

Designing for Interesting Moments

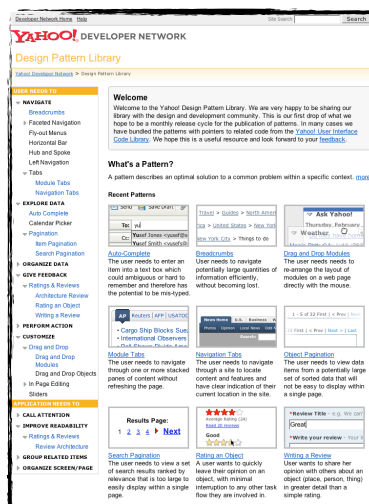
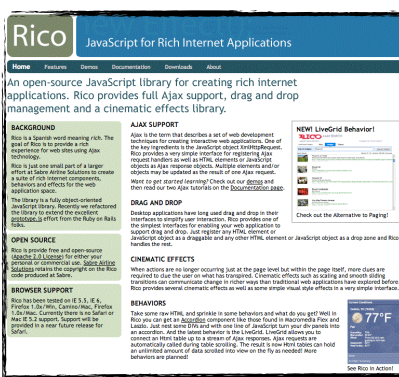
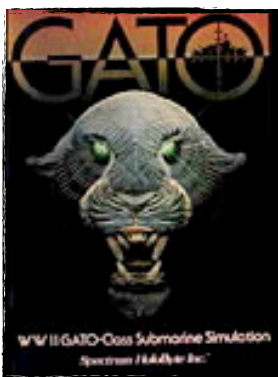
Bill Scott

Director, UI Engineering
Netflix

Web App Masters Tour - San Diego - March 24, 2010

1

Me



2

Simple Interaction?

3

Simple Interaction? Events...

Page load. Mouse hover. Mouse down. Drag initiated. Drag leaves original location. Drag re-enters original location. Drag re-enters original location. Drag enters valid target. Drag exits valid target. Drag enters specific invalid target. Drag is over no specific target. Drag hovers over valid target. Drag hovers over invalid target. Drop accepted. Drop rejected. Drop on parent container.

16+

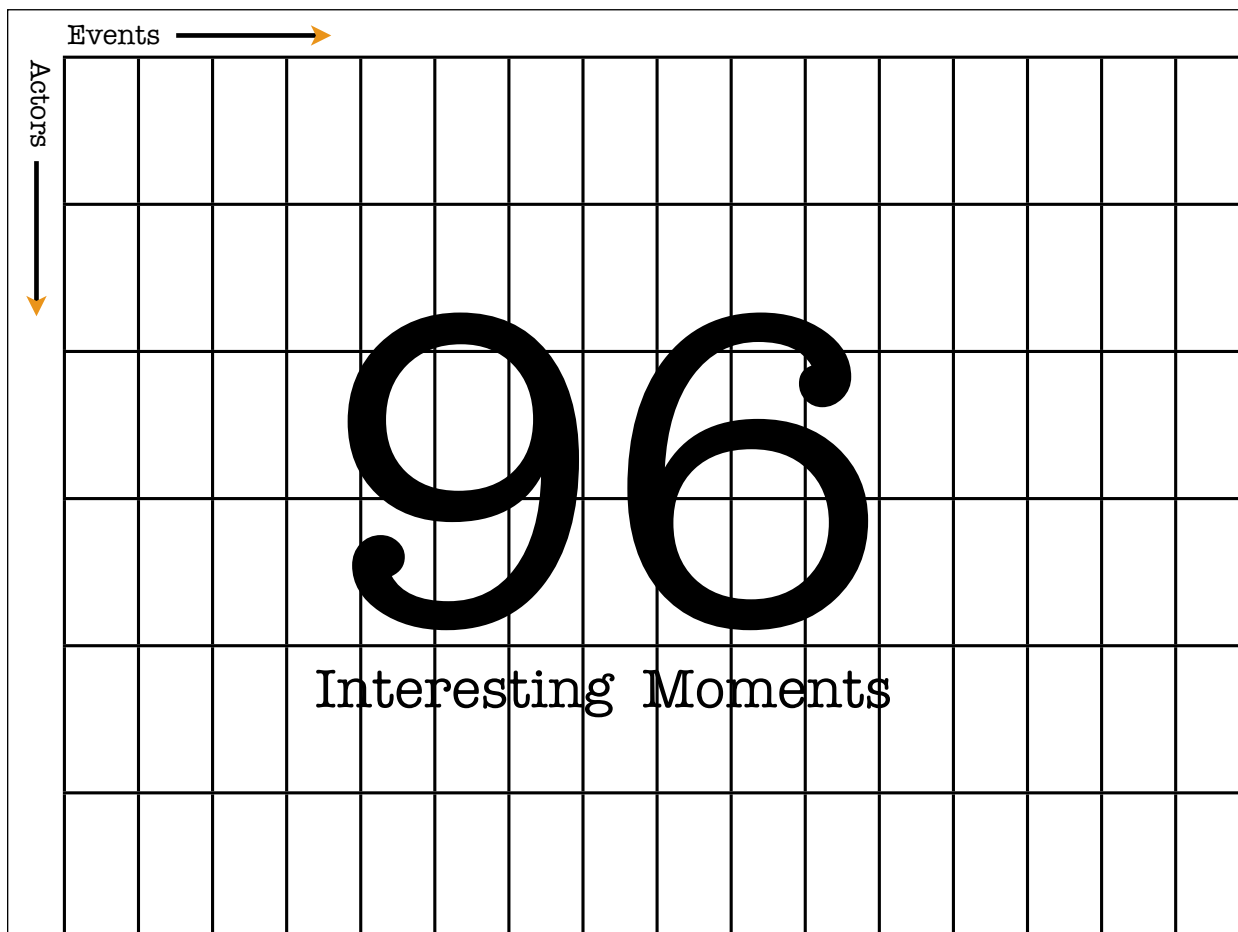
4

Simple Interaction? Actors...

Page. Cursor. Tool Tip. Drag
Object. Drag Object's Parent
Container. Drop Target.

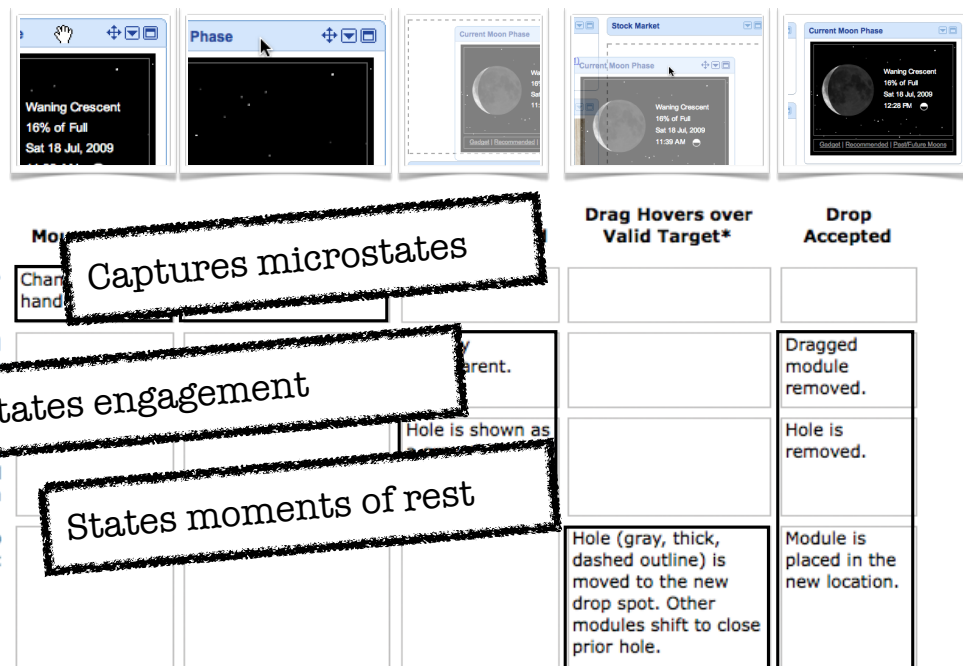
6+

5



6

Interesting Moments



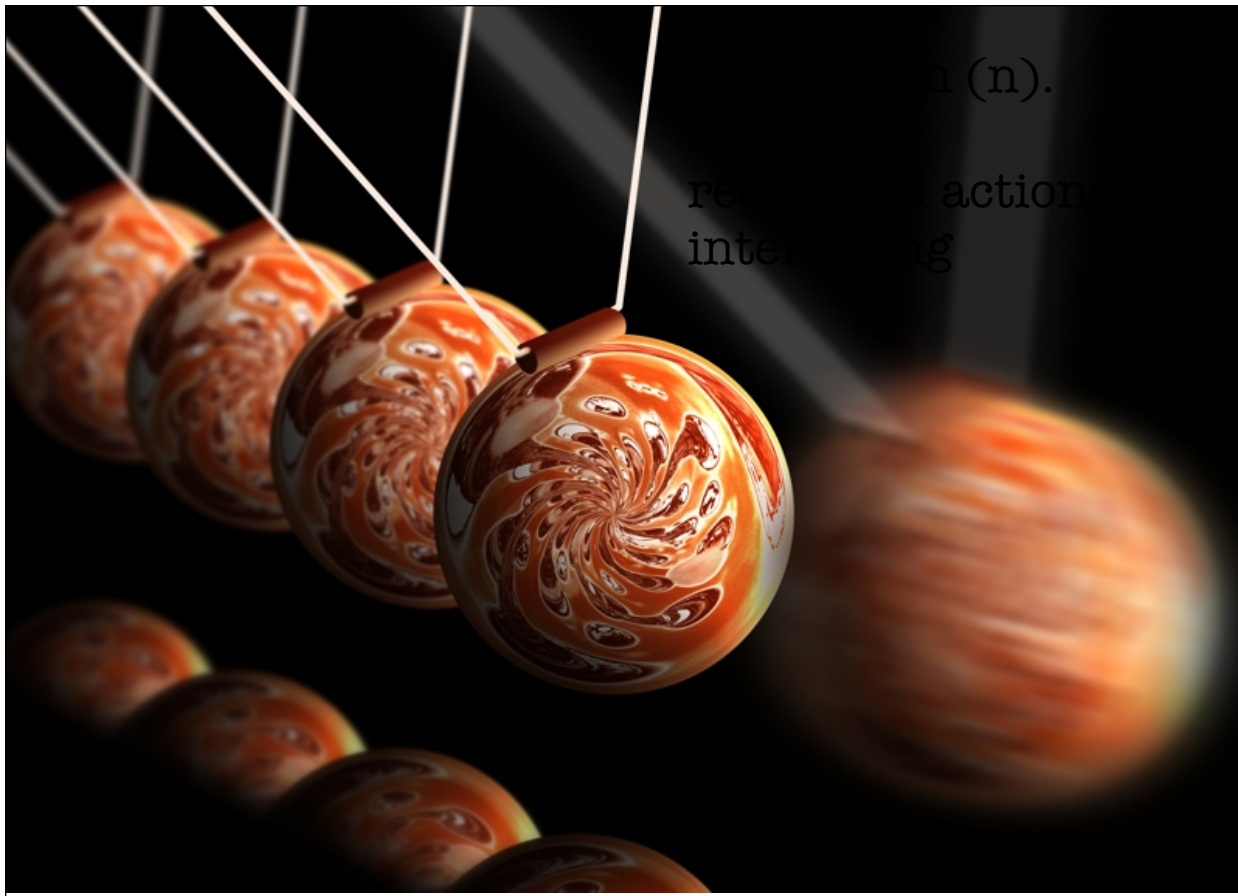
7



interesting moments.
opportunities for
engaging with the
user throughout an
interaction.

microstates.

8



... (n).

reaction action
interesting

6 principles

for designing interesting moments



Input where
you output.

- Alan Cooper

11



12

In Page Editing



inline editing. flickr.com

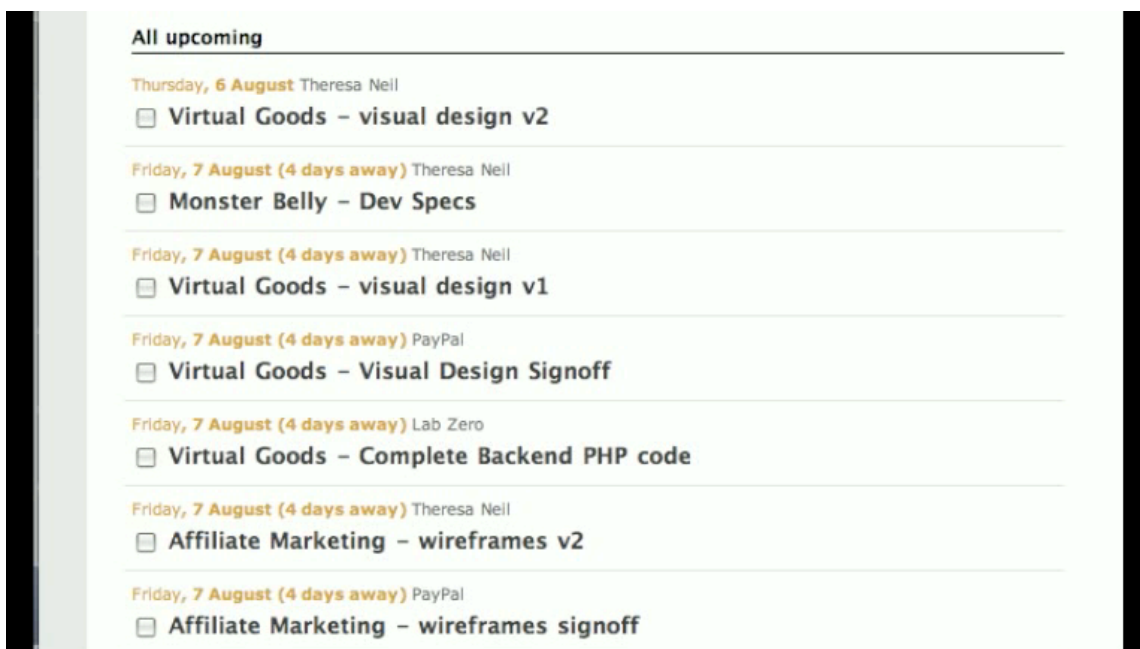
Additions:

- Yellow spotlight/invitation
- Tooltip invitation
- Explicit Save/Cancel buttons



13

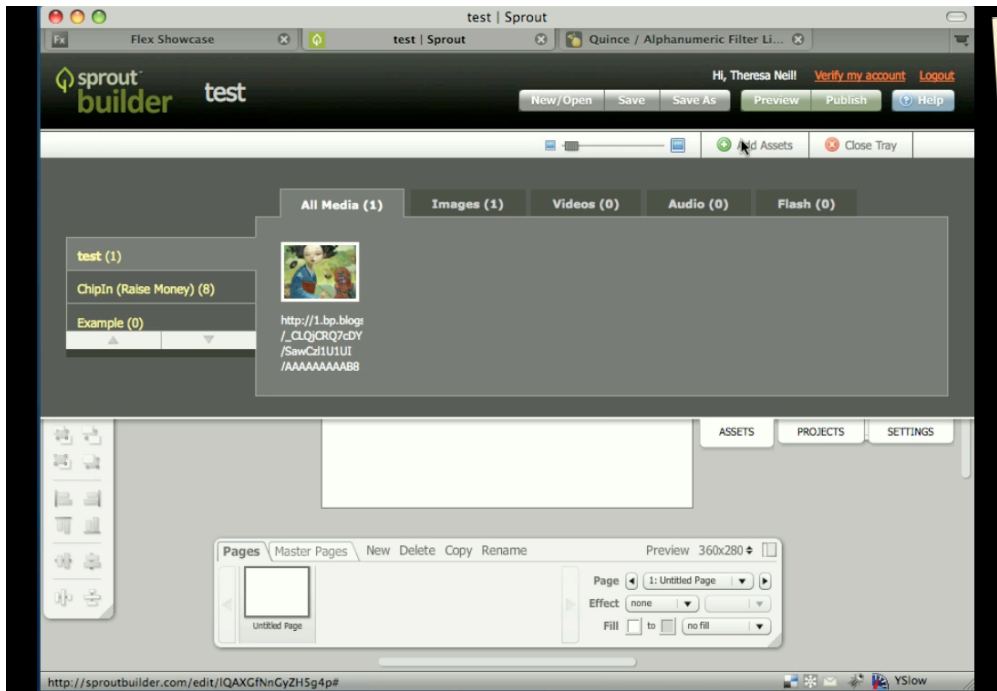
In Page Editing



multi-inline edit. basecamp

14

Non-Symmetrical Interaction



Anti-Pattern
Non
Symmetrical
Interaction

anti-pattern. non-symmetrical. sproutbuilder

15

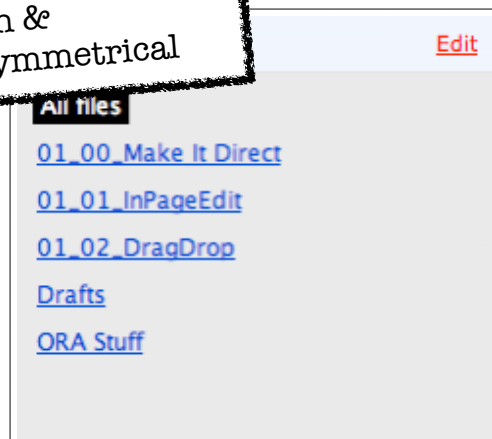
Non-Symmetrical Interaction

Anti-Pattern
Non
Symmetrical
Interaction

Keep activation &
deactivation symmetrical



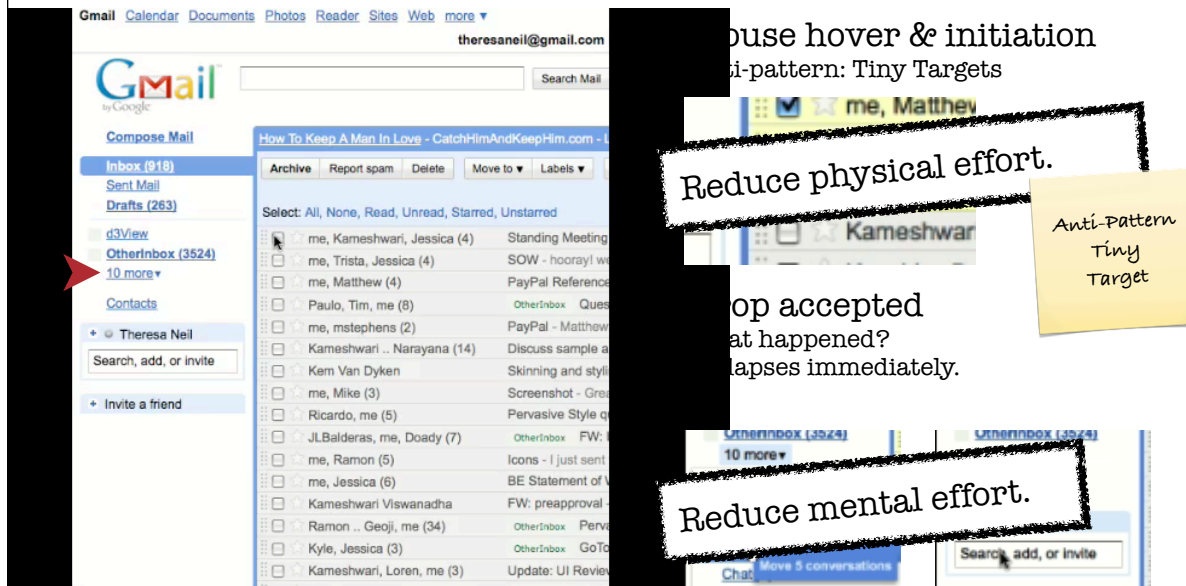
anti-pattern. non-symmetrical. iphone



symmetrical interaction. basecamp

16

Drag, Open & Drop



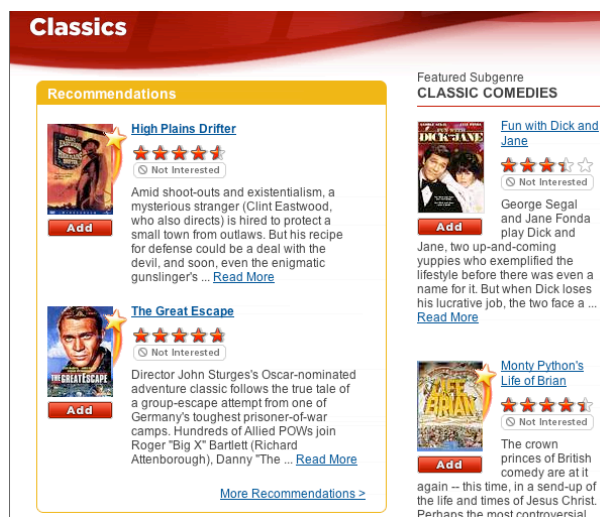
drag and drop. gmail

17

Drag & Drop = Usability?

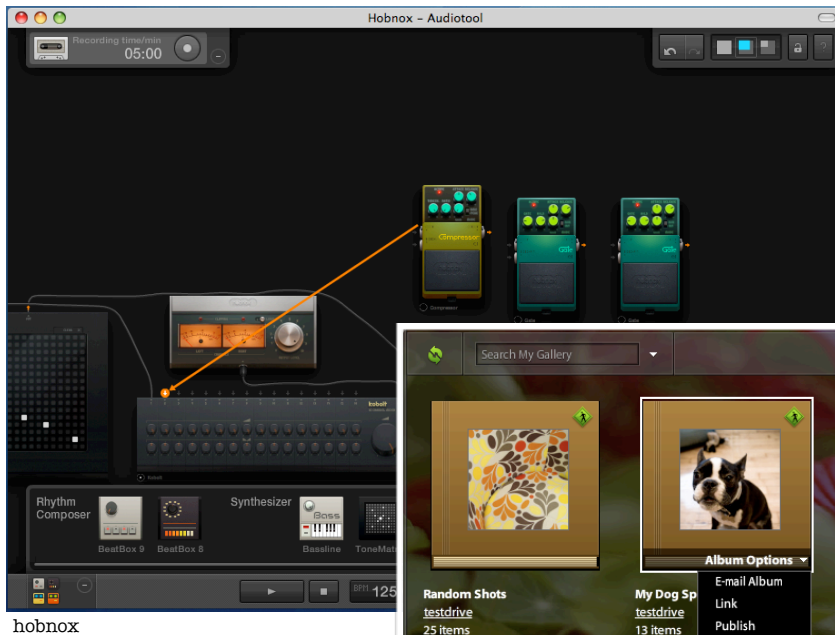


anti-pattern. artificial construct.

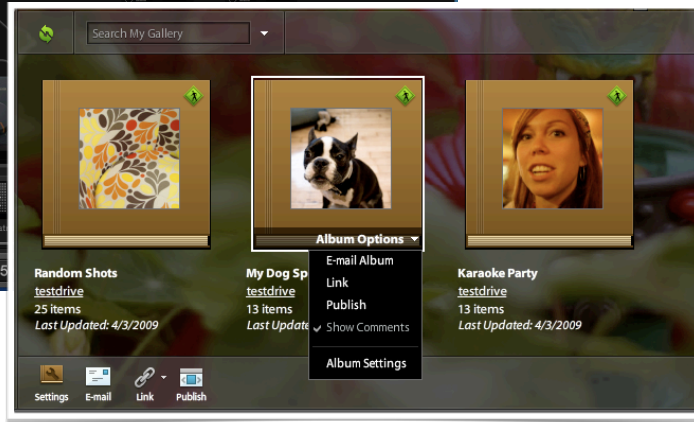
rate an object. netflix.com

18

Tiny Target



hobnox



adobe photoshop express

19

Tiny Target Refactored

Step 1. Selecting a Volcano

Topographic maps are available for all the volcanoes in the United States. Topographic maps and outdoor recreation stores also sell topographic maps. For more information, click on the link below. [Click here for more information about Mount St. Helens. Click here for more information about the major dome building episodes. You can also find information about the major dome building episodes. You can also find information about the major dome building episodes.](#)

Step 2. Creating a Pattern.



Print the page with the simplified topographic map highlighted. The highlighted lines will be 1/4 inch on a side. It can be square or rectangular.

yahoo teachers

Remember Fitts Law :-)

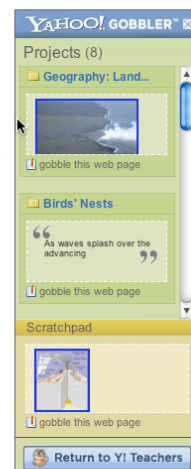
$$T = a + b \log_2 \left(1 + \frac{D}{W} \right)$$

Volcanic Hazards

**When Lava Enters the Sea:
Growth & Collapse of Lava Deltas**

Photograph by C. Heliker on November 12, 1992.

Only four days old, this fan-shaped lava delta (center of image) extends about 200 m into the ocean on the southeast coast of Kilauea Volcano, Hawai'i. The diffuse plume of white steam at the leading edge of the delta indicates that several small lava flows are pouring into the ocean. Countless deltas have formed



20

Novel Notion



Anti-Pattern
Novel
Notion

ebay desktop

21

Require only a
light footprint.

22



COPYRIGHT 2006 © DIGG INC. WWW.DIGG.COM

23

Lightweight Actions

sorting by: [newest | [oldest](#) | [most digs](#) | [least digs](#)]

[IBM, AMD, Sony boost chip speeds by 24%](#)

"IBM and AMD have found a way to improve transistor performance by up to 24% without increasing the power draw - using a tweaked implementation of Big Blue's 'strained silicon' process."

[[dig this story](#) | [comment](#) | by: anonymous]

original digg site. digg.com 1.0

180
digs

[Are Lost's New Time](#)

popular

heads

worms:

digg it

25 Comments

Share

Bury



msaleem made popular 9 min ago

Remove barriers

keep our



in-page action. digg.com

24

Lightweight Actions

Be mindful of the “click weight.”

- # of interaction steps
- Decision time
- Seek time
- Second guessing
- Wait time

<http://genesisconduit.wordpress.com/2008/07/13/click-weight/>
<http://www.amazon.com/Designing-Both-Sides-Screen-Collaborate/dp/0672321513>

25

Lightweight Actions

in-page action. digg.com

282 diggs
submitted by [usedmac](#) 1 day 1 hour ago (via [http://mac](#))
The Apple Mighty Mouse brings a slew of great feat with most new Mac systems it is becoming a comm one for close to a year now, I have found that the us Scroll Ball far outweigh its quirks.
[60 comments](#) | [blog this](#) | [email this](#) | category: [apple](#)

0 items in my bag [checkout](#)

Pique polo
only at gap.com

overview you'll also like

Soft cotton pique knit.
Short-sleeved, button neckline.
• [Need large quantities? Click for Corporate Apparel](#)
• 100% Cotton. Machine wash, imported.

regular tall

Buy More and Save
select Color: **royal grape**
\$29.50 **Buy 2 or more, \$25.00 each**
\$9.99

select Size:
☒ XS ☐ S ☐ M ☐ L ☐ XL ☐ XXL ☐ XXXL
[size chart](#)

Quantity: 1
royal grape
\$29.50 **\$9.99** [add to bag](#)

remembered collections. gap.com

rating an object. yinews, netflix

RECOMMEND THIS STORY

Recommend It: ☆☆☆☆☆ Average (63 votes) ★★★★★

Classics

Recommendations

High Plains Drifter
★★★★★
Amid shoot-outs and existentialism, a mysterious stranger (Clint Eastwood, who also directs) is hired to protect a small town from outlaws. But his recipe for defense could be a deal with the devil, and soon, even the enigmatic gunslinger's ... [Read More](#)

The Great Escape
★★★★★
Director John Sturges' Oscar-nominated adventure classic follows the true tale of a group-escape attempt from one of Germany's toughest prisoner-of-war camps. Hundreds of Allied POWs join Roger "Big X" Barkett (Richard Attenborough), Danny "The ... [Read More](#)

More Recommendations >

Featured Subgenre
CLASSIC COMEDIES

Fun with Dick and Jane
★★★★★
George Segal and Jane Fonda play Dick and Jane, two up-and-coming yuppies who exemplified the lifestyle before there was even a name for it. But when Dick loses his lucrative job, the two face a ... [Read More](#)

Monty Python's Life of Brian
★★★★★
The crown princes of British comedy are at it again -- this time, in a send-up of the life and times of Jesus Christ. Perhaps the most controversial ... [Read More](#)

The Critics:
B-
14 reviews

My Grade:
Rate this Movie!
Select grade to the right
[write a review](#)

Yahoo! Users:
B+
13199 ratings

A
B
C
D
F

Answer hidden due to its low rating [Show](#)

Total rating: -16 32 48

rating an object. yimovies, y!answers

26

Lightweight Actions

Yelp Food brought to you by MGD 64

Mi Tierra Foods
based on 35 reviews [Rating Details »](#)

Categories: [Grocery](#), [Specialty Food](#), [Mexican](#) [\[Edit\]](#)

Address: [\[Edit\]](#)
Pablo Avenue
Addison, TX 75001
946

Good for Kids: Yes
Take-out: Yes
Outdoor Seating: No

Accepts Credit Cards: Yes
Attire: Casual
Takes Reservations: No
Waiter Service: No
Good for: Lunch

Parking: Street, Private Lot
Good for Groups: No
Delivery: No
Wheelchair Accessible: Yes
Alcohol: None

[Edit Business Info](#) [Is this your business?](#)

[Send to Friend](#) [Bookmark](#) [Send to Phone](#) [Write a Review](#) [Print version](#)

[Add Photos](#)

[First to Review](#) [Amy J.](#)

Anti-Pattern
Idiot
Box

Don't add unnecessary steps.

anti-pattern. idiot box. yelp.com

27

Contextual Tools: on Hover

[lantzilla pro](#) says:
...with biscuits and gravy and all the fixins...
Posted 16 hours ago. ([permalink](#))

Add your comment

Preserve readability by initially
hiding secondary actions.

(Some HTML is OK.)

contextual tool menu. flickr.com

Pick Up at the Store

- ☐ Milk
- ☐ Orange Juice
- ☐ Tomatoes
- ☐ Lettuce
- ☐ Bread
- ☐ Chips

contextual tool actions. backpackit

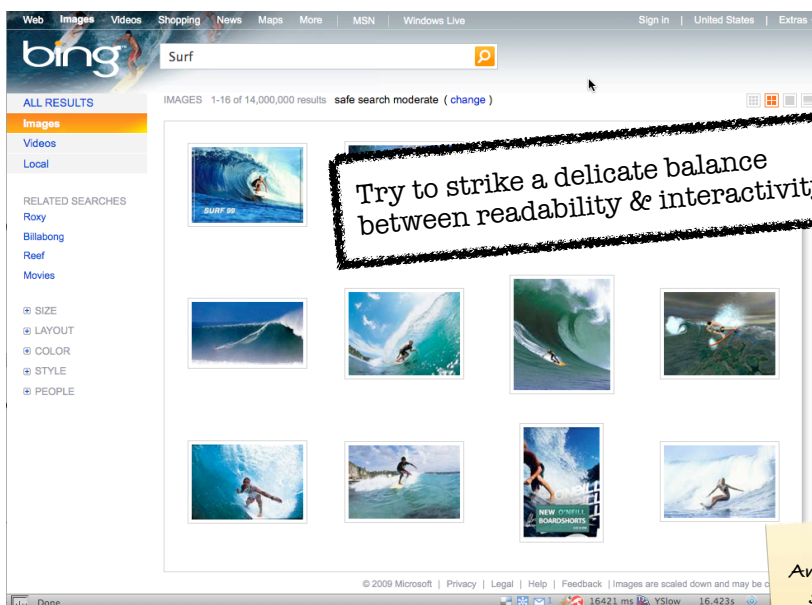
28

Contextual Tools: on Click



29

Shifting Content



Anti-Pattern
Shifting
Content

contextual tool overlay. bing.com

30

Bing Refactored

WebImagesVideosShoppingNewsMapsMoreMSNHotmailSign inUnited StatesPreferences

bing

surf

Make Bing your decision

ALL RESULTS

Local listings for Surf

Reference Articles on Surf

Images of Surf

RELATED SEARCHES

Surf Girls

Hawaii Surf Waves

Los Angeles Surf

Surf Board

Surf Art

Ocean Surf

Surf Detergent

Surf Fishing

Surf Pictures

SIZE

LAYOUT

COLOR

STYLE

PEOPLE

IMAGES1-16 of 2,490,000 resultsSafeSearch moderate(Change)

No more “shifting content”

BUT now “hover & cover”

Anti-Pattern Hover & Cover

contextual tool overlay. bing.com

Hover & Cover

National Mapping - F...
http://www.ga.gov.au...

National Mapping - F...
http://www.ga.gov.au...

National Mapping - F...
http://www.ga.gov.au...

National Mapping - F...
http://www.ga.gov.au...

Volcano S...
http://volc...

Copy of Plateau - Wl...
http://en.wikipedia...

Copy of Gobbie Image...
http://beta.teachers...

Copy of Gobbie Image...
http://beta.teachers...

Copy of Gobbie Image...
http://beta.teachers...

Copy of Alaska Volca...
http://www.avo.alask...

National Mapping - F...
http://www.ga.gov.au...

Don't obscure context or navigation.

	Page Render	Mouse over object	Mouse leaves tool layer	Tool selected		
		link cursor				
Actionable Object		Wrapped by tool layer	Normal display mode	Normal display mode		
Contextual Tools		Show tool layer	Hide tool layer	Hide tool layer		

Anti-Pattern Hover & Cover

copy

delete

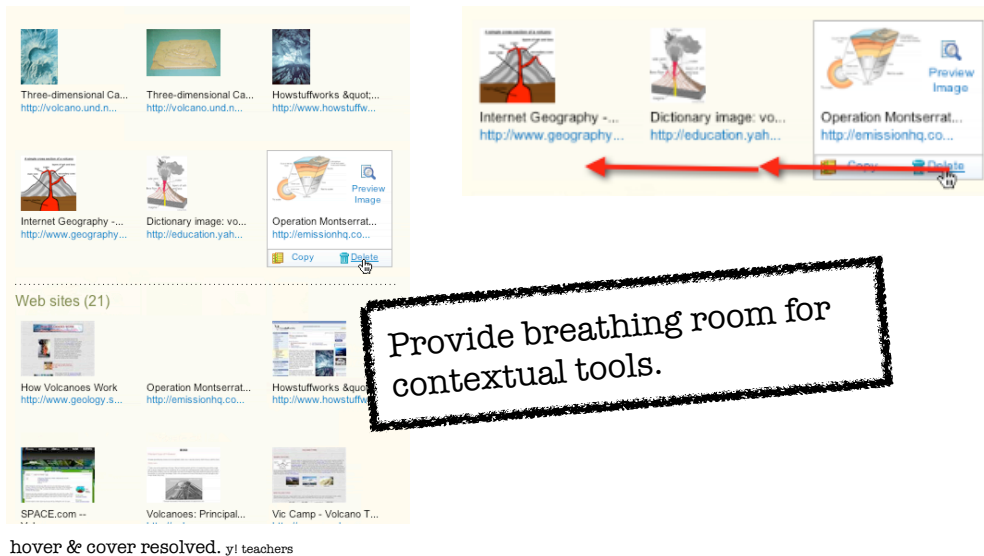
preview

title stuff that runs long

anti-pattern. hover & cover. yahoo! teachers

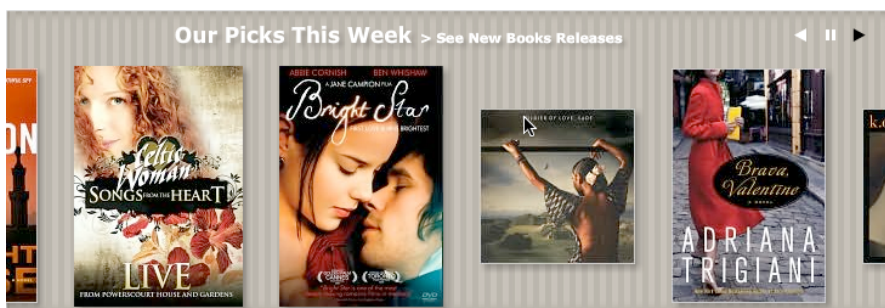
32

Hover & Cover Refactored



33

Hover & Cover (and more)



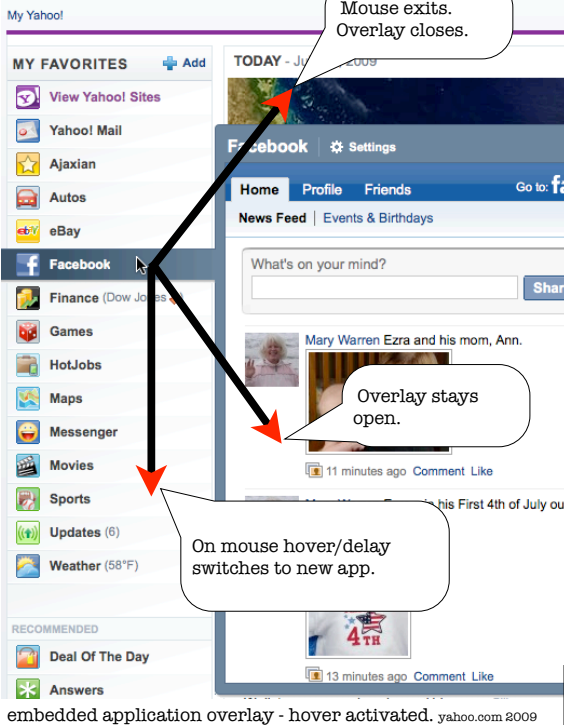
barnes and nobles



34

What about new Yahoo page

Anti-Pattern
Mouse
Trap



The good?

- Doesn't obscure other navigation
- Doesn't collapse erratically.

The not so good?

- Activation delay feels sluggish (however delay is necessary).
- Not all menus activate a panel.
- Accidental triggering (result in obscuring content).
- Gigantic overlays activated by hover



bokardo

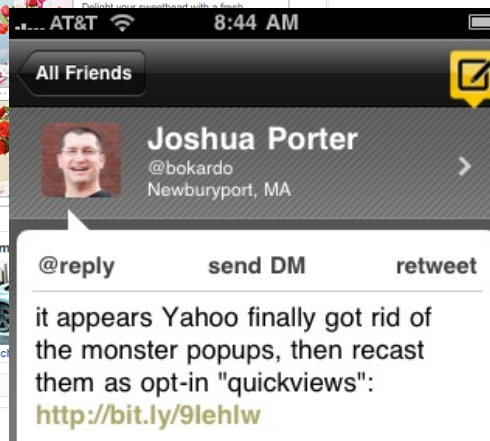
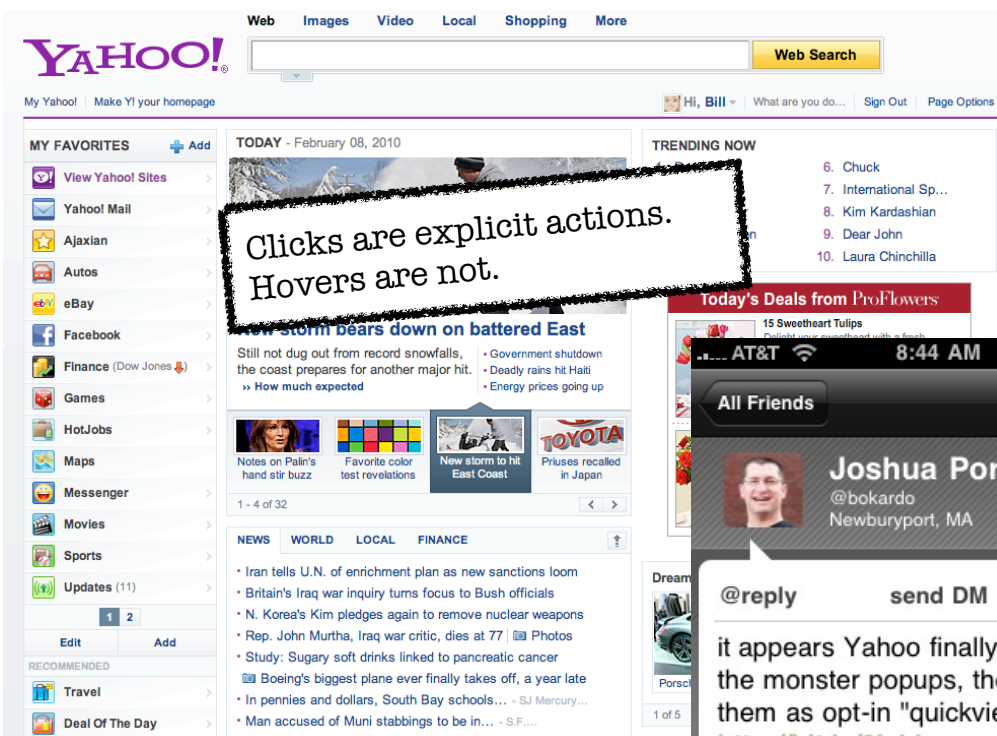
I like the idea of the left-hand nav on Yahoo's new home page, but my guess is the gigantic hovers won't last long.
<http://yahoo.com>

20 minutes ago from TweetDeck

See also: Jakob Nielsen's research on "Mega Menus": <http://tr.im/twnC>

35

Yahoo! Refactored



36



Maintain flow.

37



Exploratorium Exhibit

38

Spot the differences



39

Now try again...

Keep the moments within the page.



40

Overlays



43

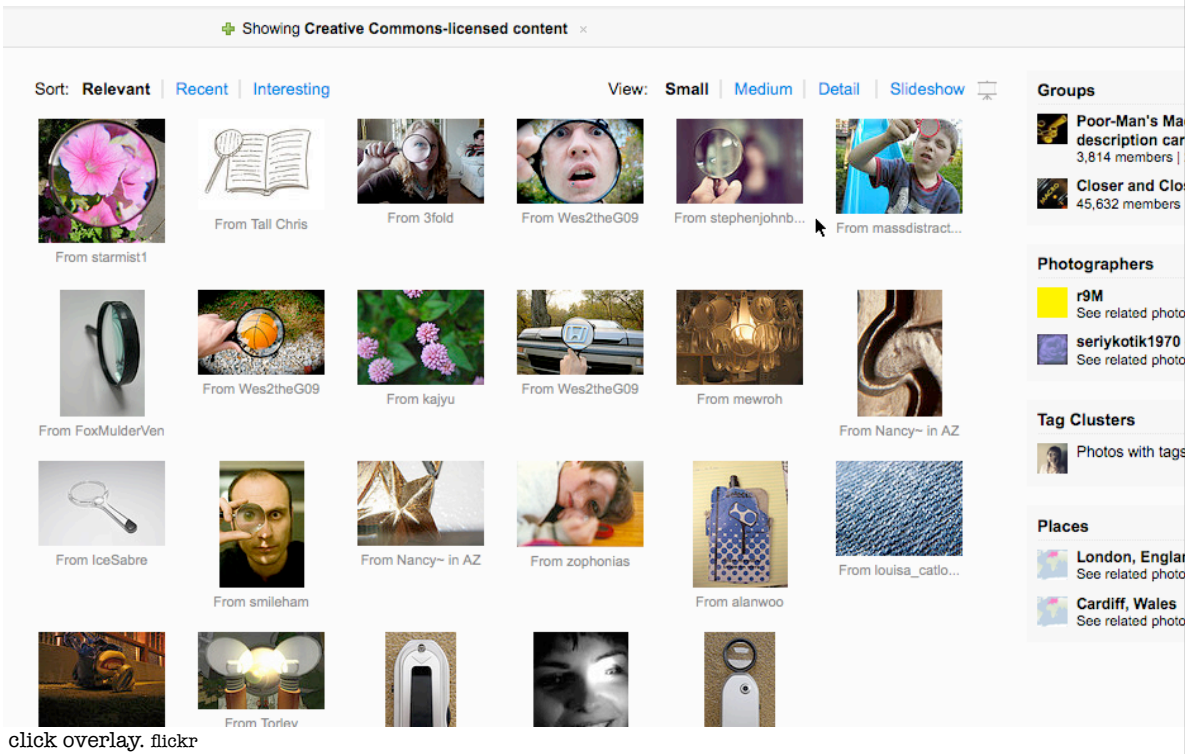
Overlays: Idiot Box



anti-pattern. idiot box. yahoo! photos

44

Overlays



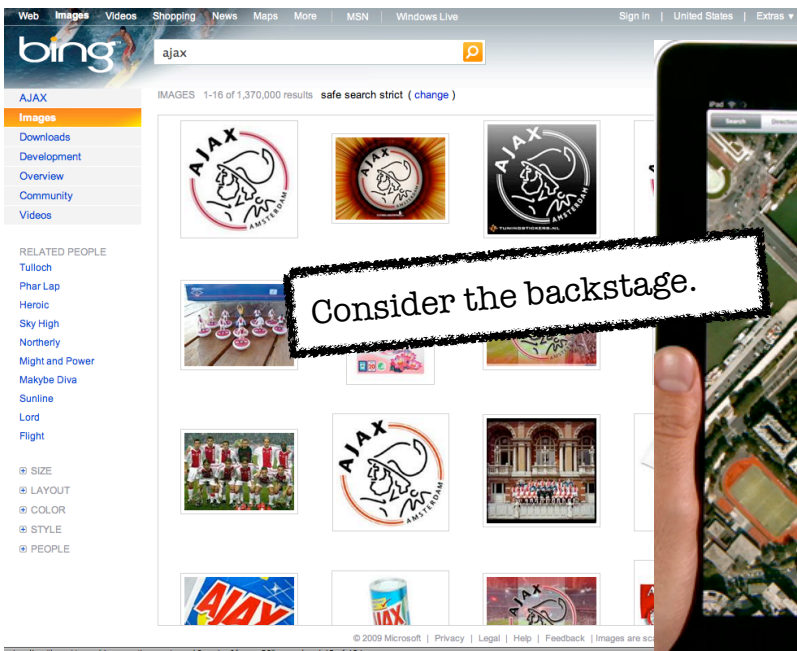
45

Inlays



46

Virtual Space



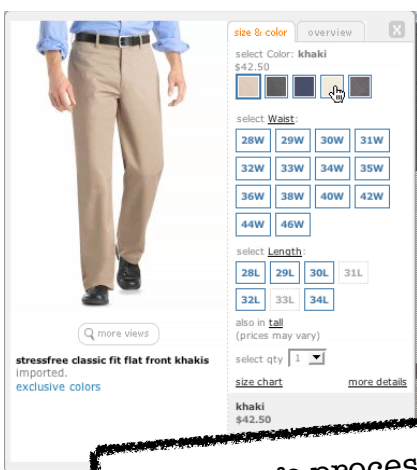
endless scrolling. bing.com



page curl. iPad Maps

47

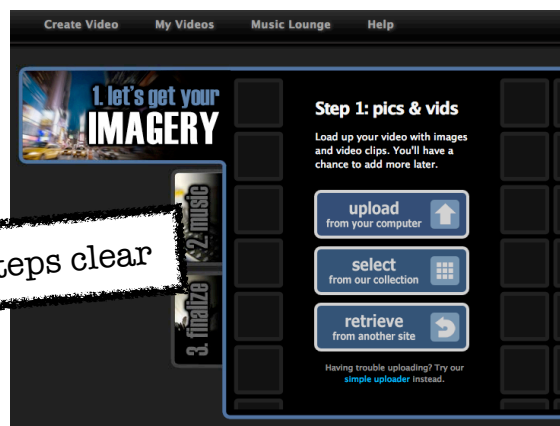
Process Flows



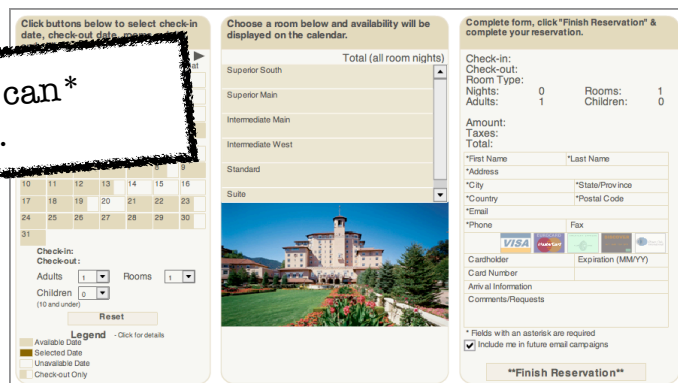
the gap.

Single page process *can* improve conversions.

Keep steps clear

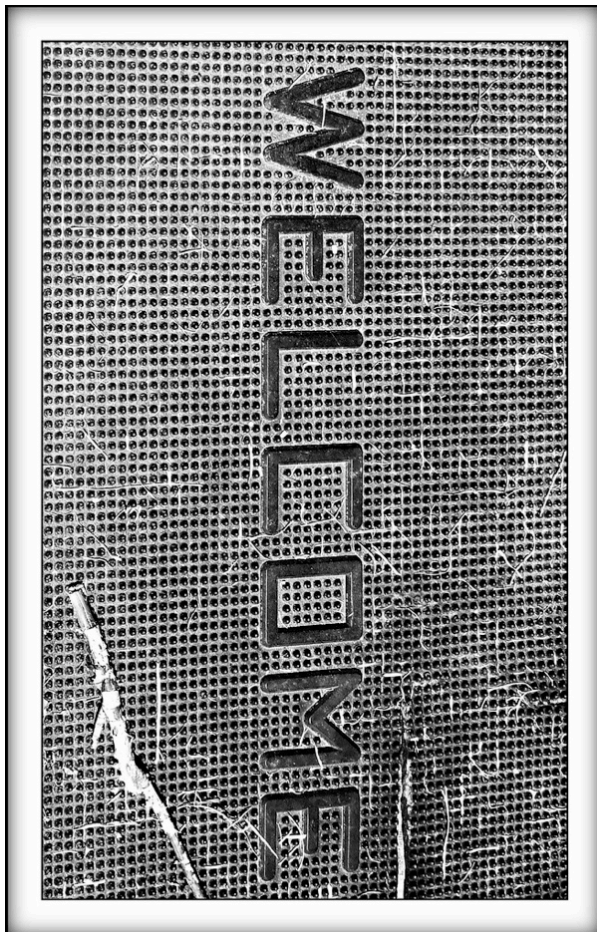


animoto. create a video



broadmoor hotel. one page checkout

48



Invite interaction.

49

DUSTIN CURTIS

◀ PREV ⚡ NEXT ▶

Hello average person,

You should follow me on Twitter.

A quick study exploring the power language has on clickthrough rates.

July 14, 2009

I spend a lot of time thinking about how to improve user experiences. Sometimes, I take my ideas and create experiments to get hard data about how users behave in the real world.

During the past few months, I have been performing an experiment on this site.

50

PERMUTATION	CLICKTHROUGH
"I'm on <u>Twitter</u> ."	4.70%
PERMUTATION	CLICKTHROUGH
"Follow me on <u>twitter</u> ."	7.31%
PERMUTATION	CLICKTHROUGH
"You should follow me on <u>twitter</u> ."	10.09%
PERMUTATION	CLICKTHROUGH
"You should follow me on twitter <u>here</u> ."	12.81%

Use a clear call to action.

http://dustincurtis.com/images/twitter/green_spill.jpg

51

Tour Invitation

Use new visits to promote new features.

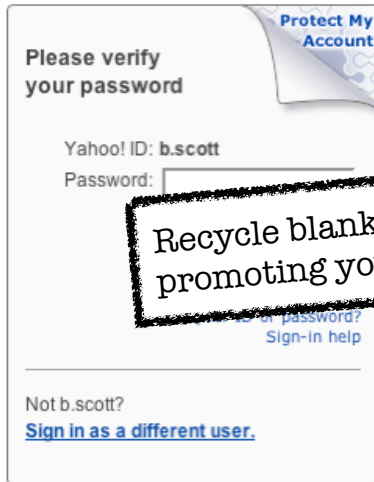
Caution: Don't use as a bandaid for a bad UX.

invitation.yahoo.com

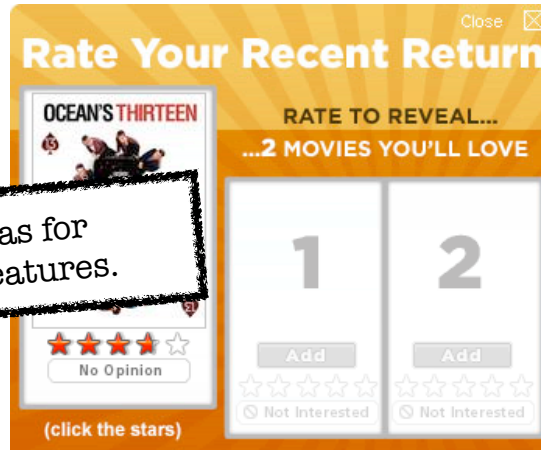
tour invitation. gmail

52

Blank Slate Invitation



dog-ear invitation. login.yahoo.com



fill-in-the-blanks invitation. netflix



blank-slate invitation. backpackit

53

Prompt Invitation



What are you doing right now?

facebook.com

delicious

Home



Bill Scott's Bookmarks

Bookmarks | Network | Tags | Subscriptions | **Inbox (1 new)**

Site: <http://looksgoodworkswell.blogspot.com>

See more bookmarks in [Popular](#), [Recent](#), or [look up a URL](#).

billwscott

Type a tag

02 JAN 09

21 Must-Have Scripts For Your Favorite Javascript Library (jQuery, MooT

[EDIT](#) | [DELETE](#)

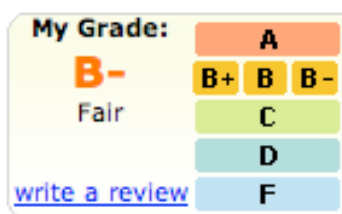
delicious.com

Use questions or commands to prompt for input.

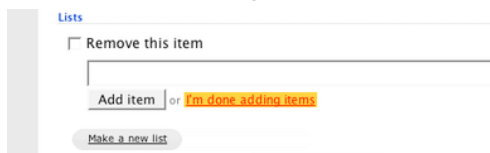
54

Hover Invitation

hover invitation. ylmovies



hover & tool invitation. backpackit



Front Grounds



Aid discoverability with
hover invitations.



tooltip, hover & cursor invitation. flickr.com

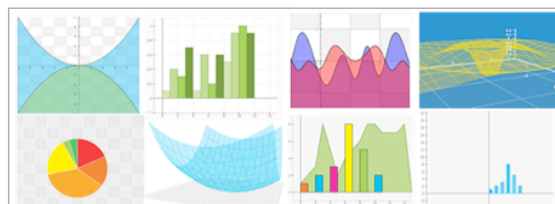
55

Drag & Drop Moments

Rich Data Visualization Tools. I've included the first three to whet your appetite.

Ajax.org

Ajax.org Platform is a pure javascript application framework for creating real-time collaborative applications that run in the browser.



AnyChart

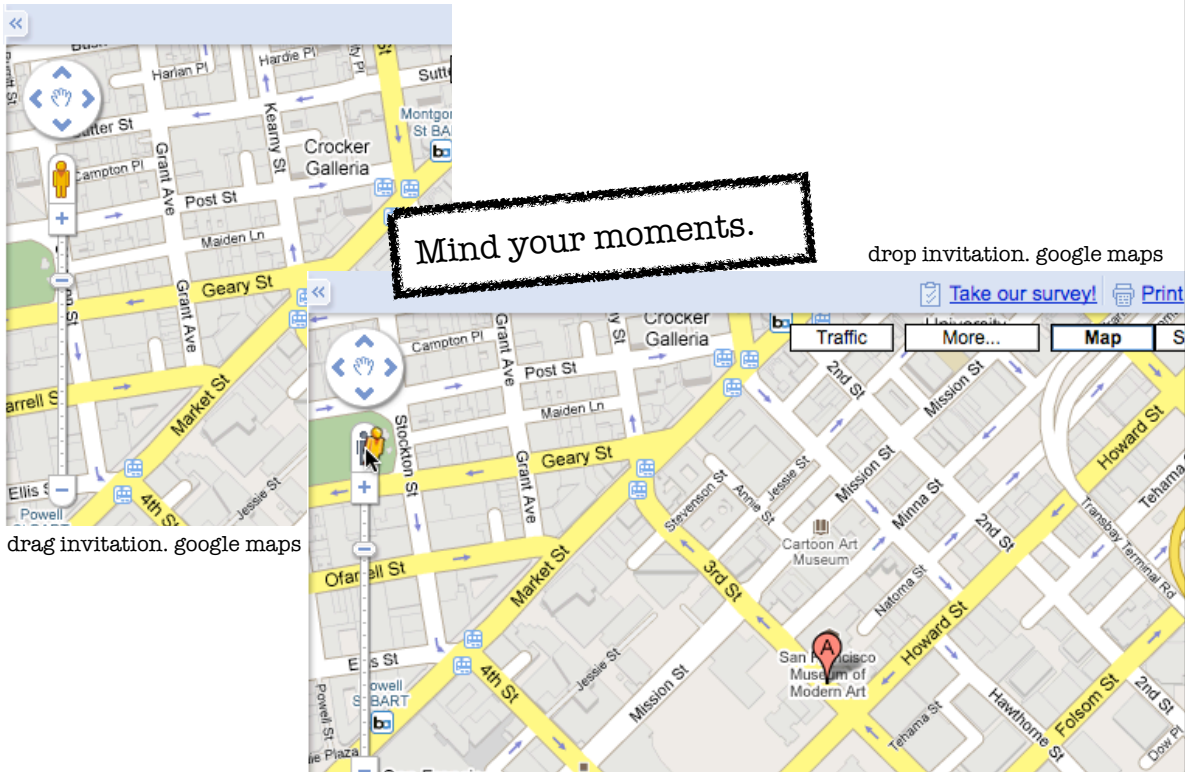
AnyChart is a flexible Flash based solution that allows you to create interactive and great looking flash charts.



meebo bar

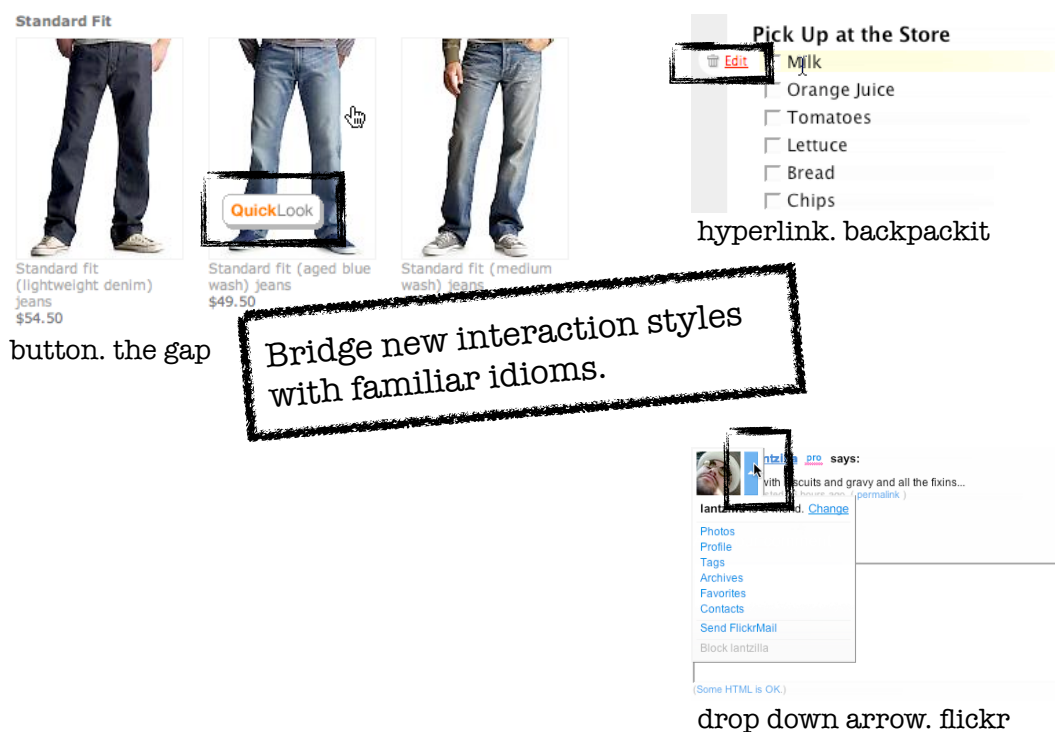
56

Drag & Drop Invitation



57

Invitations



58

Call to Action

Anti-Pattern
No Single
Call to Action

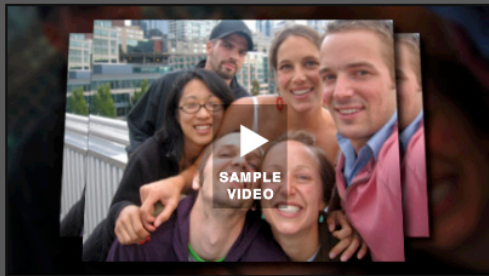
change your search or start over

go back to your search

Use a clear call to action.

Short Animoto Originals

CLOSE X



The original Animoto video, limited to 30 seconds. Turn your pictures into beautiful video productions. Add text to tell a story.

Animoto Shorts are free but limited to 30 seconds. Get unlimited full-length videos with an All-Access Pass! View our [pricing details](#).

Create Video

59



Show transitions.

60



61

Why?

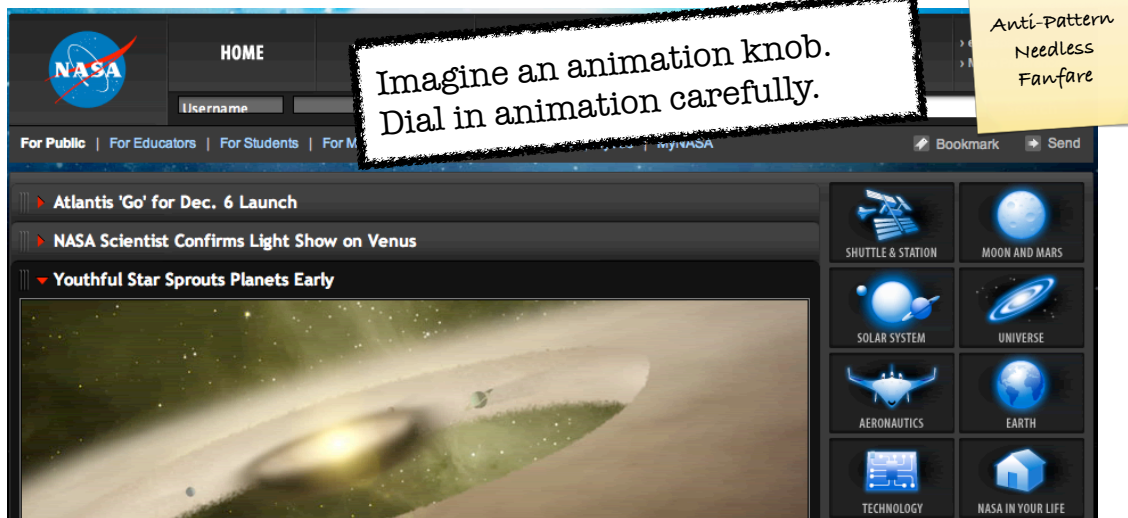
anti-pattern. needless fanfare. macintosh turbo tax

again in slow-motion...



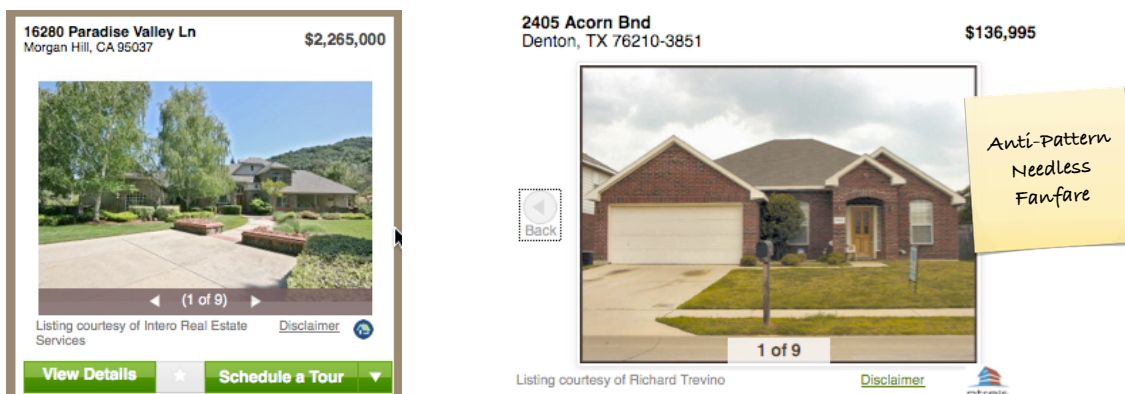
62

Imagine - No Animation



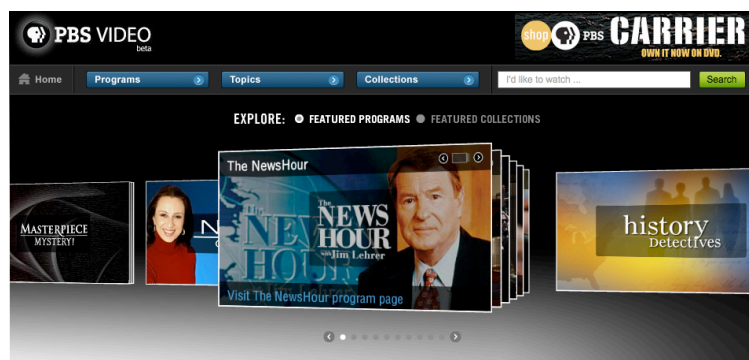
anti-pattern. needless fanfare. nasa.gov

63



anti-pattern. needless fanfare. roost.com

anti-pattern. needless fanfare. roost.com



anti-pattern. needless fanfare. pbs.org

64

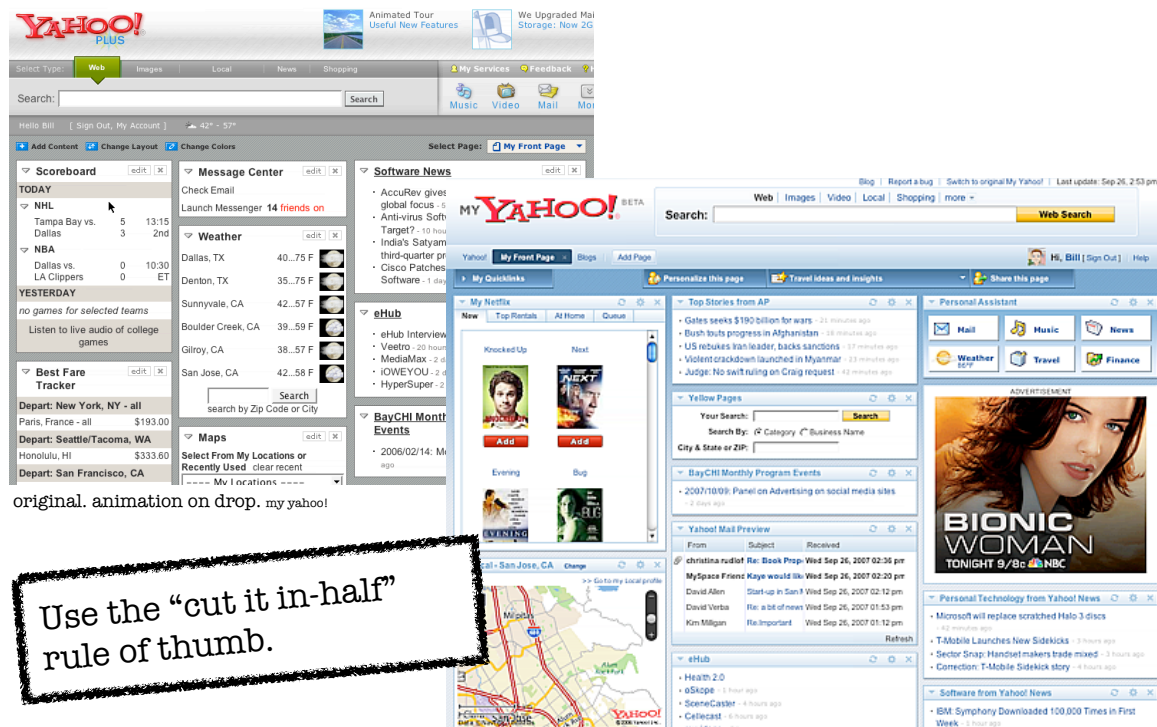
Animation Can Be Overdone



anti-pattern. animation gone wild. behr paint

Designing Visual Interfaces. Kevin Mullet & Darrell Sano

65



original. animation on drop. my yahoo!

current. no animation on drop. my yahoo!

66

Animation Can Be Good

Used car locator

[Back to Used cars homepage](#)

My search ☆ My favourites

Setup your search, enter your location and click 'search now'

1. Chosen models:

To ADD a model:

Simply click a model on the right.

Please note.

You can add more than one model to your search.

Once added:

Click the 'model image' for more options that allow you to select only specific model variations & trims.

OR

Click the 'remove' button to delete the model from your search.

2. Fine-tune your search:

3. Must haves:

4. Search type:

☒ Available stock

☐ Coming soon stock

5. Enter your postcode or location:

Search now

Model selection

 Lupo £2,990 to £8,990	 Fox £4,685 to £8,995	 Polo £3,995 to £14,995	 Golf £4,995 to £27,000	 Golf GTI £6,492 to £29,990
 Golf Plus £6,995 to £19,995	 New Beetle £5,980 to £22,490	 Bora £3,995 to £7,999	 Jetta £6,995 to £19,995	 Eos £12,250 to £28,990
 Scirocco £18,990 to £26,995	 Passat £4,295 to £37,000	 Passat CC £16,950 to £32,494	 Touran £6,995 to £23,490	 Sharan £8,450 to £23,995
 Tiguan £16,290 to £27,995	 Touareg £14,999 to £52,980	 Phaeton £12,999 to £39,990		

Views: [All](#) [Hatchbacks](#) [Saloons](#) [Estates](#) [Coupe/Cabrio](#) [Executives](#) [MPVs](#) [4x4s](#)

Animation must reinforce the interaction.

67

Animation Can Be Really Good



68

Moments Communicate

The collage consists of four distinct web interface elements, each with a callout box pointing to a specific feature:

- mint.com**: A "YOUR ALERTS" section with two alerts. A callout box labeled "Show state change." points to the date "JUL 3" on the second alert.
- Shoes, Belts & More**: A product listing for bags. A callout box labeled "Show relationships." points to the "bags" category link above the product images.
- the gap**: A "Batch Organize" interface for photo management. A callout box labeled "Focus attention." points to the "Batch" button.
- earlier version of my yahoo!**: A screenshot of an older Yahoo! homepage. A callout box labeled "Speed up time." points to a "Connecting..." progress indicator. Another callout box labeled "Slow down time." points to the "YAHOO! PLUS" logo.

69



Be reactive.

70

Late Night Comedies

Not Interested See All >

Based on your interest in
[National Lampoon's Pledge This!](#)
[The Stoned Age](#)
[Team America: World Police](#)

Set this genre

Late Night Comedies

☐ ☒ Sometimes watch

[Humboldt County](#)



Add

★★★★☆
 Not Interested

[Revenge of the Nerds: Panty
 Raid Edition](#)



Add

★★★★☆
 Not Interested

[The Onion Movie](#)



Add

★★★★☆
 Not Interested

[A Dirty Shame](#)



Add

★★★★☆
 Not Interested

experiment on home page

NETFLIX

Bill Scott | Your Account | Buy / Redeem Gift | Help

Browse DVDs Watch Instantly Your Queue Movies You'll Love

Movies, actors, directors, genres Search

Suggestions (1435) Rate Movies Taste Preferences Movies You've Rated (608)

Rate Movies you've seen to discover movies you'll love

Rating Movies in All Genres

RATED MOVIES 608

Miss Congeniality Add

Big Momma's House Add

Hitch Add

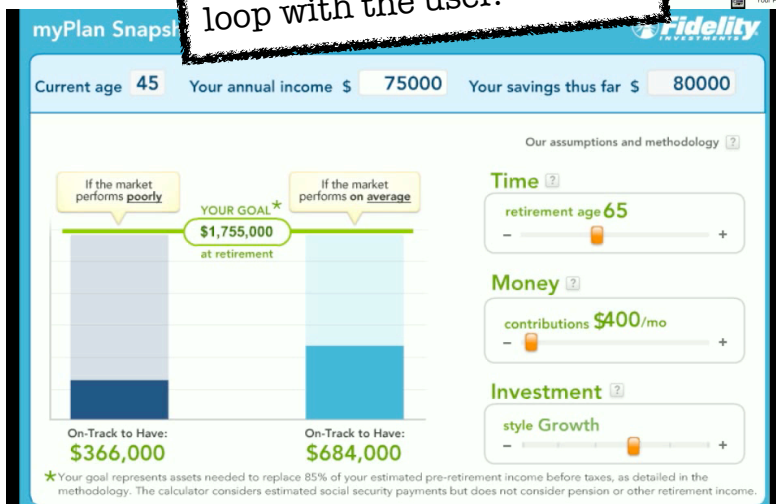
Taxi Driver Add

dedicated area

71

Live Feedback

Create a tight feedback loop with the user.



live feedback. fidelity

omio

Home Deals Phones Networks Forum Blog

Contract Phones

Compare all contract mobile phone deals in the UK instantly

Pay Monthly Term up to: 36 months | Play As You Go | SIM Free

Networks Brands Tariffs Features Styles Offers Colour

Monthly Cost Inclusive Texts Monthly Minutes

122,367 Deals Compared

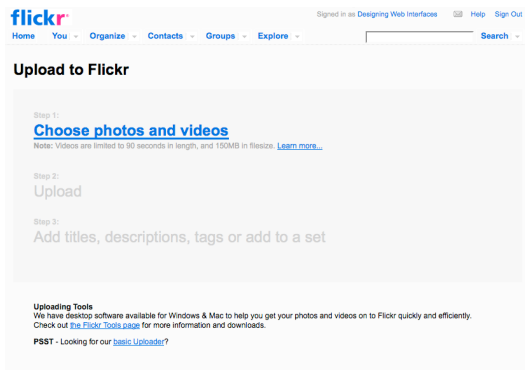
Networks	Brands	Tariffs	Features	Styles	Offers	Colour
Nokia N97 (Black)	Anytime	Crash network	Unlimited	FREE	24 Months	£29.36
Anytime	Crash network	Unlimited	FREE	18 Months	£35	£19.57

live feedback. omo

72

Live Feedback

Create a tight feedback loop with the user.



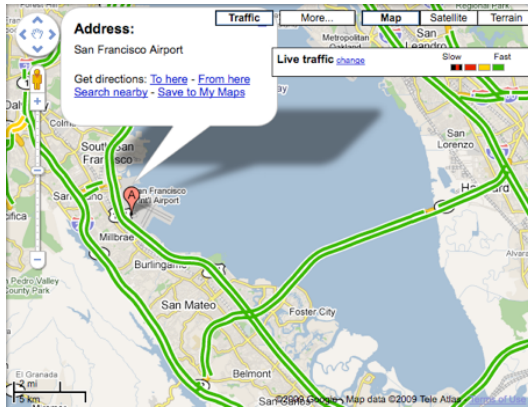
live feedback. flickr



american airlines from july 12 to july 16



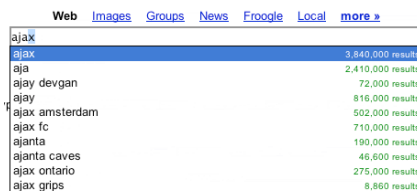
live feedback. wundrbar



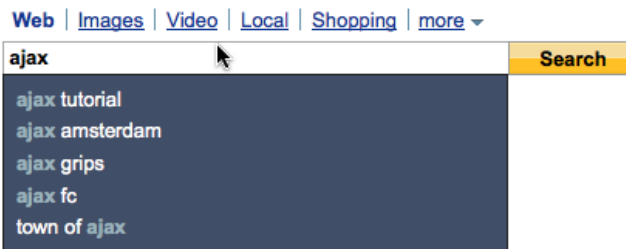
live feedback. google maps

73

Live Suggest

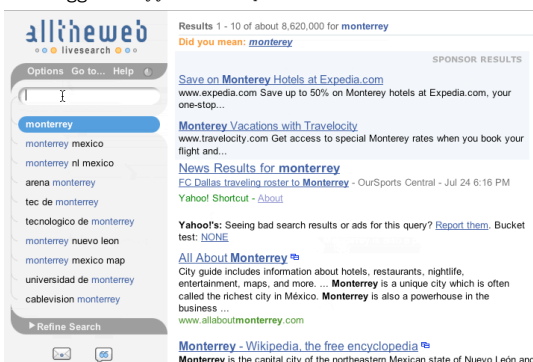


live suggest. google (early version)



live suggest. yahoo search

live suggest. early yahoo search experiment



Narrow toward a goal rather than distract from it.

74

Live Filtering

The image shows two screenshots from Bing. The top screenshot is the 'bing tweets' page, which features a 'trending topics' section with names like Carl Crawford, Chuck Norris, and Dash Snow. A callout box with a hand-drawn border points to the search bar and says 'Reduce search effort with live filtering.' The bottom screenshot is a Bing search result for 'Carl Crawford', showing a baseball player's statistics table and a list of related searches like 'Ryan Howard' and 'Jimmy Rollins'.

bing tweets

trending topics

Popular Now People Places Products

Carl Crawford Chuck Norris Dash Snow Dave Chappelle Joe Buck Lamar Odom Mariano Rivera Michael Jackson Obama Orrin Hatch Pujols Ryan Higa Ryan Howard Sonia Sotomayor Wendy Williams

search results

Web Images Videos Shopping News Maps More MSN Windows Live

Carl Crawford

ALL RESULTS 1-20 of 6,860,000 results · Advanced

Carl Crawford LF, #13 Tampa Bay Rays

	OPP	AB	R	H	HR	RBI	BB	K	SB
Jul 10	Oak, W6-0	4	0	1	0	1	1	0	0
Jul 11	Oak, L2-7	3	0	0	0	0	1	2	0
Jul 12	Oak, L3-7	1	0	0	0	0	0	1	0

Jul 17 · Rays at Royals · 8:10 PM ET

Season: GP 88 · AVG .309 · HR 8 · RBI 39 · Runs 58 · SB 44

Player Stats · FOX Sports on MSN · Statistics provided by STATS, Inc. © 2009

RELATED SEARCHES

Ryan Howard Jimmy Rollins

refining search. bing tweets

75

Live Previews

The image shows two screenshots. The left screenshot is the Volkswagen Beetle configurator, displaying a black Beetle with a color selection palette. A callout box with a hand-drawn border points to the car and says 'Use live previews.' The right screenshot is an Apple Search result for a movie, showing a 'Trailer' section with video quality options (480p, 720p, 1080p) and a 'live suggest. apple search' label at the bottom.

New Beetle

Starts at \$18,290*

Overview

Gallery

Photos

360°

Features

Highlights

Complete Specs

Price List

Warranty

Configure Maintenance

Build

Shopping Tools

Find A Dealer

Get A Quote

Schedule A Test Drive

Special Offers

Financial Options

Brochure

*seal disclaimer

Click and Drag the Car or Spin Now

Black exterior

interior

Copyright © 2009 20th Century Fox

Trailer

Standard

Small Medium Large

for your iPod ▶

HD

480p 720p 1080p

34 MB 101 MB 164 MB

live suggest. apple search

76

Live Forms

Find a domain name:

www.

(ex. widgetdesigns.com)

live forms. yahoo! small business

Prevent errors beforehand
with live forms.

Required information for Google account


Your current email address:
e.g. myname@example.com. This will be your username and sign-in.

Choose a password:
Minimum of 6 characters in length. [Password strength:](#) Too short

live forms. google account creation

77

Auto Complete

 Search with us, book with them.™

Flights | [Hotels](#) | [Cars](#) | [Deals](#) | [Best](#)

☒ Round-trip ☐ One-way ☐ Multi-city

From
☒ Show Nearby Airports

Leave Time

To
☒ Show Nearby Airports

Return Time

Travelers

Cabin

☐ Prefer Nonstop

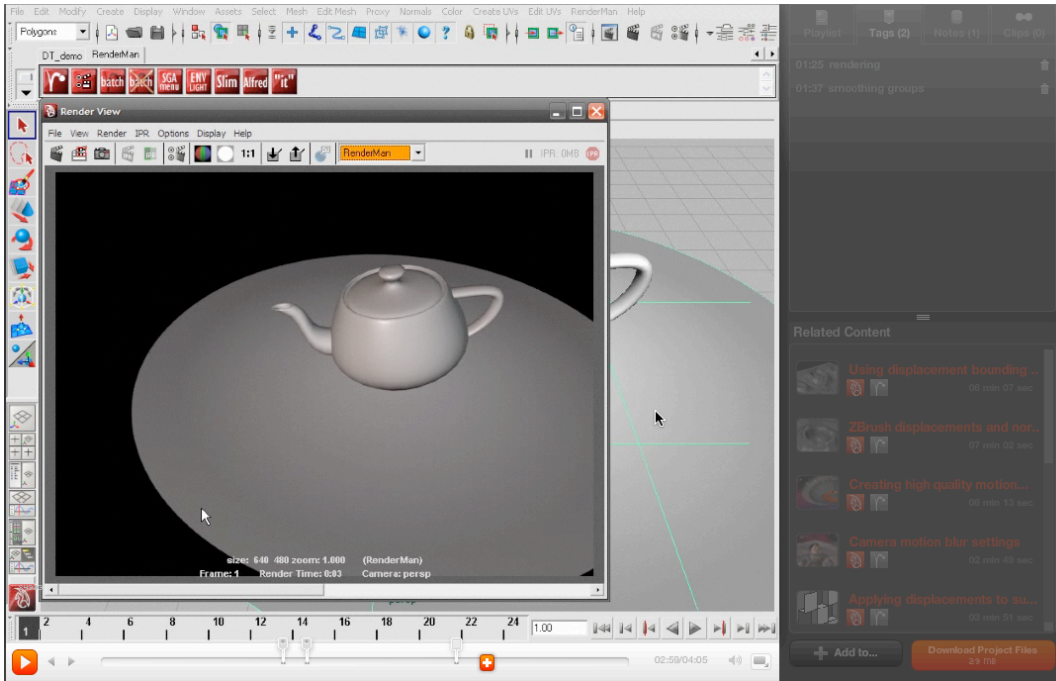
for [hundreds of airlines.](#)

Reduce user effort by
autocompleting correctly.

auto complete. kayak

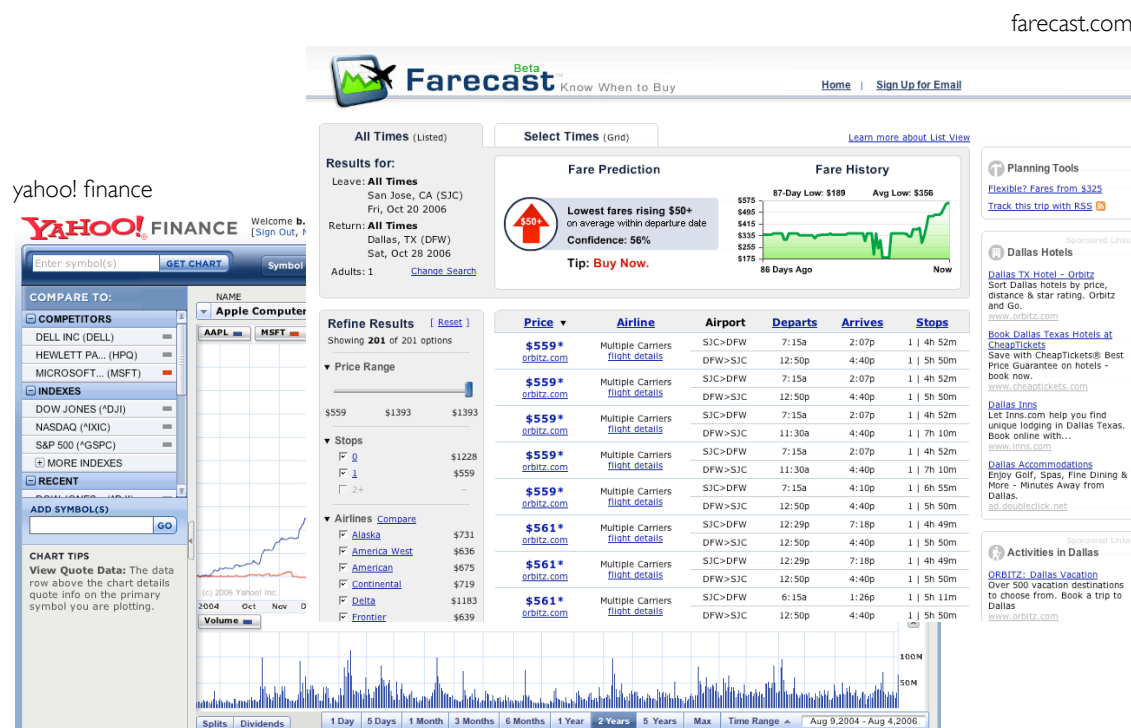
78

React in Mutiple Dimensions



79

React in Mutiple Dimensions



80

Input where you output.

Maintain flow.

Require a light footprint.

Invite interaction.

Show transitions.

Be reactive.

81

Putting it All Together



Delete Messages. iPad Mail

82

Resources

“About Face 3: The Essentials of Interaction Design”

Alan Cooper, Robert Reimann, David Cronin 2007

“Designing Web Interfaces: Principles and Patterns for Rich Interactions”

Bill Scott and Theresa Neil, O'Reilly Press 2009

“Designing Interfaces: Patterns for Effective Interface Design”

Jenifer Tidwell, O'Reilly Press 2006

“The Design of Everyday Things”

Donald Norman 2002

“The Designers Guide to Web Applications, Part 1”

Hagan Rivers, Two Rivers Consulting

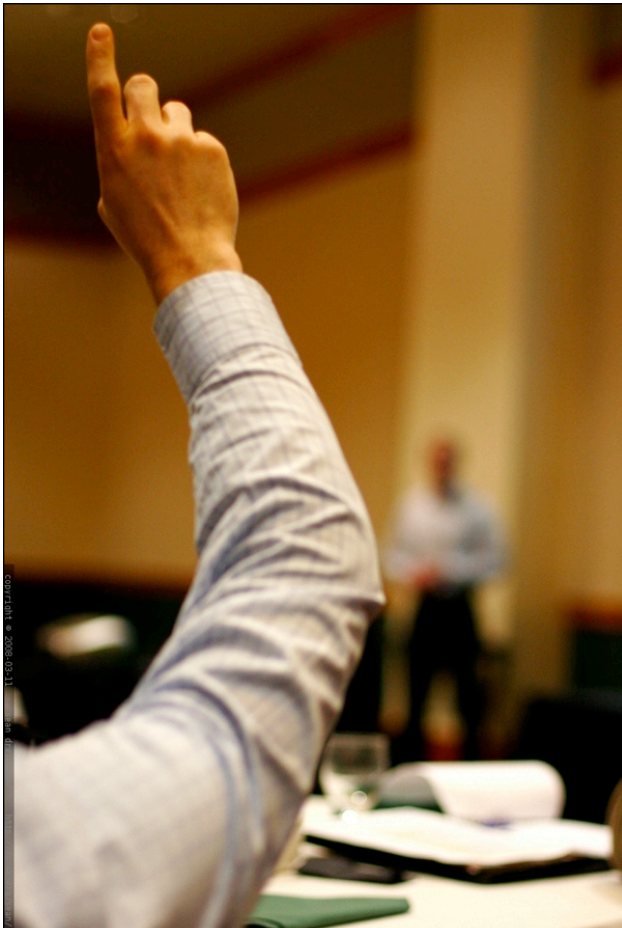
“Web Form Design: Filling in the Blank”

Luke Wroblewski, Rosenfeld Media 2008

Designing For Flex by Rob Adams

http://www.adobe.com/devnet/flex/articles/fig_pt1.html

83



Flickr Credits

<http://tr.im/t6Ew>

Presentation

[billwscott.com/share/
presentations/2010/
wamsd](http://billwscott.com/share/presentations/2010/wamsd)

Blog

looksgoodworkswell.com

Web username

[billwscott](http://billwscott.com)



Book

designingwebinterfaces.com
O'Reilly

84