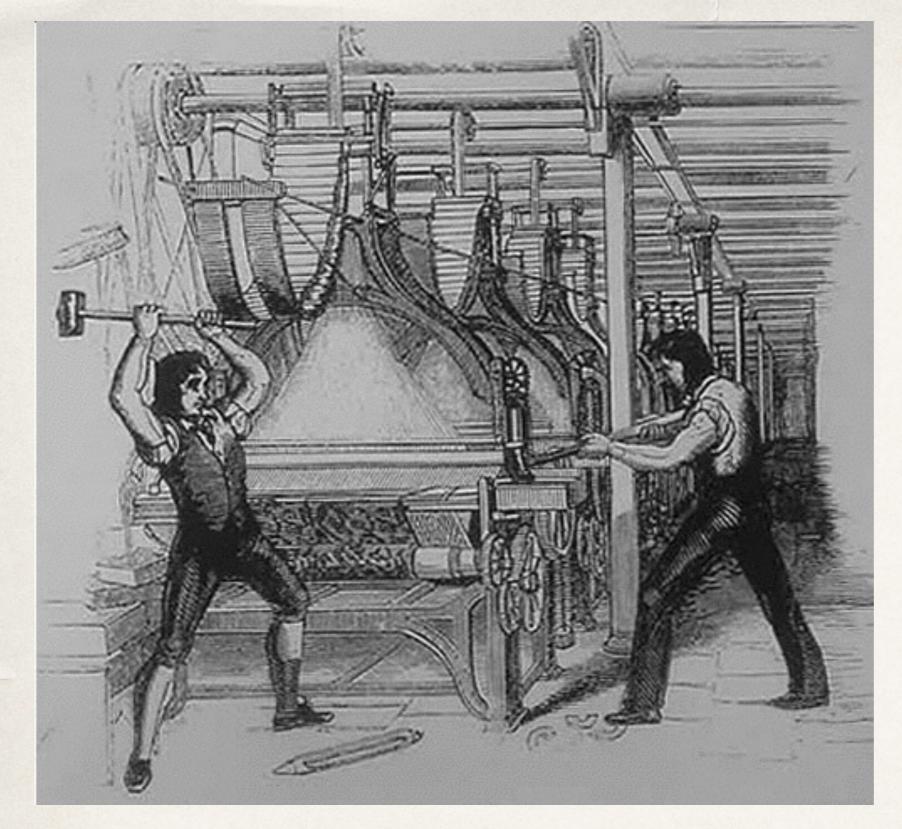
Parts to di partico anticolor. The common and it formers have been produced by an inferior and income to the common and income to the common and income to the common and an inferior and inferior analism and inferior and inferior and inferior and inferior analism

CARLES OF THE PARTY OF THE PART

Cut outs! The coolest thing ever (at the time)

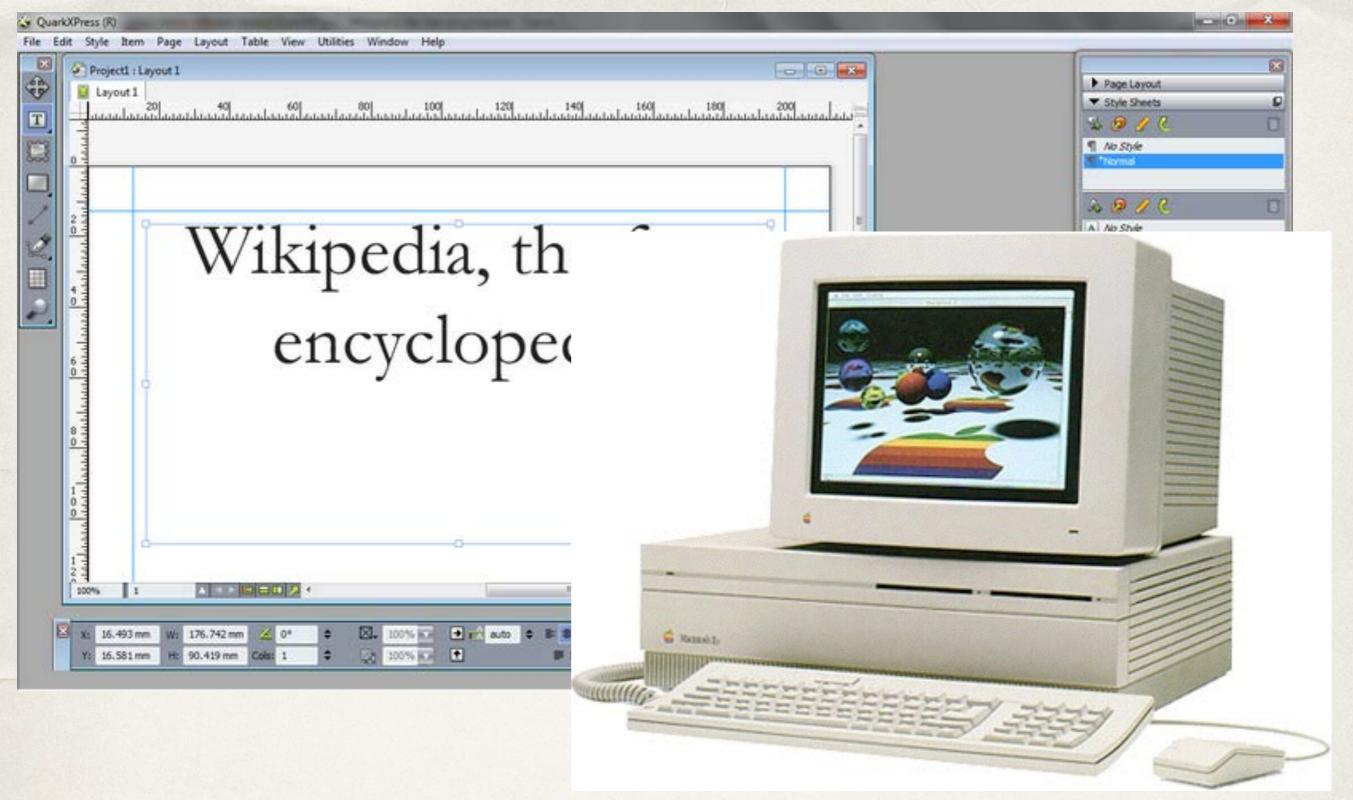


Lots of amberlith!

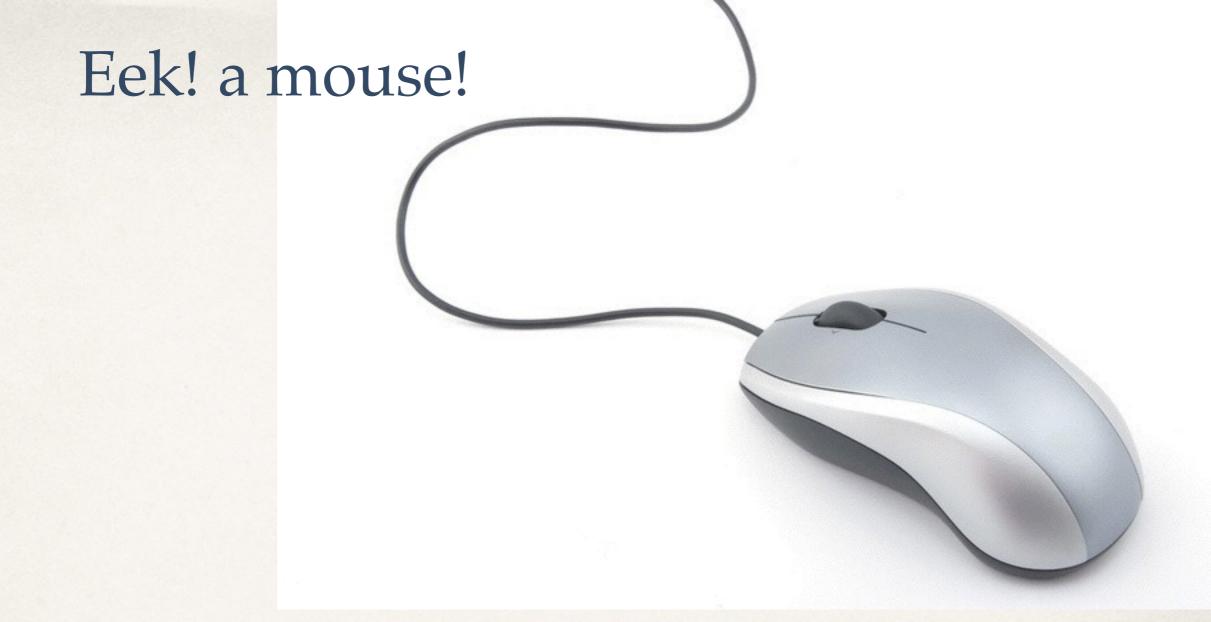


Big guys
and
their big
machines

# Then in the early 90s ...things changed



QuarkXPress and a Mac

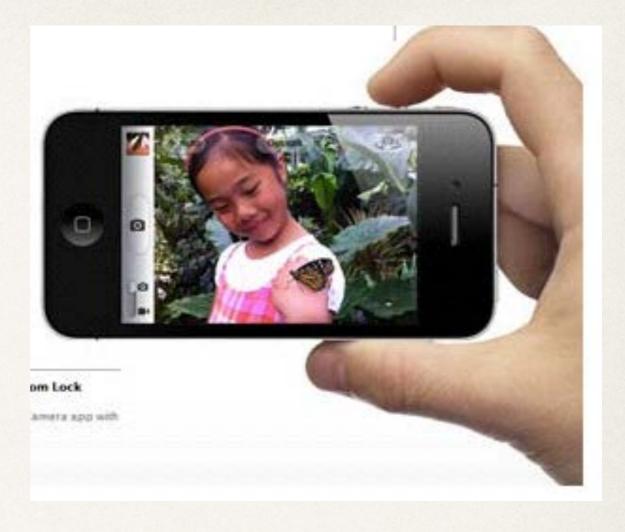


## But this change was scary.

Then came video...





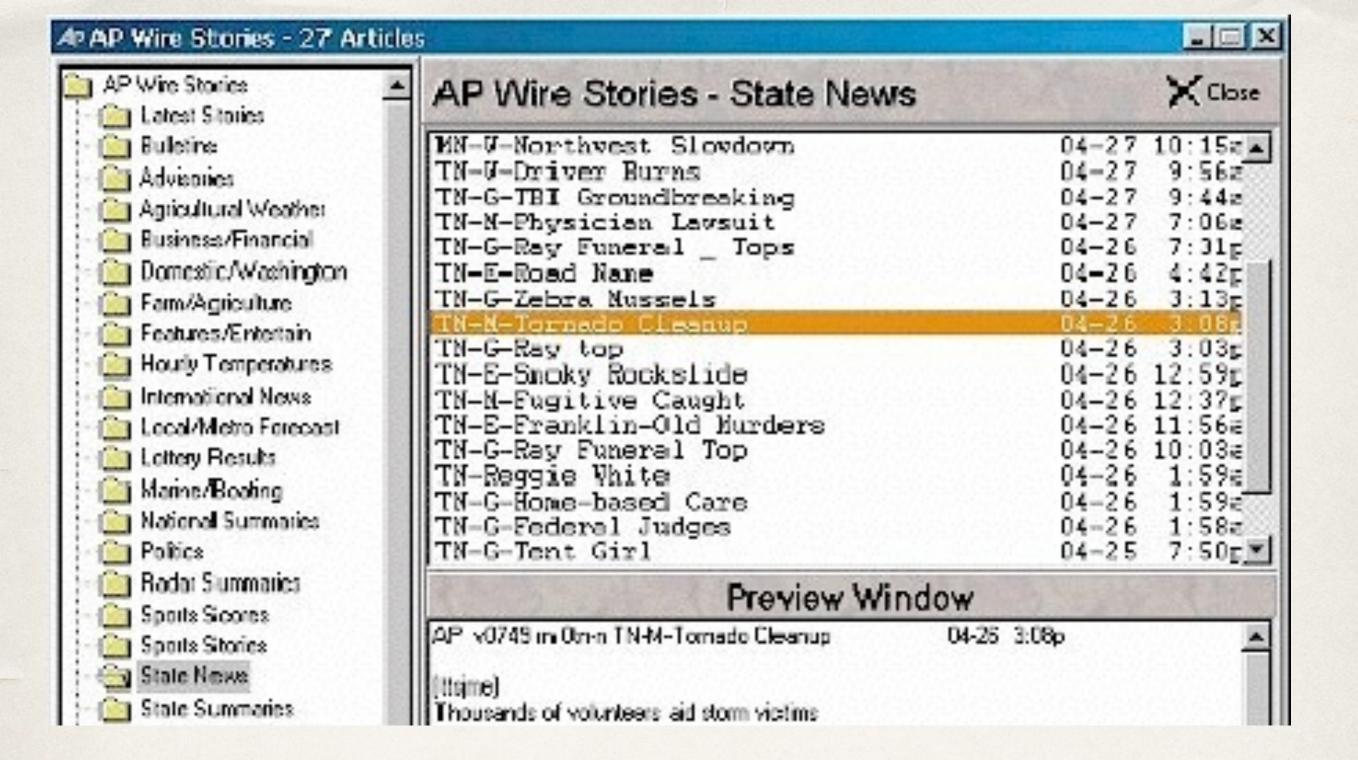


Then....

Now.....



## The internet arrived



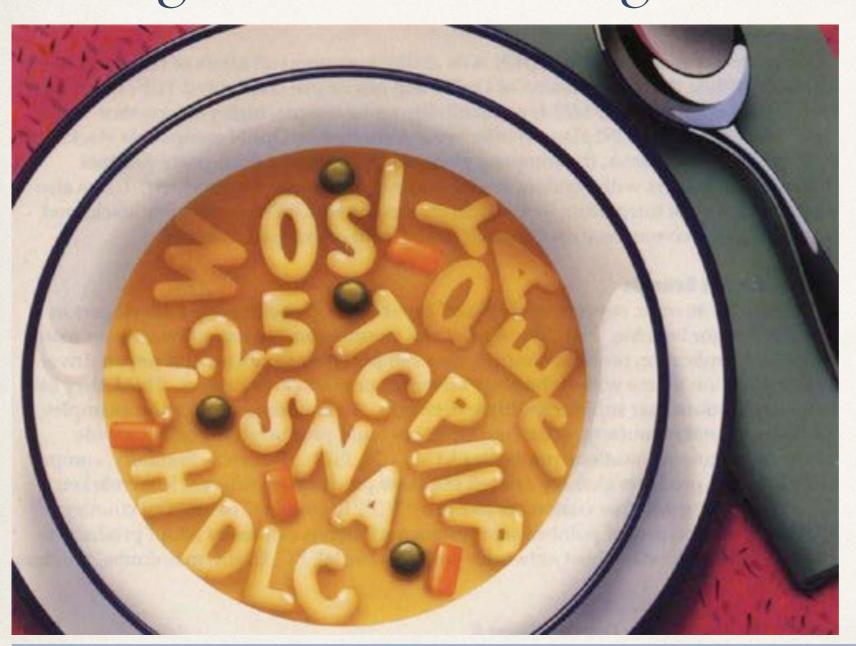
## AP Wire: our own private Internet

# Everything has converged on the web:

- Newspapers regularly win Emmys for videos they produce
- \* Radio news shows are expected to have a visual impact, such as NPR's recent T-shirt interactive.
- \* Television stations post print articles as part of their news offerings.

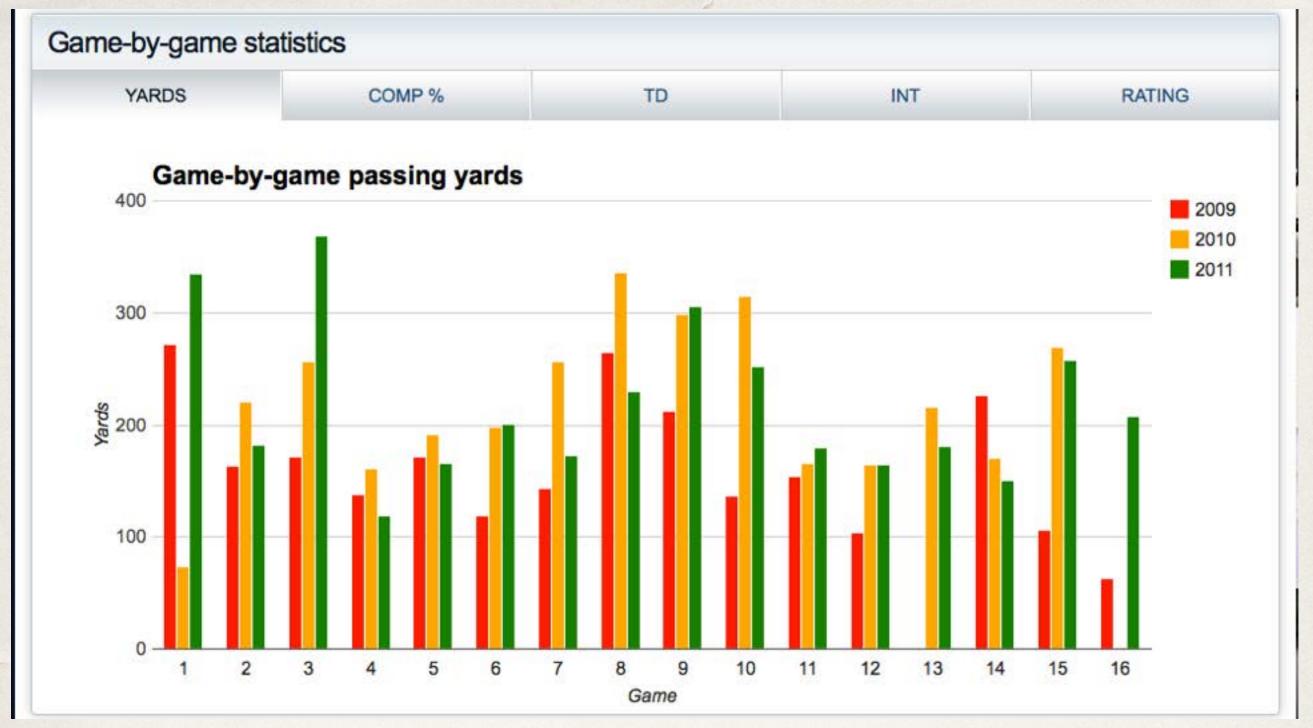


These new forms of storytelling are possible only on the web, using web technologies:



HTML CSS JS PHP SQL JSON...

# The variety is staggering ... and inspiring



## Graphs:

Newsday's data visualization of Mark Sanchez's stats 2009 through 2011

INTERACTIVE

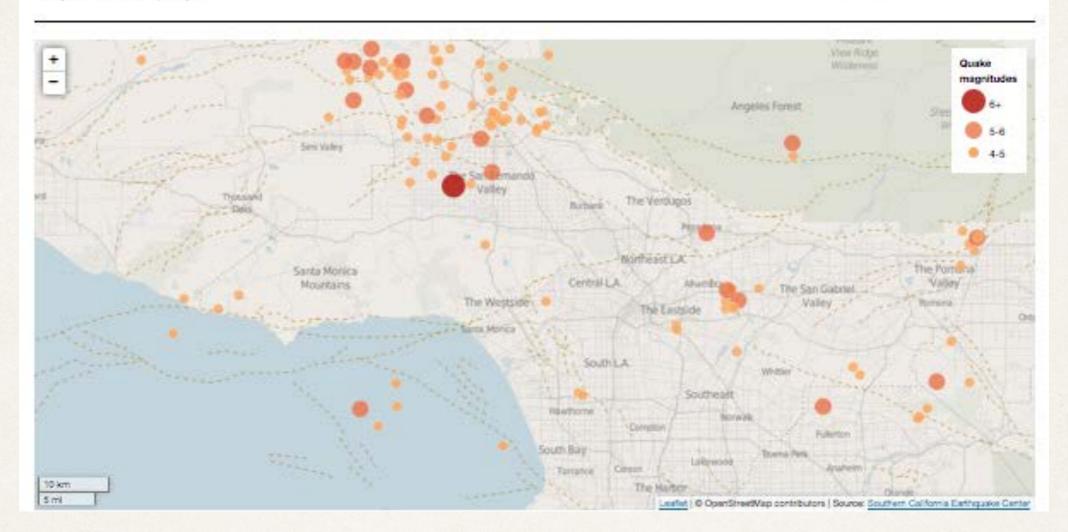
#### Large earthquakes in the Los Angeles area

Theest (80 | Paccement | 1.5k | 9+1

The greater Los Angeles area has seen more than 100 earthquakes with a magnitude of 4 or higher since 1973. Click to explore.

Note: An earlier version of this map used inexact U.S. Geological Survey data. It has been updated with authoritative data from the Southern California Earthquake Center.

Last updated: Mar 29 2014, 3:00 p.m.

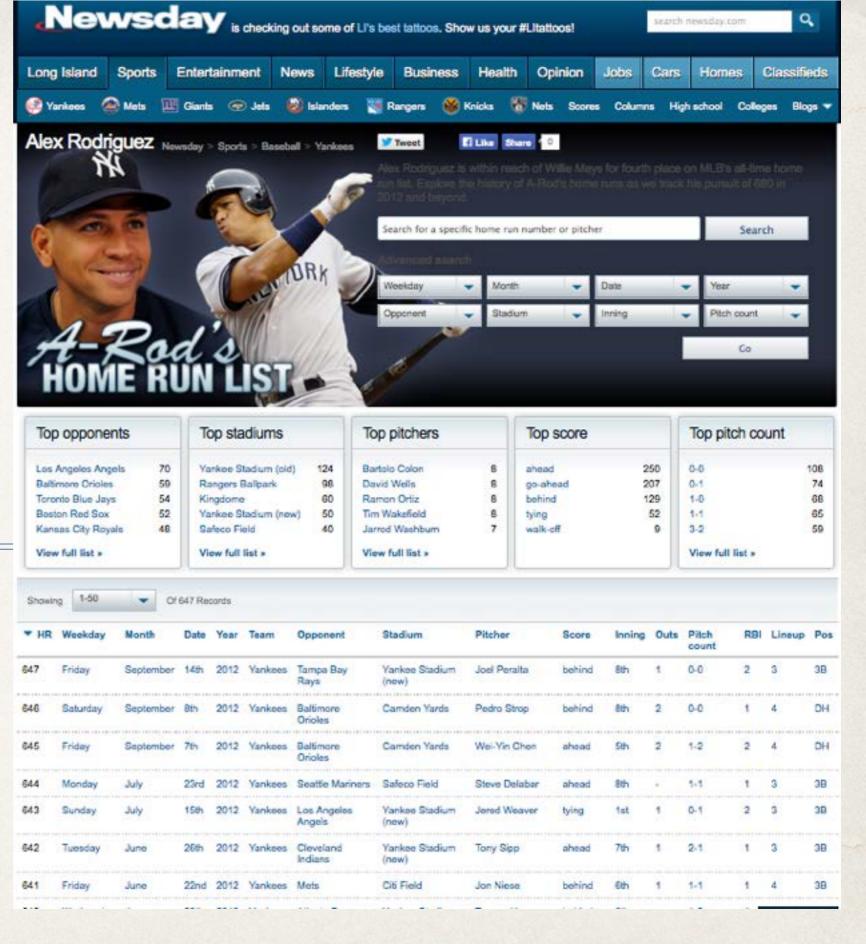


## Maps

L.A. Times map of large earthquakes in Los Angeles

### Tables:

Newsday's database of A-Rod's home runs



Q

search newsday.com

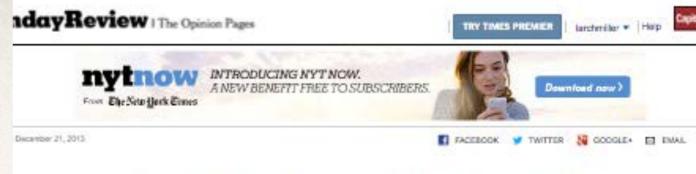


# Interactive projects

USA Today's interactive data project on mass killings

# Quizzes and games

NY Times dialect map



#### How Y'all, Youse and You Guys Talk

What does the way you speak say about where you're from? Answer all the questions below to see your personal dialect map.



#### About This Quiz

Most of the questions used in this quiz are based on those in the Harvard Dialect Survey, a linguistics project begun in 2002 by Bert Vaux and Scott Golder. The original questions and results for that survey can be found on Dr. Vaux's current website.

# Quizzes and games

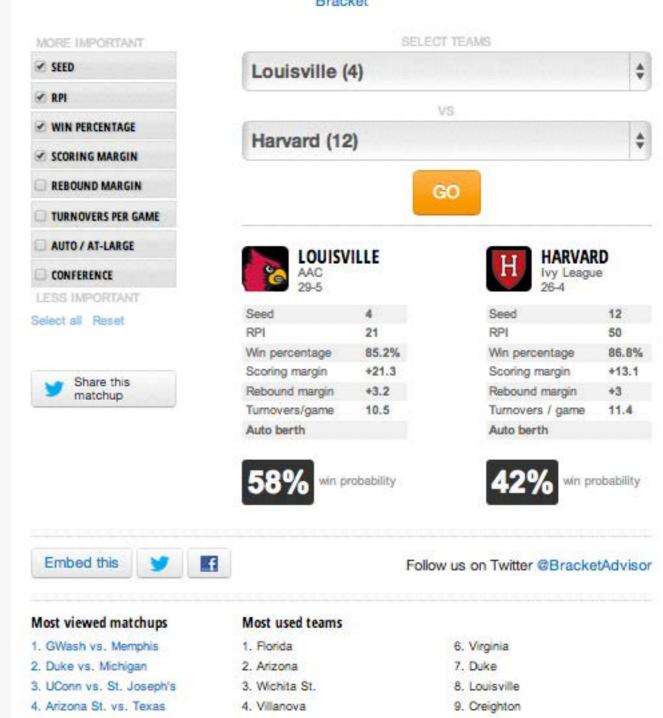
DFM's enormously successful Bracket Advisor

#### **BRACKET ADVISOR**

5. Cincinnati vs. Harvard

News - Sports - Business - Entertainment - Lifestyle - Obituaries Opinion - Politics

Bracket Advisor helps compare how any two teams in the 2014 NCAA men's basketball tournament might fare against each other. Choose two teams, arrange the stats at left if you like, and click the "go" button. Looking for a bracket to make your picks? Go here: Interactive



5 Wisconsin

10. Kansas

# A wide range of topics

### from features...

DFM's Oscar voting ballot

That's a wrap for Oscars 2014! View the winners below, highlighted in gold, and compare them to the nominees our voters picked.

All categories

Select a category -

Next category

#### **NOMINEES FOR: Best Picture**

After a win at the Golden Globes, "12 Years A Slave" would appear to be a lock for Best Picture. If Alfonso Cuarón takes home Best Director, his "Gravity" might win this category as well. Then again, the critical attention for "Her" is something to consider.

Last year's winner: "Argo"



"American Hustle"

11% of users' votes

Read more



"Captain Phillips"

6% of users' votes Read more



"Dallas Buyers Club"

25% of users' votes Read more



"Gravity"

23% of users' votes Read more

of



"Her"

6% Read more of users' votes



"Nebraska"

6% of users' votes Read more



"Philomena"

6% Read more of users'



"12 Years a Slave"

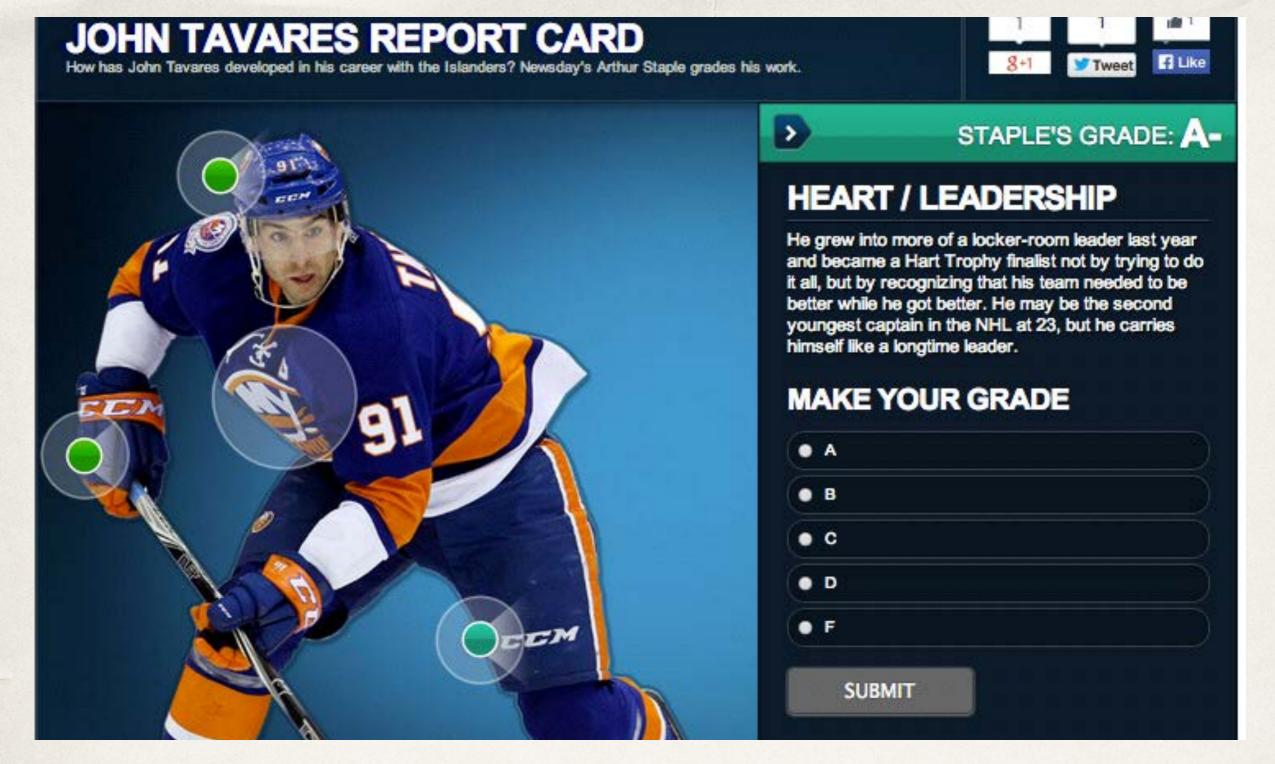
6% Read more of users'



"The Wolf of Wall Street"

11% Read more

http://data.digitalfirstmedia.com/oscarballot14



to sports...

Newsday's John Tavares interactive voting report card

#### How Much Acetaminophen Are You Taking?

By Al Shaw, Lena Groeger and T. Christian Miller, ProPublica, September 20, 2013

Many common over-the-counter drugs contain acetaminophen. Taking more than one at the same time increases your chance of "double-dipping" -- accidentally overdosing. Use this tool to find out which of the drugs in your medicine cabinet contains acetaminophen -- and how much. This is not meant to be medical advice. Toxic levels vary by individual. Call your doctor if you think you've overdosed, even if you don't show medical symptoms.

#### Combining the daily maximum dose of common drugs can lead to an overdose.



SEVERE COLD

Dimetapp























Coricidin® 3900 mg

Percocet \* 3900 mg

Childrens Tylenal® 800 mg

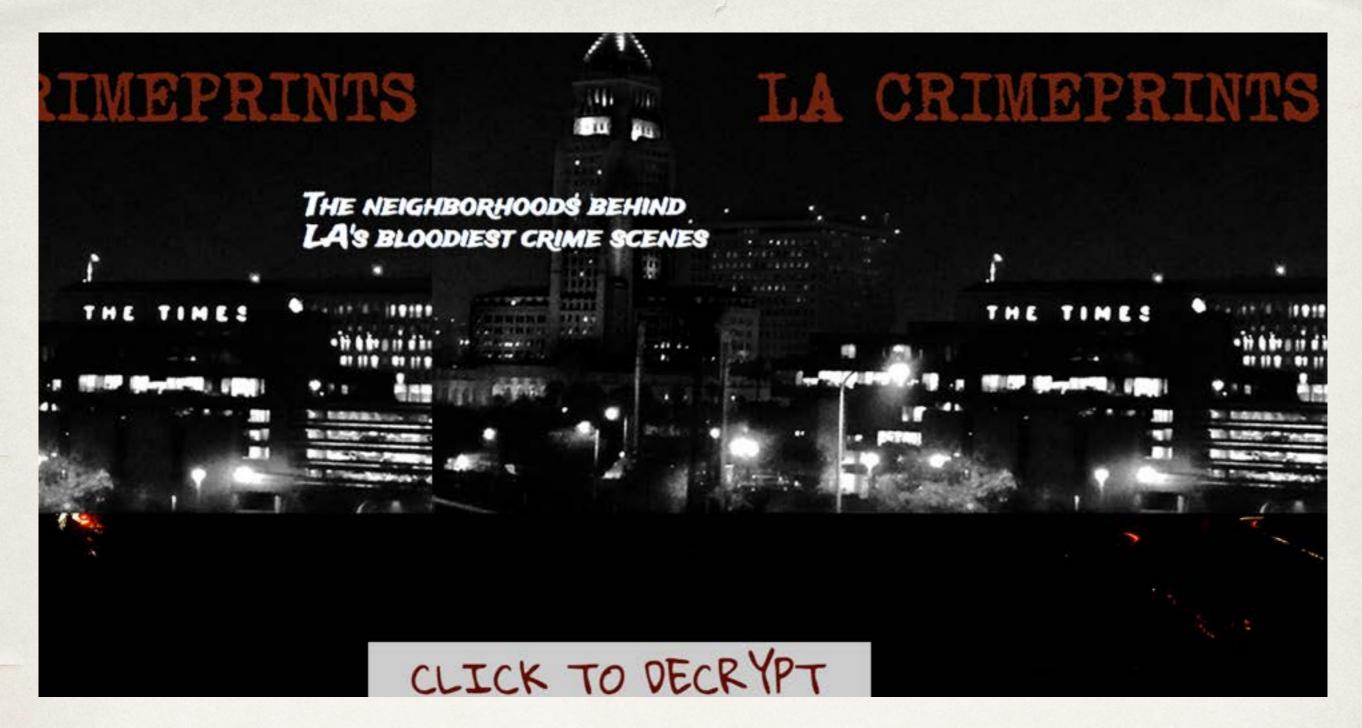
11.600

milligrams
You've exceeded
the level at which
liver damage can
occur if taken for
several days,
according to
McNeil, the maker
of Tylenol.

to the useful...

ProPublica's acetaminophen calculator

# Student projects



# L.A. Crimeprints

Evie Liu and Denise Guerra

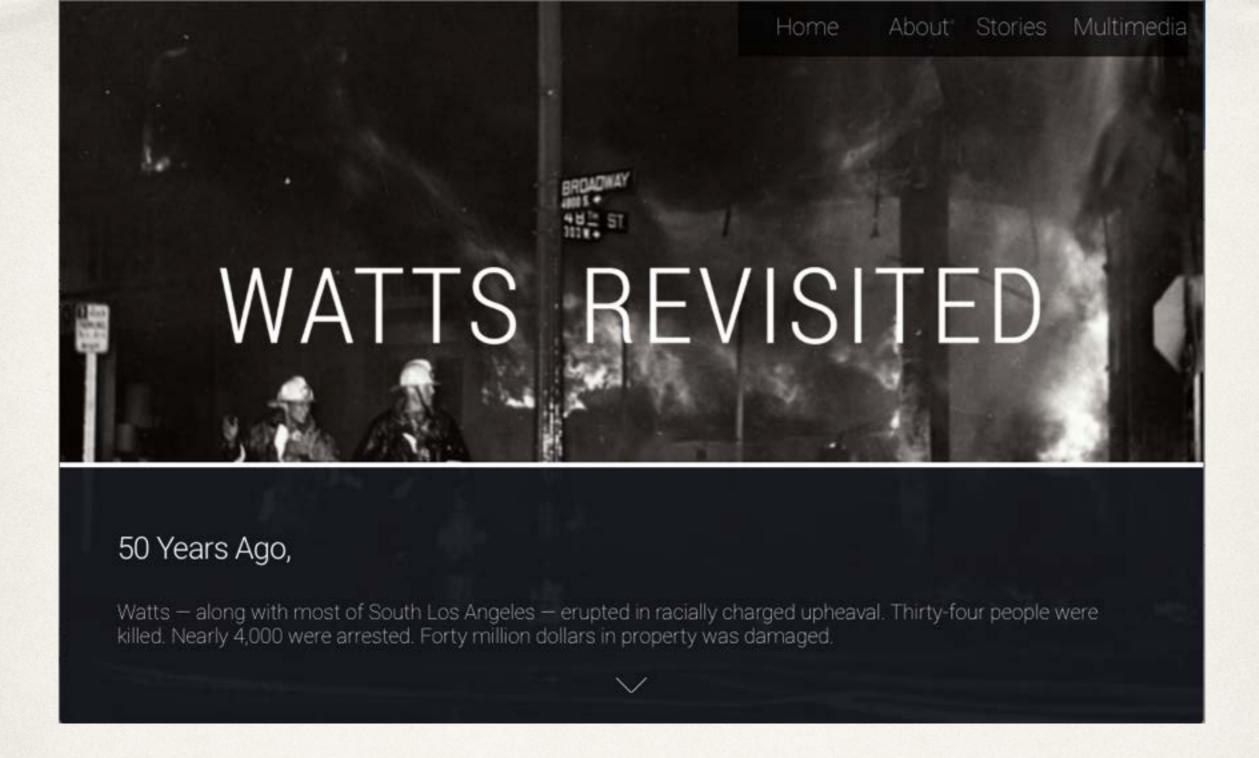
LAKE ELSINORE CHANGE OVER DOWNTOWN TIME

MEET FRED DOMINGUEZ **ABOUT** LEARN MORE ABOUT THIS



# Lake Elsinore History

Daniella Segura



### Watts Revisited

Sinduja Rangarajan and Kevin Tsukii

# News orgs pushing the boundaries

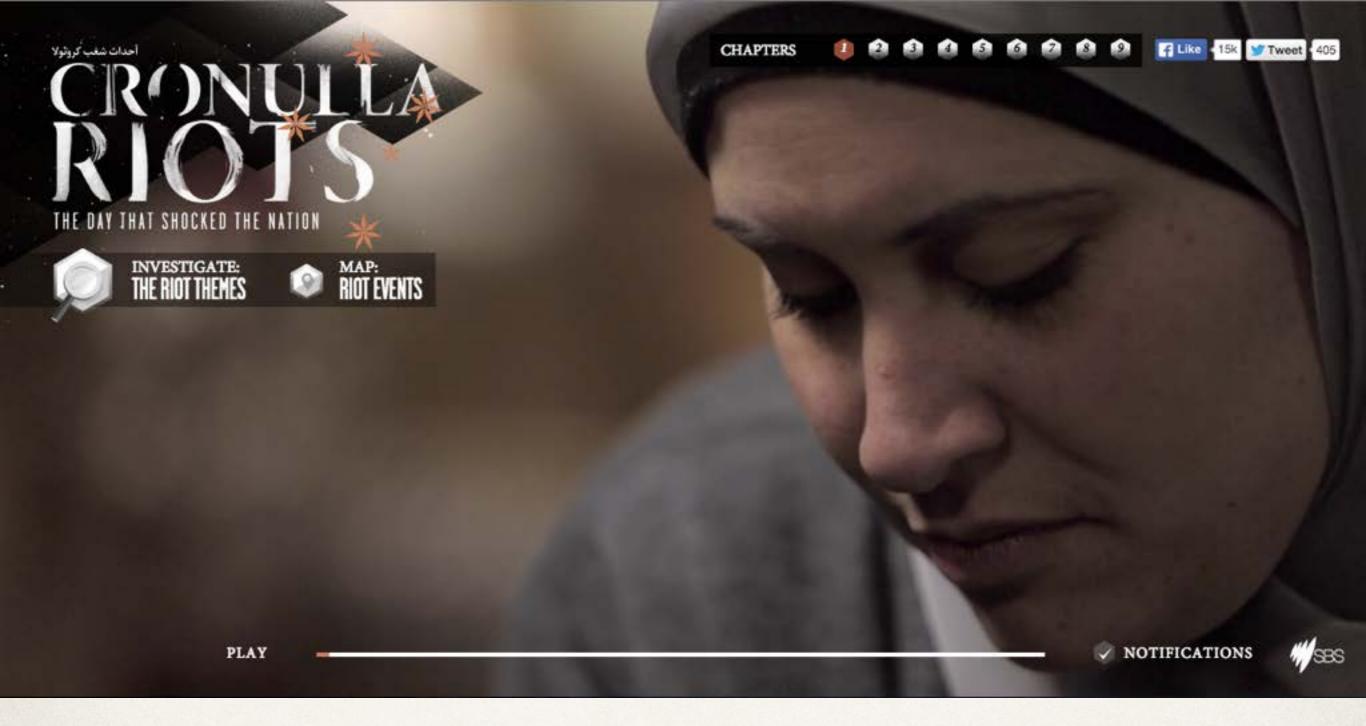
### SLAB CITY STORIES

SQUATTERS, SNOWBIRDS AND WANDERERS OF SOUTHERN CALIFORNIA'S DESERT



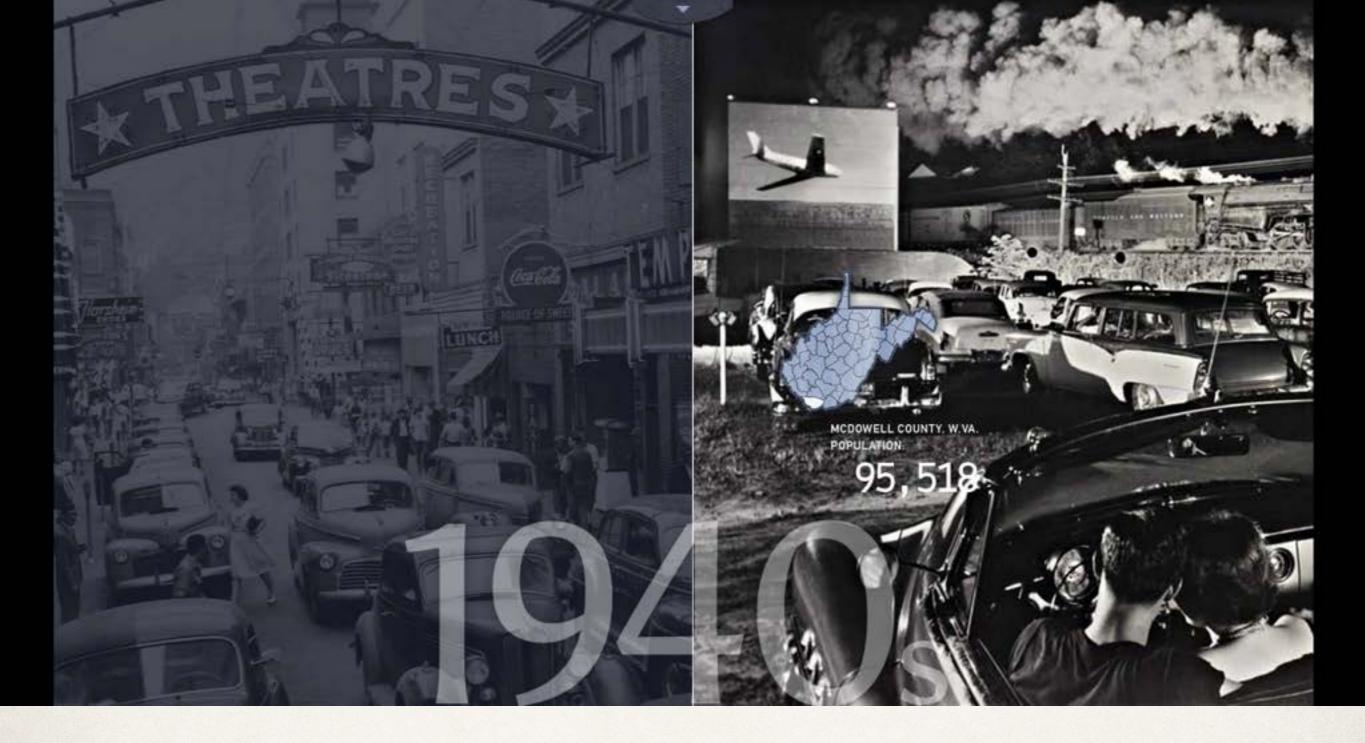
## to the compelling

Slab City Stories interactive



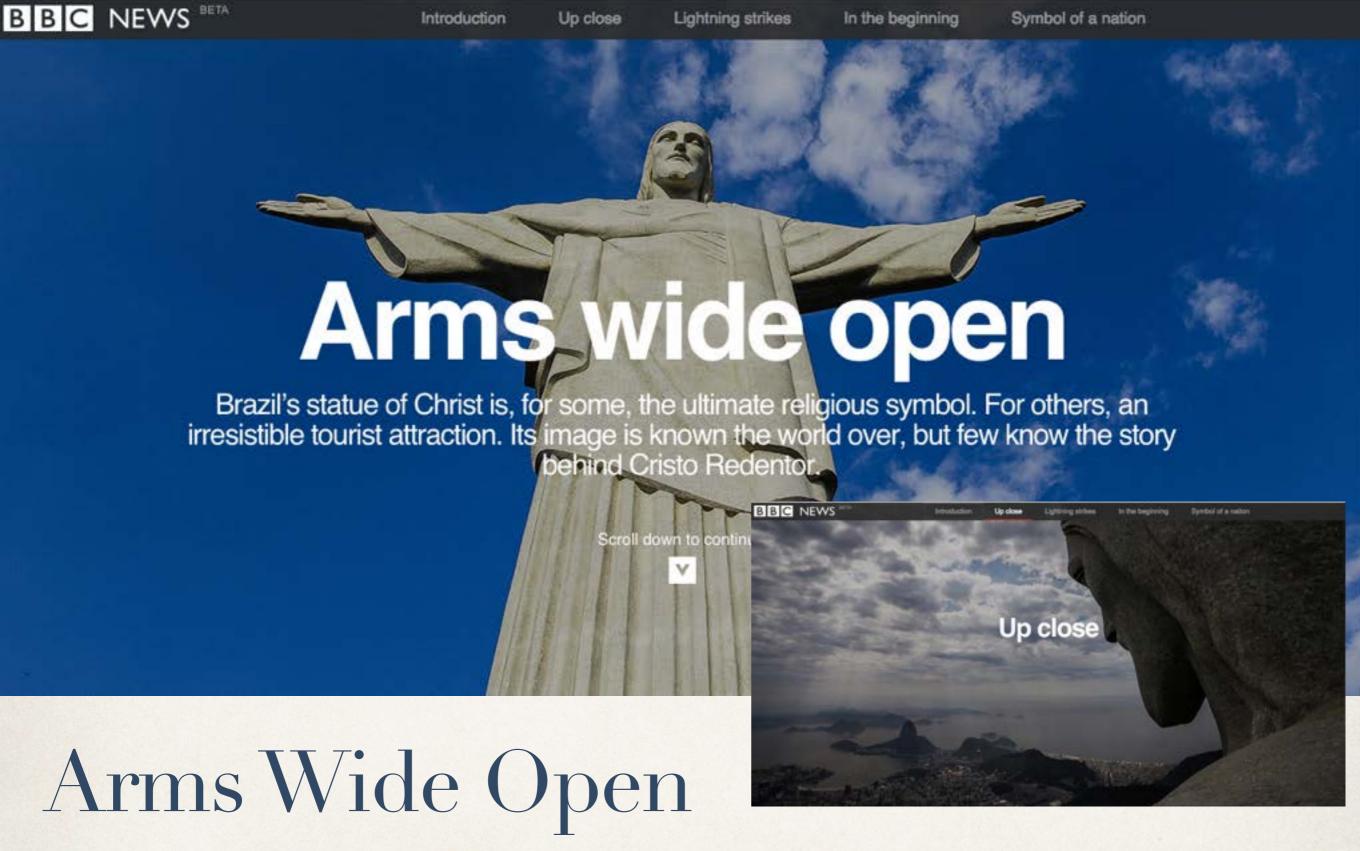
### Cronulla Riots

From Australia's SBS news organization



# Hollow: Interactive documentary

Complex interactive experience



BBC's complex piece on Brazil's famed statue of Christ



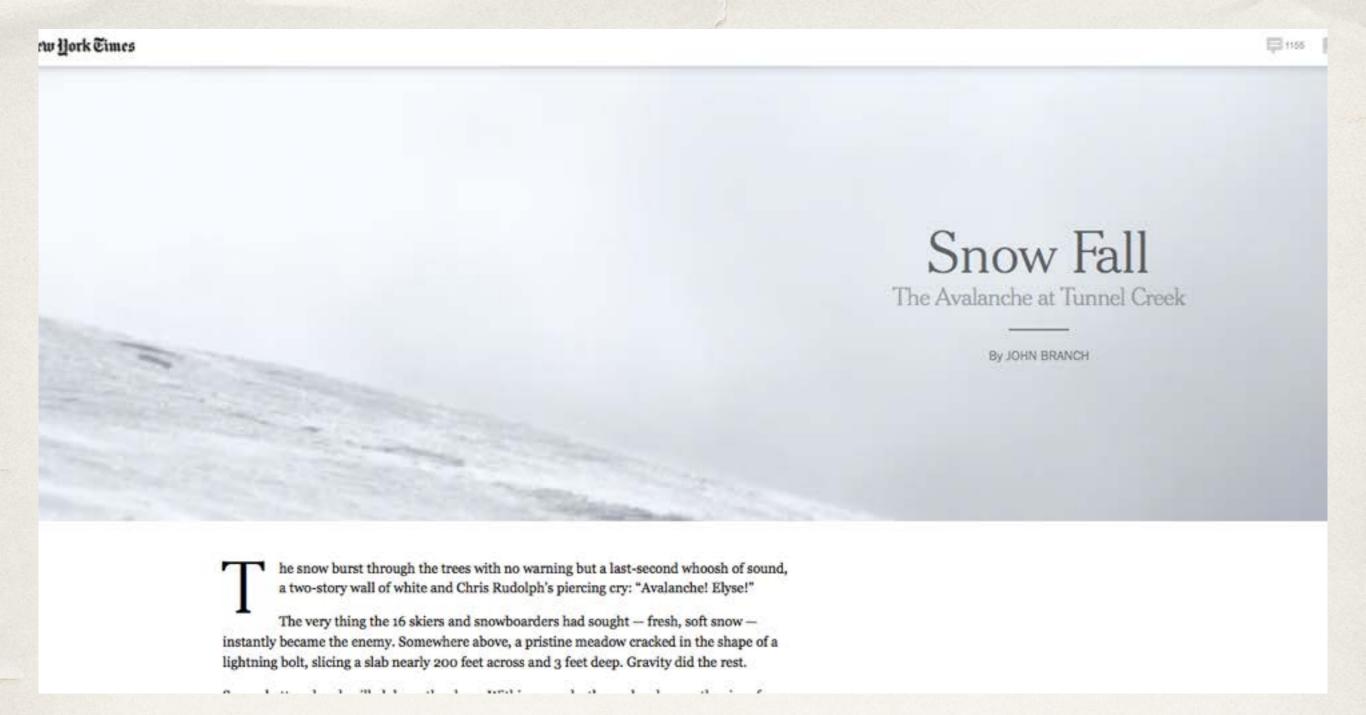
# 'A Fighting Chance'

Emmy-nominated 12-part interactive video series about fighters at a boxing gym on Long Island



# 'A Fighting Chance'

Emmy-nominated 12-part interactive video series about fighters at a boxing gym on Long Island



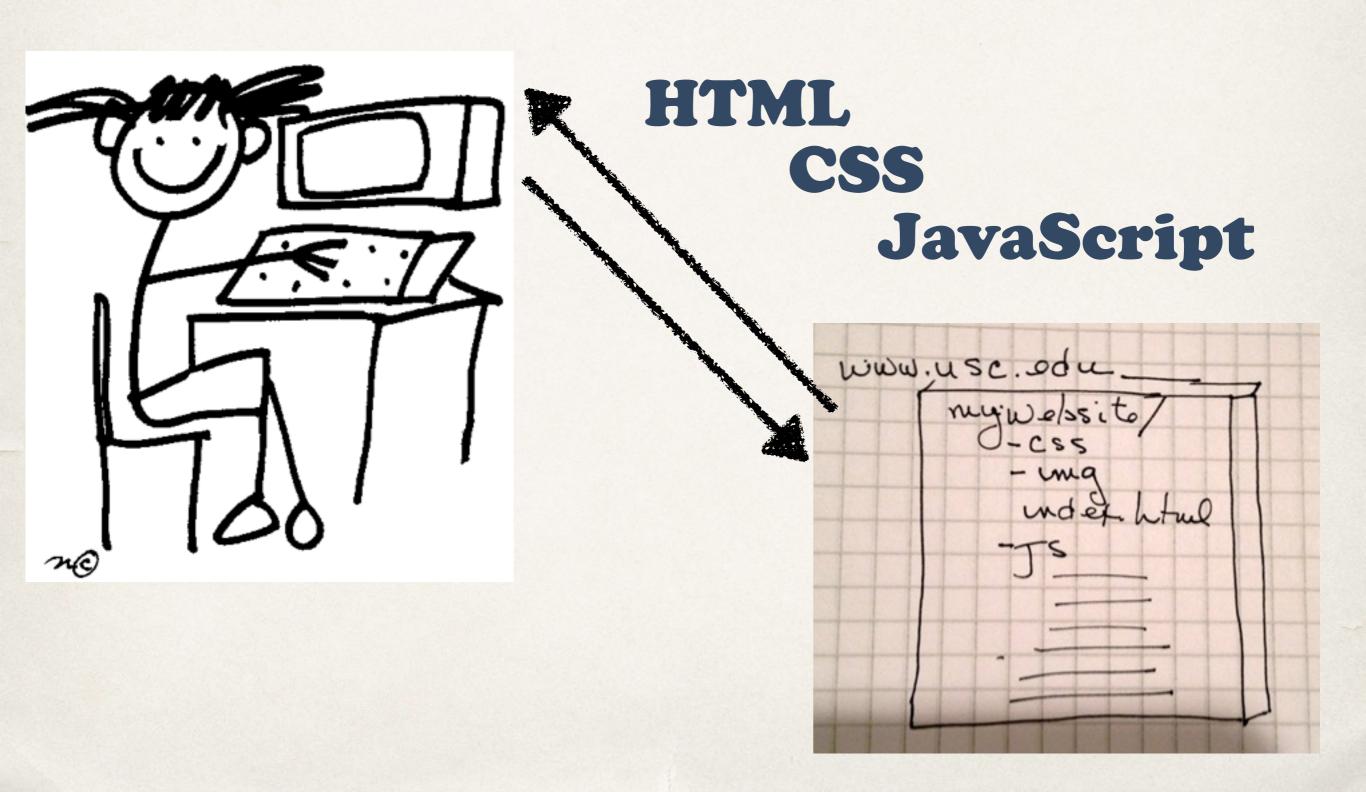
#### 'Snow Fall: The Avalanche at Tunnel Creek

Probably the most high profile visual and interactive experiment.

### How the web works

Browser -

—> Server



#### What do these do?

- \* HTML: gives structure to the page. Places headline, image, text.
- \* CSS: adds style to the page.

  Adds background color, font color, borders, changes page layout.

  Without it, a webpage will look like 1994: a bunch of items stacked on the page with blue underlined text for links.
- \* JAVASCRIPT: Adds action and motion to the page.

  Anytime there's a pop up or some action, that is JavaScript acting in the browser. Anything that's not static (mostly, CSS3 is stepping in with some animation).

### Basic web template structure



- \* Put the template folder on your desktop
- \* Drop index.html into Chrome browser and also open it in a text editor

#### Basic index.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>My first web page</title>
   <!-- your CSS stylesheet -->
    <link href="css/styles.css" rel="stylesheet" type="text/css">
  </head>
  <body>
    <h1>Hello, World!</h1>
  </body>
</html>
```

## Basic styles.css

```
/* Filename: style.css
  Author: P. Bustamante
   Date: Jan. 1, 1970
h1 {
    color: red;
```

# Basic script.js

```
/* script.js
  Author: Peggy Bustamante
   Date: February 2015
*/
$(document).ready(function(){ // begin document.ready block
    alert("hello, NICAR!");
}); //end document.ready block
```

### Always have the basic:

```
<!DOCTYPE html>
<html>
<head>

<!-- invisible stuff goes here -->
</head>

<body>

<!-- visible stuff goes here -->
</body>
</html>
```

#### index.html with CSS and JS file links

```
<!DOCTYPE html>
<html>
 <head>
    <title>My first web page</title>
  <!-- your CSS stylesheet -->
  <link href="css/styles.css" rel="stylesheet" type="text/css">
  </head>
  <body>
     <h1>Hello, world!</h1>
     By Code Artist
  <!-- JAVASCRIPT -->
     <script src="http://code.jquery.com/jquery.js"></script>
     <script src="js/script.js"></script>
 </body>
</html>
```

# HTML elements (1/2)

• headline  $\langle h1 \rangle \langle /h1 \rangle$  (largest) -->  $\langle h6 \rangle \langle /h6 \rangle$  (smallest)

```
<h1>This is a heading</h1>
```

paragraph

```
This is a paragraph.
```

• images <img/>

```
<img src="img/izzy.jpg" width="300" />
```

• links <a></a>

```
<a href="http://usc.edu">USC</a>
```

### HTML elements (2/2)

```
• divs <div></div>
  <div>
   <h1>My First Heading</h1>
   My first paragraph.
  </div>
• lists 
  <u1>
   Coffee
   Milk
  tables 
 row 1, cell 1row 1, cell 2
   row 2, cell 1row 2, cell 2
 • forms <form></form>
 <form>
   <input type="text" name="firstname">
```

</form>

### CSS selectors

#### Three basic types:

• element:

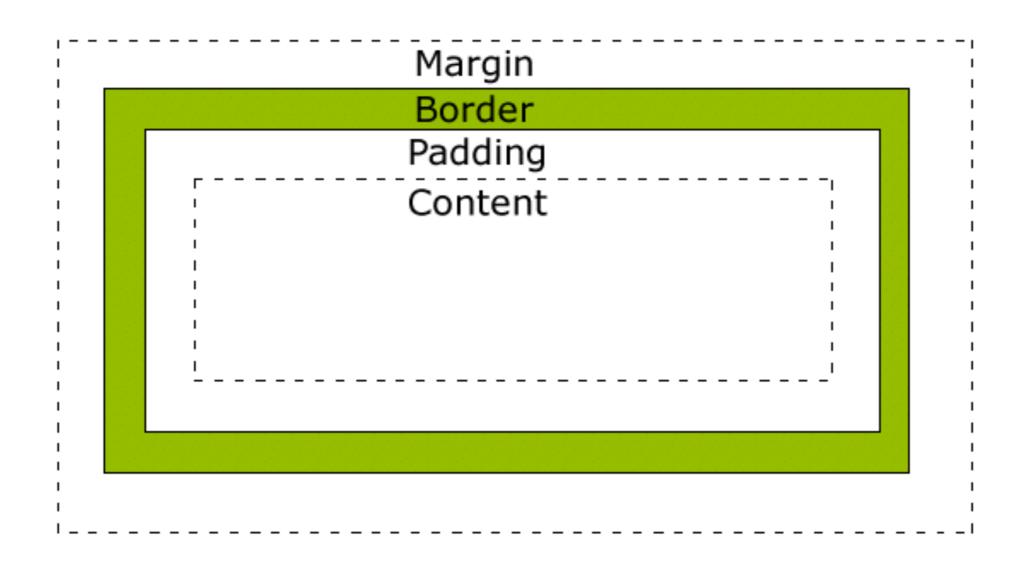
• #id

### Most commonly used CSS properties

```
/* Typography */
color: #ff6699;
background-color: #ff6699;
text-align: right;
text-decoration: none;
font-family: "Times New Ronan", Times, serif;
font-style: italic;
                                                     Margin
font-size: 12px;
                                                     Border
                                                     Padding
/* Box-model properties */
                                                     Content
width: 300px;
height: 200px;
border: 2px solid teal;
margin: 10px;
margin: 30px 10px 20px 10px; /* top right bottom left */
padding: 10px;
padding: 30px 10px 20px 10px; /* top right bottom left */
/* also */
display: none;
```

#### The Box Model

Know it. Love it. It's not as complicated as you think it is.



### Basic styling: mostly typography

• Background:

```
body { background-color: #ff6699; }
div#unique { background-color: #ff6699; }
```

Text

```
h1 { color: #ff6699; }
p.date { text-align: right; }
a { text-decoration: none;}
```

Font

```
p {
   font-family: "Times New Ronan", Times, serif;
   font-style: italic;
   font-size: 12px;
}
```

### Box model properties

#### • Border:

```
border-width: 2px;
border-style: solid;
border-color: red;

/* shorthand */
border: 3px solid red;
```

#### Margin

```
margin-top: 30px;
margin-bottom: 20px;
margin-right: 10px;
margin-left: 10px;

/* shorthand */
margin: 30px 10px 20px 10px; /* top right bottom left */
```

### Box model properties con't

#### Padding

```
padding-top: 30px;
padding-bottom: 20px;
padding-right: 10px;
padding-left: 10px;

/* shorthand */
padding: 30px 10px 20px 10px; /* top right bottom left */
```

#### Dimensions

```
width: 300px;
height: 20px;

or

width: 80%;
height: 80%
```

### Display and positioning

Display

```
div.hidden { visibility: hidden; } /* hidden, layout still affected
div.hidden { display: none; } /* page displayed as if el not there
li { display: inline }; /* makes them all next to each other */
span { display: block } /* now has all block model properties */
```

• positioning: we will go into this more later for now just fixed positioning

```
p.pos_fixed {
    position: fixed;
    top: 30px;
    left: 20px;
}
```

# Download simple web template: <a href="http://bit.ly/1rohvIS">http://bit.ly/1rohvIS</a>

# Download photo gallery demo: <a href="http://bit.ly/1JULwW2">http://bit.ly/1JULwW2</a>

# Download profile template: <a href="http://bit.ly/1DUgjA3">http://bit.ly/1DUgjA3</a>

#### **Title Goes here**

USC ANNENBERG
School for Communication & Journalism

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Quisque ut dignissim enim. Donec egestas, eros vitae dignissim fringilla, turpis mauris viverra leo, nec cursus tellus purus a arcu. Duis et pulvinar sapien, sed volutpat metus. Mauris vitae velit et felis faucibus scelerisque ut sed arcu.



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Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis aliquet ipsum ligula, vitae finibus erat auctor at.

Aenean eleifend portitior egestas. Proin et pulvinar sapien. Mauris volutpat ligula vitae maiesuada commodo.

Mauris sit amet nunc magna. Suspendisse posuere sollicitudin pulvinar. Phasellus vehicula, massa quis eleifend utrices, lorem augue consequat massa, in facilisis mi lorem quis urna. Sed molestie eros ipsum, ut elementum magna elementum sit amet. Vivamus magna erat, viverra non dapibus ut, fermentum ut arcu. Ut at tortor sed neque dictum interdum.

Nunc sed lorem consectetur metus convallis accumsan et nec tellus. Phaseilus purus lacus, tristique in dui quis, sodales sodales sem. In quis nulla eget sapien aliquet facilisis. Donec suscipit ullamcorper finibus. Curabitur ac augue sagittis, rutrum augue vitae, malesuada justo. Vestibulum et nibh velit. Nullam sit amet enim hendrerit, pharetra ex at, dictum libero. Proin elementum varius tincidunt. Aenean accumsan tincidunt felis. Donec pulvinar pretium mi nec luctus. Nunc tristique massa eget nibh convallis, in lacreet lorem pretium. Phaseilus lobortis dictum lacus non scelerisque. Donec eu acet luctus, omace ante et suscipit lorem. Morbi mauris sem, ornare ut

## Images on the web

Never use full-sized image straight from your camera.

#### In Photoshop:

- \* Change the resolution to 72ppi. Anything larger is wasted file size. It will not look any better, but will make the page load very slowly. This is an even bigger issue now that mobile is so dominant.
- \* Generally 600px is the widest an image will be, unless it is a display image that goes from edge to edge. Then it can be 800px or 1080px. But only make them that large when you know you need them to be that size.
- \* Size them as close to what you think they will be as possible: Don't use a 600px wide photo for a 150px wide thumbnail image. A little larger is better than a little smaller, if they are too small they will pixelate.
- The largest files size should still be under 500Kb. Generally they are no larger than 150Kb.

### The End

Good luck! And send me any questions.