

Section 2

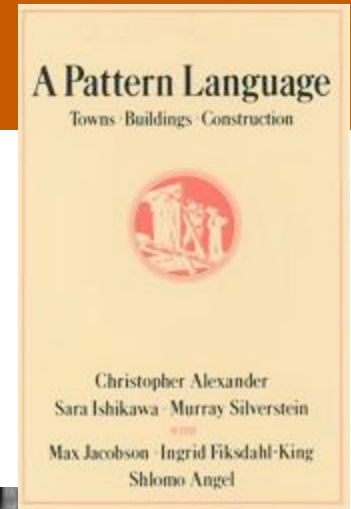
Interaction Design

Patterns & Principles for Rich Interaction Design

Dave Malouf & Bill W. Scott

Origin of Patterns

- A Pattern Language, Alexander, 1977
Dissatisfied with sterile, impersonal design
- Defined it as
Solution to a problem in context
- Captured
Situation, competing constraints, canonical solution
- Examples
Couples Realm, House for a Couple, Sitting Circle, Marriage Bed



Spread of Patterns

- Applied to software design, Gang of four, 1995
- 1996, Alexander raises the challenge higher
- User experience patterns
 - 1997, Tidwell's *Common Ground*
 - Welie's pattern site
 - *Design of Sites* book
 - 2005, Tidwell, *Designing Interfaces*



Power of Patterns

surfacing a vocabulary.

Examples of Patterns: Yahoo! Patterns

The image displays three overlapping screenshots of the Yahoo! Developer Network Design Pattern Library, illustrating various design patterns and their applications.

Top Left Screenshot: Design Pattern Library

- Header:** Developer Network Home | Help | Site Search | Search
- Navigation:** Design Pattern Library
- USER NEEDS TO:**
 - NAVIGATE:** Breadcrumbs, Faceted Navigation, Fly-out Menus, Horizontal Bar, Hub and Spoke, Left Navigation, Tabs, Module Tabs, Navigation Tabs
 - EXPLORE DATA:** Auto Complete, Calendar Picker, Pagination, Item Pagination, Search Pagination
 - ORGANIZE DATA:**
 - GIVE FEEDBACK:** Ratings & Reviews, Architecture Review, Rating an Object, Writing a Review
 - PERFORM ACTION:**
 - CUSTOMIZE:** Drag and Drop, Drag and Drop Modules, Drag and Drop Objects, In Page Editing, Sliders
- APPLICATION NEEDS TO:**
 - CALL ATTENTION:**
 - IMPROVE READABILITY:** Ratings & Reviews, Review Architecture
 - GROUP RELATED ITEMS:**
 - ORGANIZE SCREEN/PAGE:**

Top Right Screenshot: Ratings and Reviews

- Header:** Developer Network Home | Help | Site Search | Search
- Navigation:** Design Pattern Library
- USER NEEDS TO:**
 - NAVIGATE:** Breadcrumbs, Faceted Navigation, Fly-out Menus, Horizontal Bar, Hub and Spoke, Left Navigation, Tabs, Module Tabs, Navigation Tabs
 - EXPLORE DATA:** Auto Complete, Calendar Picker, Pagination, Item Pagination, Search Pagination
 - ORGANIZE DATA:**
 - GIVE FEEDBACK:**

Bottom Screenshot: Rating An Object

- Header:** Developer Network Home | Help | Site Search | Search
- Navigation:** Design Pattern Library
- Problem Summary:** A user wants to quickly leave their opinion on an object, with minimal interruption to any other task flow they are involved in.
- EXAMPLE:**
 - Restaurant:** Alma St, Menlo Park, CA 94025. Cross Street: Between Alma Ln and Ravenswood Ave.
 - Rating:** Average Rating (7) stars, Read 7 reviews, Write a Review.
- Use When:**
 - A user wants to leave an opinion quickly.
 - Use in combination with reviews for richer experience.
 - Use to quickly tap into the existing "community" of a product.
 - Ratings are collected together to present an average rating of an object from the collective user set.
- Solution:**
 - Show clickable items (most often used are stars) that light up on rollover to infer clickability.
- QUICK JUMP:** Solution, Rationale, Accessibility
- RELATED PATTERNS:** Ratings and Reviews, Architecture of a Review, Writing a Review
- AS USED ON YAHOO!:** Yahoo! Local, Yahoo! Shopping, Yahoo! Custom Autos, Yahoo! Movies
- BLOG:** Blog Article

Examples of Patterns: Yahoo! Patterns

Breadcrumbs. Module Tabs. Navigation Tabs. Auto Complete. Pagination. Item Pagination. Search Pagination. Ratings and Reviews. Architecture of a Review. Rating an Object. Writing a Review. Drag and Drop. Drag and Drop Modules. Transition. Dim. Brighten. Cross Fade. Contract. Expand. Fade In. Fade Out. Move. Self-Healing. Slide. Highlight. Invitation. Cursor Invitation. Drop Invitation. Tool Tip Invitation. Hover Invitation.

Examples of Patterns: Rich Patterns

Drag and Drop. Drag and Drop Modules. In Page Editing. In Page Custom Editing. Direct State Editing. Grid Cell Editing. Inline Custom Editing. Inline Tag Editing. Popup Custom Editing. Slide-out Custom Editing. Inline Text Editing. Persistent Portals. Inline Reordering. Indication. Busy Indication. Cursor Busy. In Context Busy. In Context Progress. Inline Status. Auto Complete. Balloon Error Tip. Deferred Content Loading. Dynamic Goal. Narrowing Choices. Refining Search. Live Search. Dynamic Filter. Invitation. Cursor Invitation. Drop Invitation. Tool Tip Invitation. Hover Invitation. Detail Zoom. Opacity Focus. Configurable Module - Faceplate. Configurable Module - Flip It. Configurable Module - Inline Configure. Configurable Module - Slide Out Drawer. Slide Out. Flip. Opacity Fade. Endless Scrolling. Expandable Paging Boundary. Fresh Content. Hover Detail. In Place Drill Down. Inline Assistant. Inline Validation. Validate Then Suggest. On Demand Refresh. Periodic Refresh. Resizable Modules. Scrolling Modules. Auto Save. In Context Tools. Remembered Collection. Remembered Preferences. Auto Form Fill. Rating an Object. Transition. Brighten Transition. Cross Fade Transition. Dim Transition. Expand Transition. Fade In Transition. Fade Out Transition. Flip Transition. Move Transition. Self-Healing Transition. Collapse Transition. Slide Transition. Rich Internet Object. Available. Selected. Identifiable Object.

Exercise

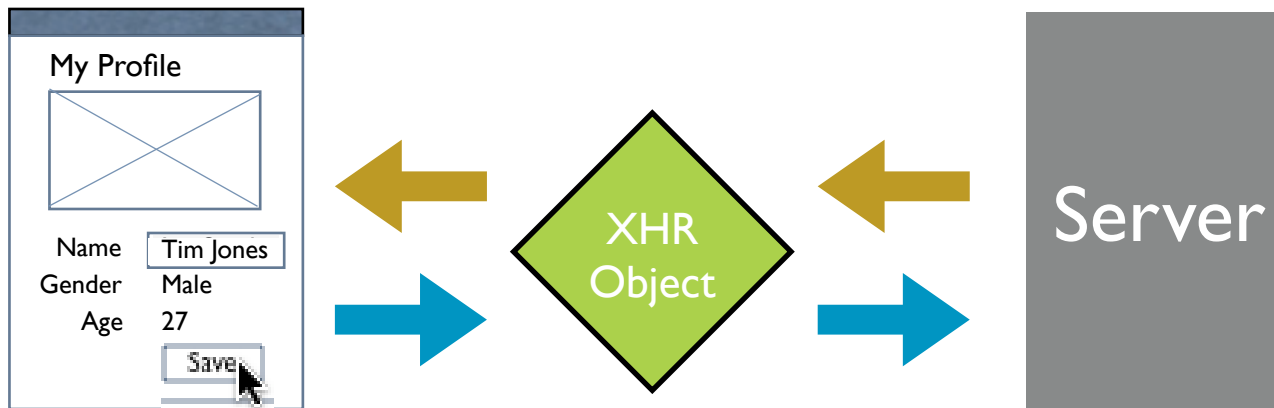
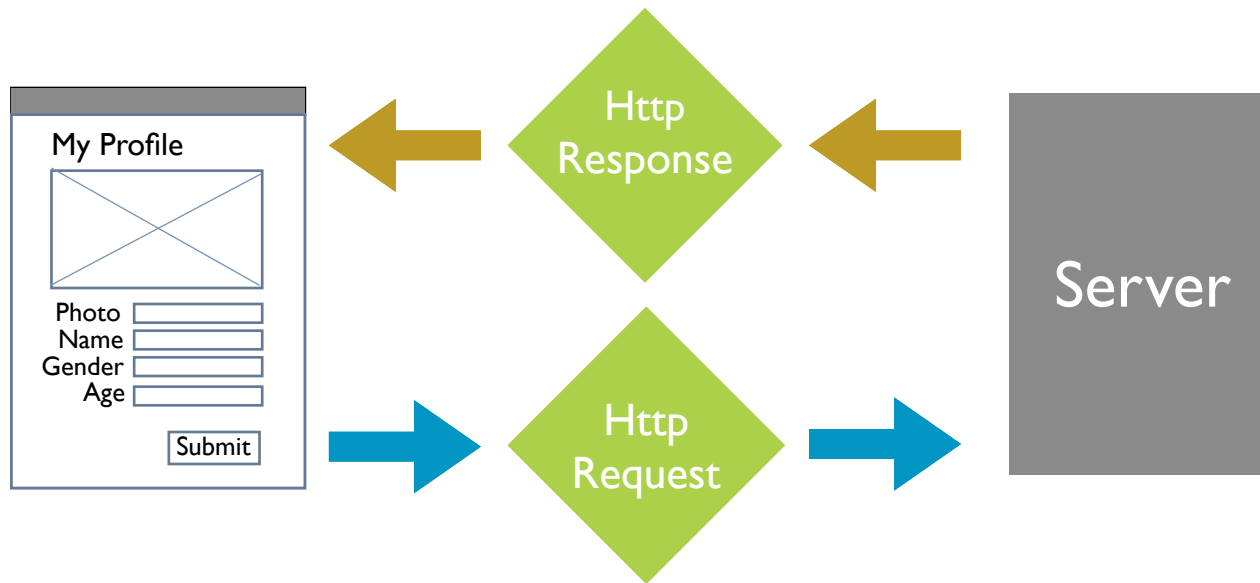
Define patterns around us

Define patterns from sites

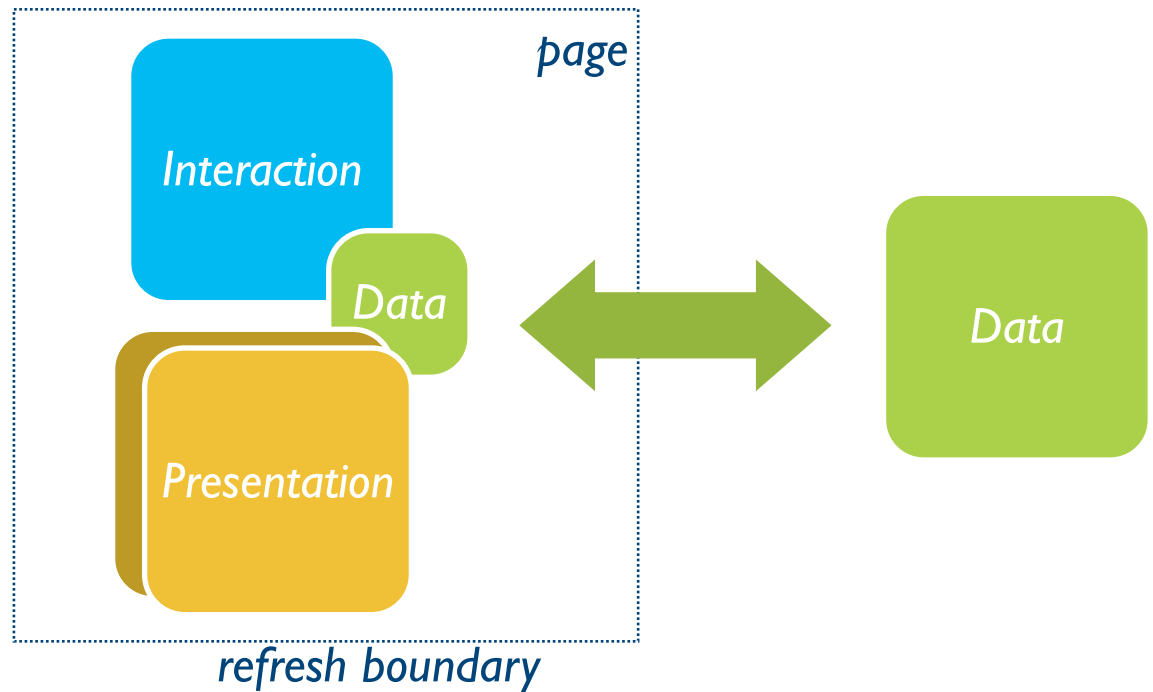
References

- Jenifer Tidwell (also a book)
<http://designinginterfaces.com/>
- Martijn van Welie
<http://www.welie.com/patterns/>
- Sari A. Laakso
<http://www.cs.helsinki.fi/u/salaakso/patterns/>
- Michael Mahemoff
<http://www.ajaxpatterns.org/>
- Web Patterns
<http://webpatterns.org/>

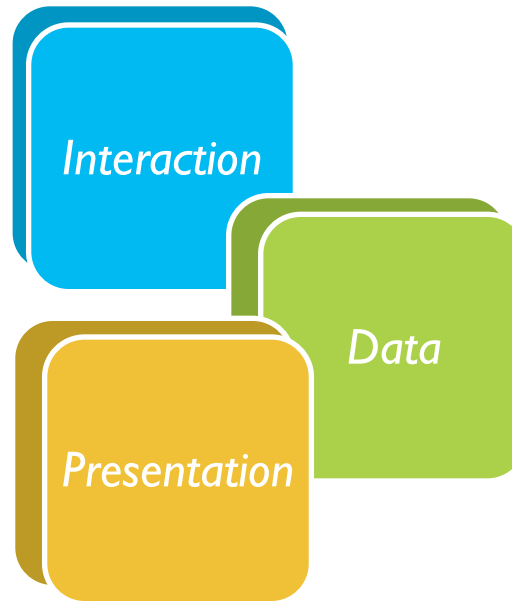
classic model. rich model.



interaction. presentation. data.



data near. interaction rich.



design principles

Principles for Rich Design

1. Keep it direct
2. Leave a light footprint
3. Cross borders reluctantly
4. Provide live feedback
5. Offer an invitation
6. Show transitions
7. Think in objects

submit hyperlink

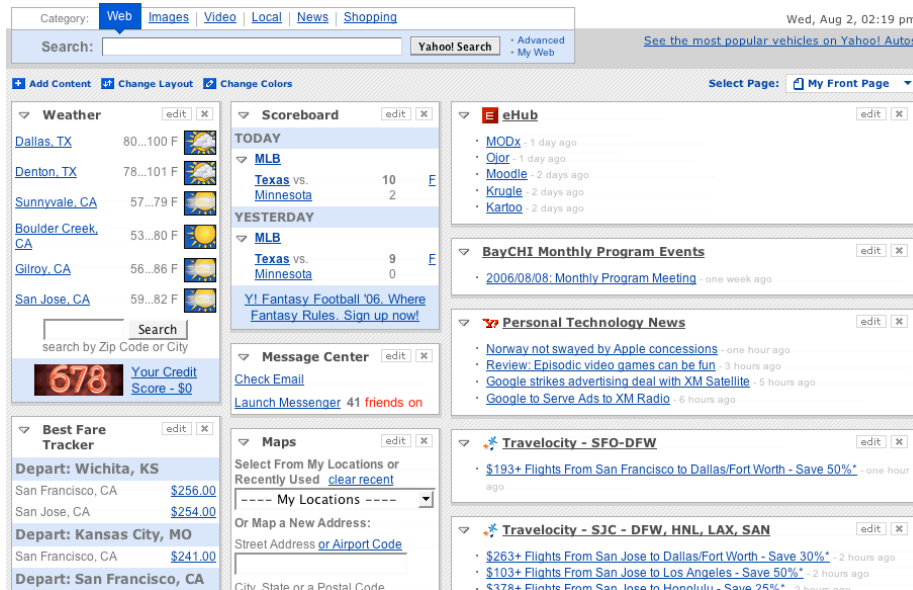


mouseout hover keypress keydown mousedown
drop filter choices mouseup drag click select focus
blur resize move timeout

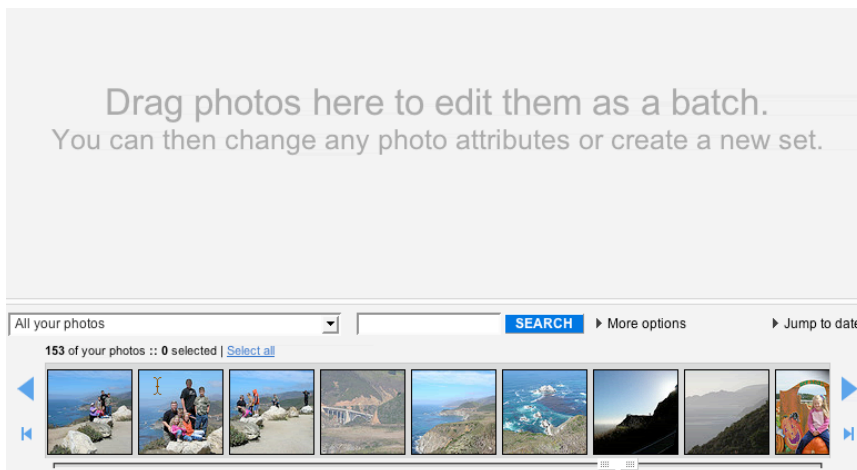


Keep it Direct

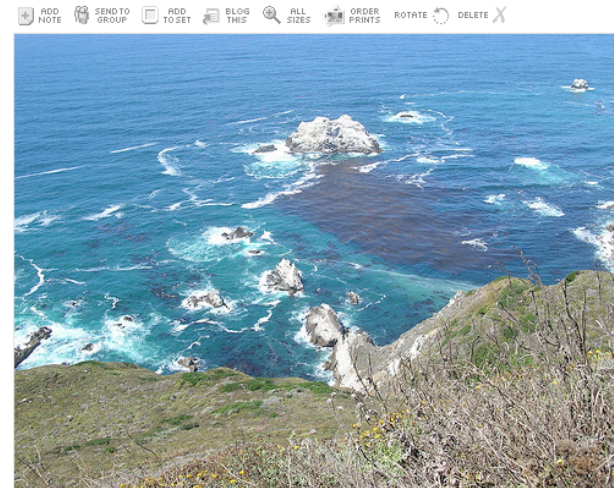
Principle. Keep it Direct



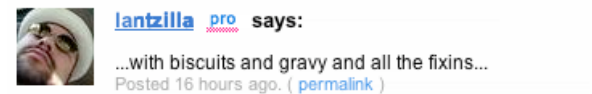
pattern. drag and drop.



Rocky Waters



pattern. inline editing.



Add your comment

A large, empty text box for adding a comment. It has a simple border and a cursor at the top, indicating it's ready for input.

(Some HTML is OK.)

pattern. in-context tools.

Prefer interaction within the page

What about discoverability?



State park near our home in San Jose

Click to edit

5 photos | [Add a comment?](#)

Photos are from
22 Oct 05.

Prefer interaction within the page

What about discoverability?

Use direct editing on page content

What about save/cancel?

Avoid page jitter

Reduce the feeling of modes

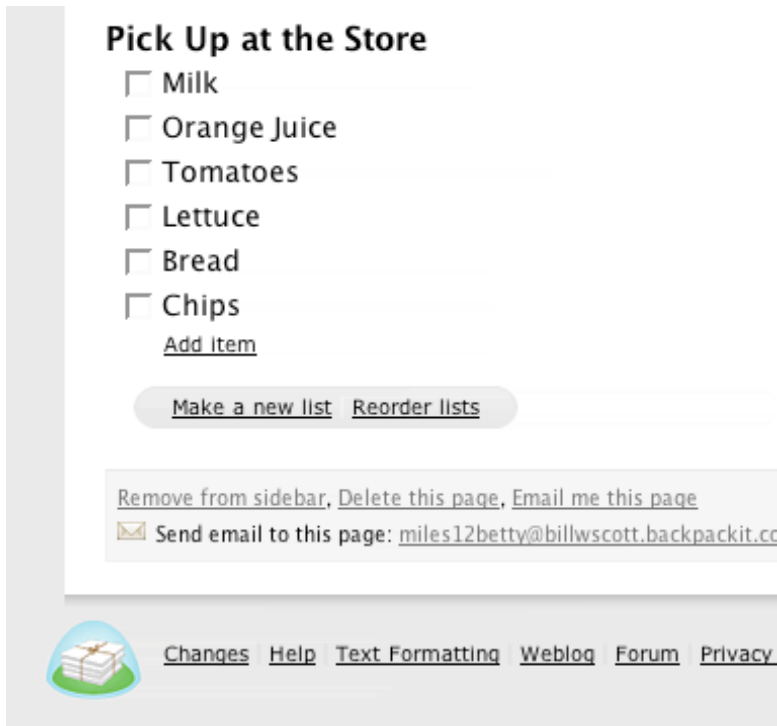


State park near our new home in San Jose
(next to Milpitas)

SAVE OR **CANCEL**

Prefer interaction within the page

What about discoverability?

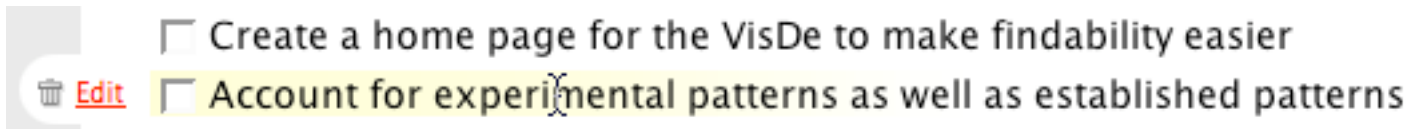


Use direct editing on page content

What about save/cancel?

Avoid page jitter

Reduce the feeling of modes



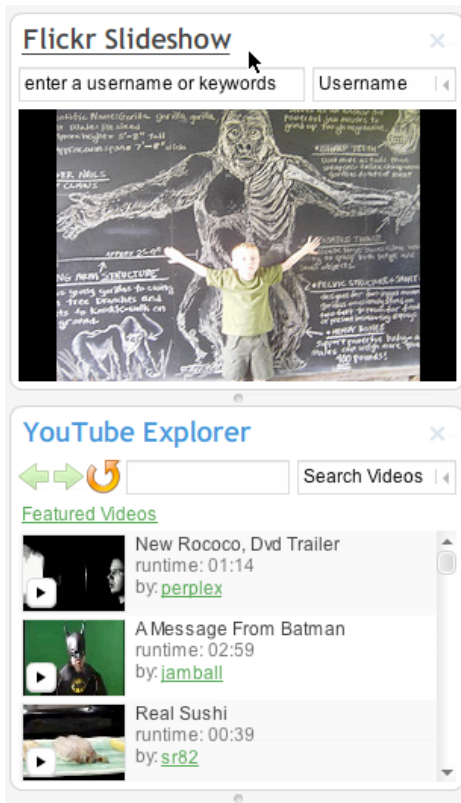
Provide in-context tools

Only good for single operations

Can actually slow you down

Prefer interaction within the page

What about discoverability?



Provide in-context tools

Only good for single operations

Can actually slow you down

Pick Up at the Store

- ☐ **DRAG** Chips
- ☐ **DRAG** Milk
- ☐ **DRAG** Bread
- ☐ **DRAG** Orange Juice2
- ☐ **DRAG** Tomatoes
- ☐ **DRAG** Lettuce

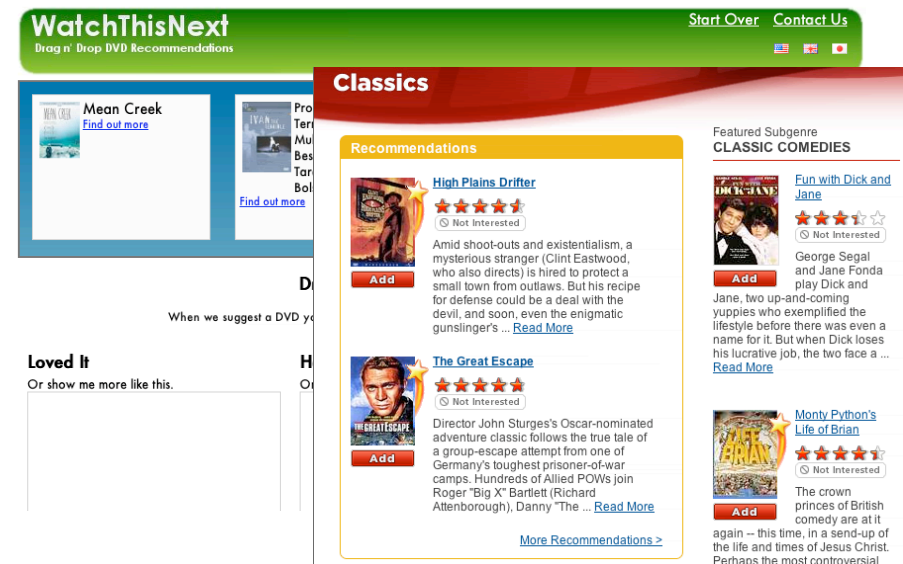
- What is spam?
- Can I transfer my message credits?
- How do I delete my HandyPay account?
- What if I didn't receive my full message package?
- I need to contact customer care regarding the Compose Text Message service.

Use direct editing on page content

What about save/cancel?

Avoid page jitter

Reduce the feeling of modes









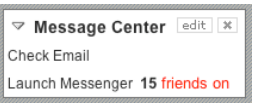
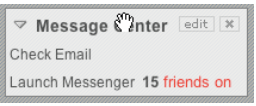
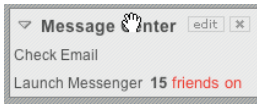
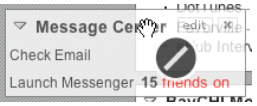
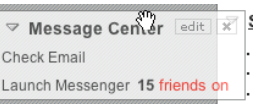
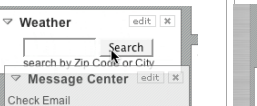
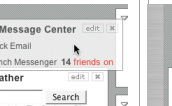
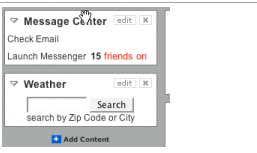
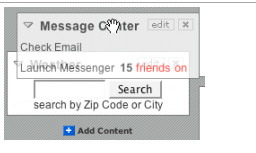
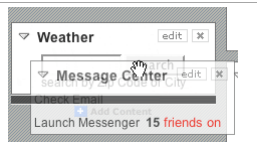
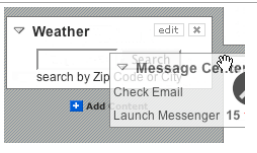
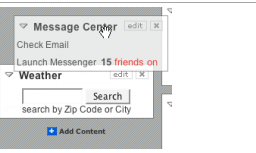
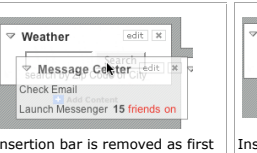
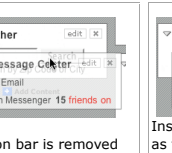
Use drag and drop where appropriate

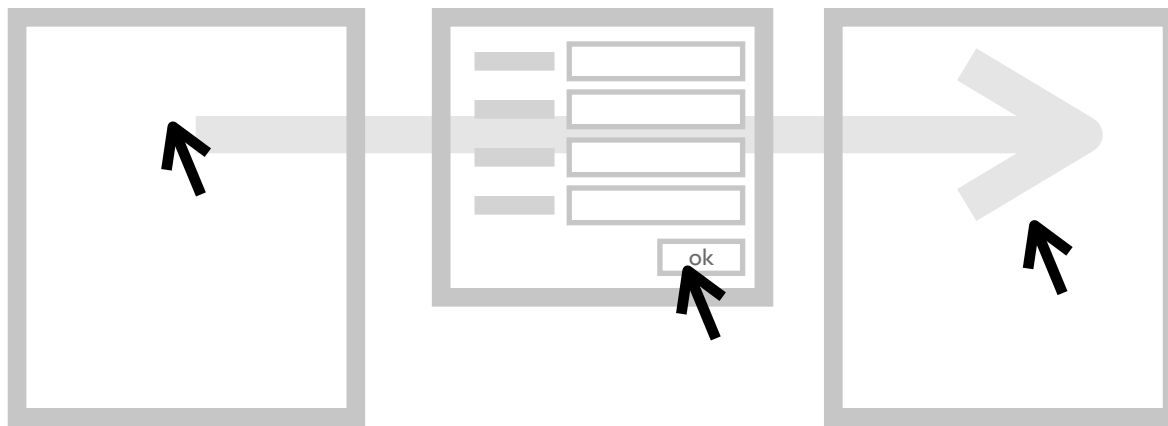
Not for simply setting an attribute

Good for layout changes or containment

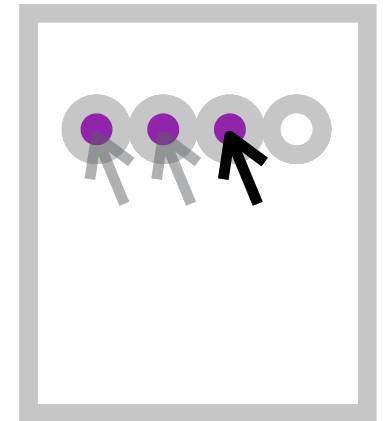
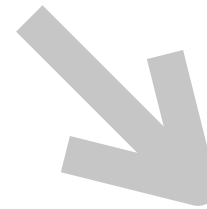
Needs transitions

Take care of the interesting moments

Drag and Drop Modules - Interesting Moments Grid								
Currently on beta.my.yahoo.com			ID: Bill Scott & Eric Miraglia			Date: Nov-05		
	Mouse Hover	Mouse Down	Drag Initiated	Drag Over Valid Target	Drag Over Invalid Target	Drag Over Parent Container	Drop Accepted	Drop Rejected
Cursor							Normal Cursor	Normal Cursor
Tool Tip	CSS Move	CSS Move	CSS Move	CSS Move	CSS Move	CSS Move	Normal	Normal
Drag Object								
	Full Opacity	Reduced Opacity	Reduced Opacity	Reduced Opacity & Invalid Badge	Reduced Opacity	Modules animates into the area just below insertion bar	Modules animates back to the home area	
Drop Target								
	No insertion bar, just a gap	No insertion bar, just a gap	Insertion bar showing where it will drop	No insertion bar, just a gap	No insertion bar, just a gap & original hole frame of animation	Insertion bar is removed as first frame of animation	Insertion bar is removed as first frame of animation	



heavy click-weight



light-weight
actions



Leave a light footprint

Principle. Leave a Light Footprint

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**
#346927 prices may vary

~~\$29.50~~ **\$9.99**

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

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

pattern. remembered collection.

RECOMMEND THIS STORY


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

pattern. rating an object.

Classics

Featured Subgenre
CLASSIC COMEDIES


Recommendations



High Plains Drifter
★★★★★
[Not Interested](#)

Add

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
★★★★★
[Not Interested](#)

Add

Director John Sturges's 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" Bartlett (Richard Attenborough), Danny "The ... [Read More](#)


[More Recommendations >](#)



Fun with Dick and Jane
★★★★★
[Not Interested](#)

Add

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
★★★★★
[Not Interested](#)

Add

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

282 diggs [digg it](#)

[Fixing the Mighty Mouse](#)

 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](#)


pattern. in page action.

Watch your click weight

Keep actions immediate and light
Count “clicks”

Classics

Recommendations




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[More Recommendations >](#)

Featured Subgenre
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 [60 comments](#) | [blog this](#) | [email this](#) | category: [apple](#) |

Watch your click weight

Keep actions immediate and light
Count “clicks”

Design for engaging moments

Use invitations

Keep it fun, exciting and light

Treat it like an impulse aisle

The Critics: B- 14 reviews	My Grade: Rate this Movie! Select grade to the right write a review	<div style="background-color: #f4a460; padding: 2px; text-align: center;">A</div> <div style="background-color: #fde725; padding: 2px; text-align: center;">B</div> <div style="background-color: #c7e9c0; padding: 2px; text-align: center;">C</div> <div style="background-color: #a1d99b; padding: 2px; text-align: center;">D</div> <div style="background-color: #74c476; padding: 2px; text-align: center;">F</div>
--	---	---



Watch your click weight

Keep actions immediate and light
Count “clicks”

Design for engaging moments

Use invitations
Keep it fun, exciting and light
Treat it like an impulse aisle

RECOMMEND THIS STORY

Recommend It:



Average (63 votes)

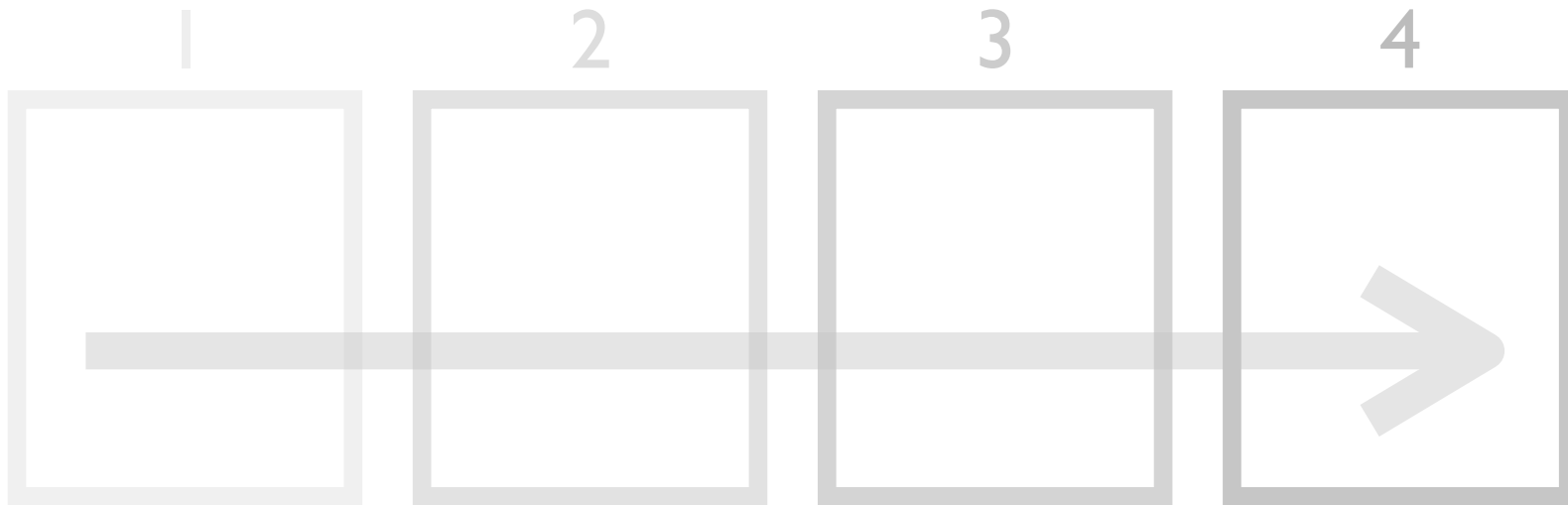


Use lightweight events

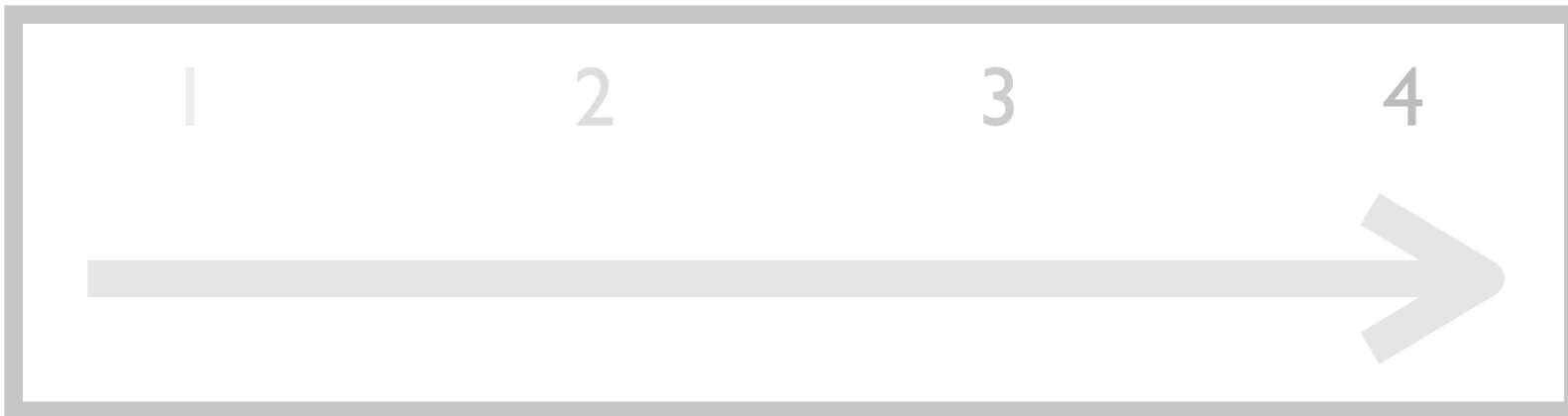
Hover

Blur, focus

Click. Avoid double-click



classic flow across pages

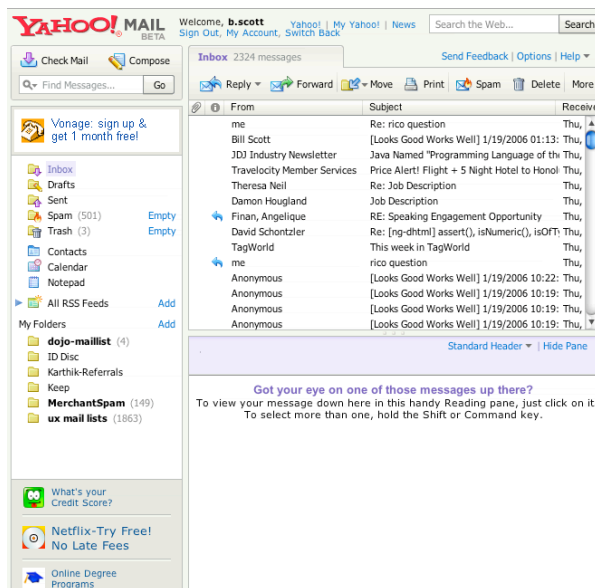


rich flow within page

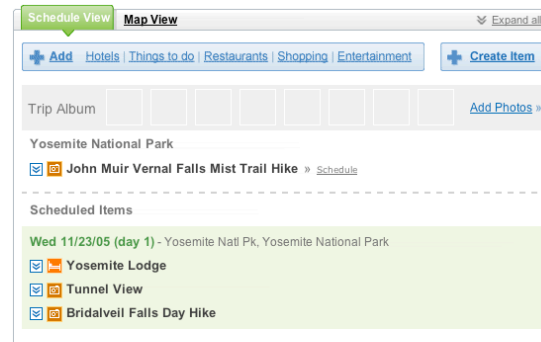


Cross borders reluctantly

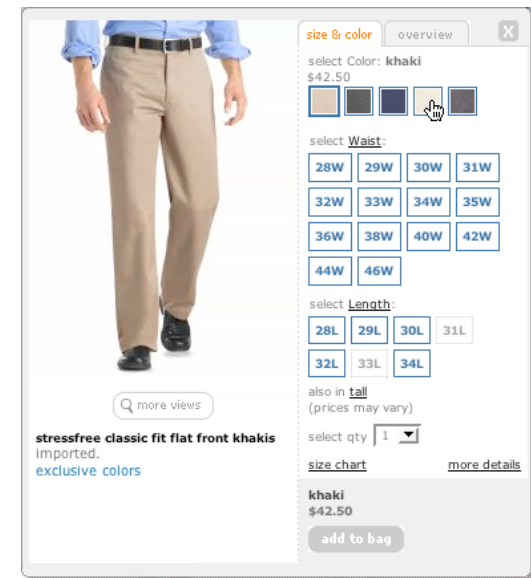
Principle. Cross Borders Reluctantly



pattern. endless scrolling.



pattern. in-context expand.

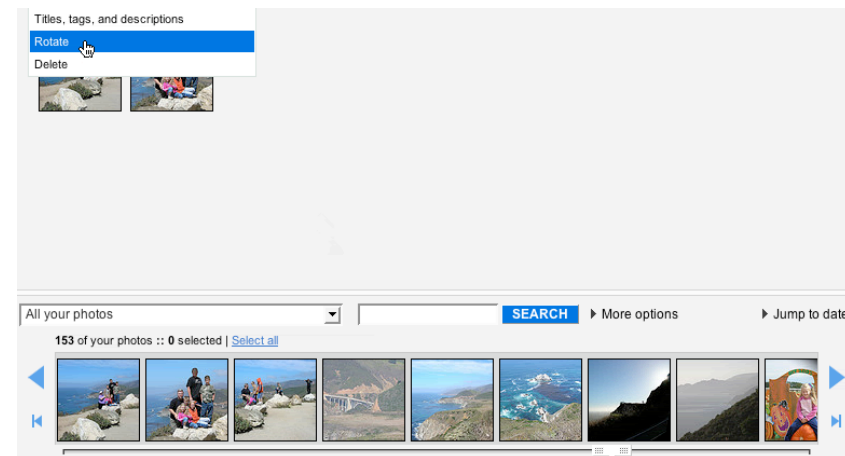


pattern. inline assistant.

Top Stories



pattern. hover details.

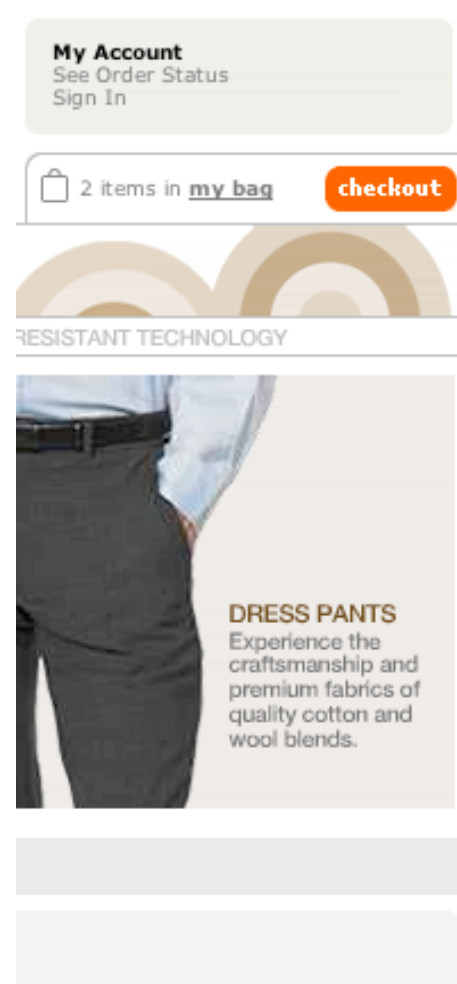
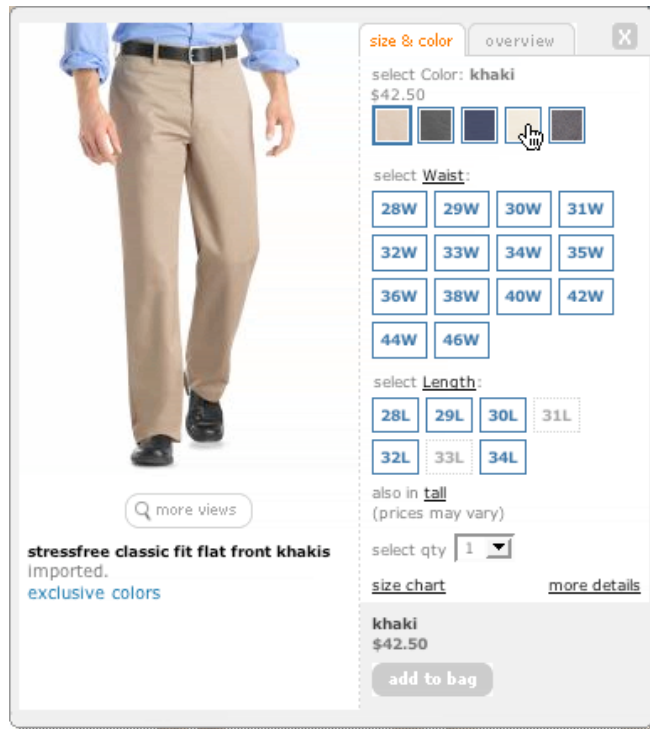


pattern. lightweight popup + lightbox

Rethink process flows

Its the user's model, not the page model

Every page jump is a mental speed bump





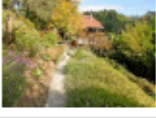


Rethink process flows

Its the user's model, not the page model
Every page jump is a mental speed bump

Rethink paging

Its the user's model, not the paging model
Use scrolling for "owned" data
Watch out for dual scroll bar issue

Photo Click for info	Price	Bd/Ba Sq Ft	Address and Area Presented By	MLS # (Click for info)	More Photos (Click for info)	Virtual Tours (Click for info)
	\$1,750,000 Single Res	6+, 4+ 3700	14080 BEAR CREEK RD Boulder Creek, CA 95006 (San Lore Valley) Schwarzbach Associates			
	\$1,995,000 Single Res	6+, 4+ 5675	17617 MOUNTAIN CHARLIE RD LOS GATOS, CA 95033 (Unincorporated Los Gatos Mtns) Almaden Oaks Realtors			
	\$2,286,000 Single Res	5, 4+ 4800	20930 PANORAMA DR Los Gatos, CA 95033 (Los Gatos Mtns) Alain Pinel Realtors			
	\$2,750,000 Single Res	5, 4+ 5000	155 LARITA DR Ben Lomond, CA 95005 (San Lore Valley) Network Alliance Real Estate			
	\$2,777,000 Single Res	5, 4+ 5819	777 HAPPY VALLEY RD Scotts Valley, CA 95065 (Scotts Valley) Linda Burroughs Real Estate			

RICO AJAX SEARCH


LiveGrid Demonstration

Powered by Yahoo! Search


Select Search Category: Web **Images** Videos

Search Images:


Search Results Results 1 - 5 of about 1580284 for flowers




flowers 025
flowers021.jpg 110k 29Feb2004 flowers022.jpg 783k 29Feb2004 flowers023.jpg 186k
http://wp.li.ru/flowers
1024x768 - jpeg fmt - 0.3MB




flowers 063
flowers059.jpg 122k 29Feb2004 flowers060.jpg 134k 29Feb2004 flowers061.jpg 120k
http://wp.li.ru/flowers
1024x768 - jpeg fmt - 0.1MB



flowers 045
flowers041.jpg 277k 29Feb2004 flowers042.jpg 125k 29Feb2004 flowers043.jpg 744k
http://wp.li.ru/flowers
1024x768 - jpeg fmt - 0.1MB



flowers 076
flowers072.jpg 820k 29Feb2004 flowers073.jpg 160k 29Feb2004 flowers074.jpg 120k
http://wp.li.ru/flowers
1024x768 - jpeg fmt - 0.1MB



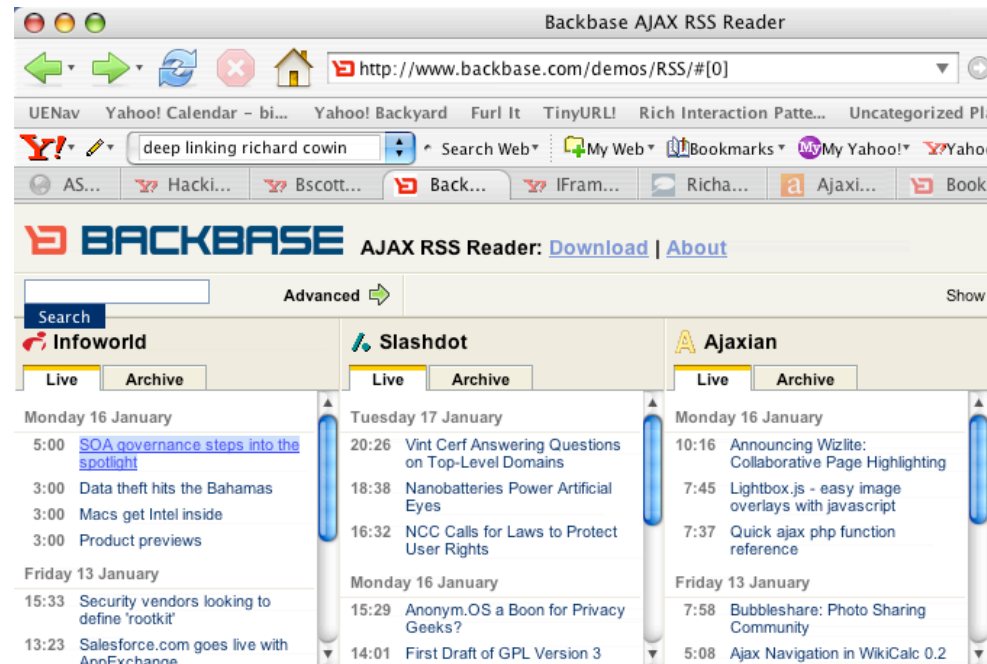
flowers 019
flowers015.jpg 781k 29Feb2004 flowers016.jpg 455k 29Feb2004 flowers017.jpg 143k
http://wp.li.ru/flowers
1024x768 - jpeg fmt - 0.3MB

New Search << Prev

Rethink process flows

Its the user's model, not the page model

Every page jump is a mental speed bump



Plan for linking, crawling and back button

Not everything is a single page application

What will the user think the back button does?

Rethink paging

Its the user's model, not the paging model

Use scrolling for "owned" data

Watch out for dual scroll bar issue

Use overlays

For momentary interruption

Replace page transition

When editing an individual, more complex item

Be symmetrical

Not disturb the page

- **Starter Web Page**

Publish basic information on a placeholder [web page](#) — until you're ready to upgrade to a full web site.

[View a sample.](#)

- **Domain Locking**

Safeguard your domain from hijacking and unauthorized transfers with [domain locking](#). Yahoo! Domains secures your domain for you — and only you.

- **Domain Forwarding**

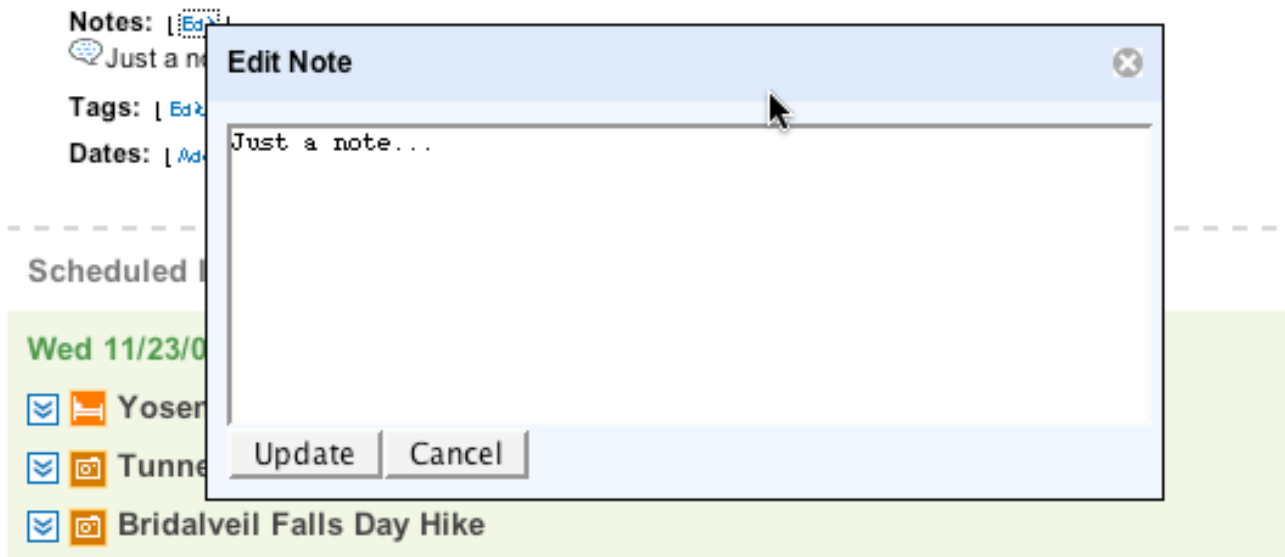
Point your new domain name to a web site you already have with [domain forwarding](#). This is a useful feature if you own multiple domain names.

- **Complete Domain (DNS) Control**

Advanced users: You can easily edit your name servers and [MX](#), [A](#), and [CNAME](#) records for complete control over your domain.

- **Email Forwarding**

Unlimited [forwarding](#) of messages sent to your new domain name into your free Yahoo! email account.



Use overlays

For momentary interruption

Replace page transition

When editing an individual, more complex item

Be symmetrical

Not disturb the page

Wired News: Top Stories [edit](#)

[Christians Code Heavenly Games](#)

[Cloning the Best in Show](#)

[Brain Workouts May Tone Memory](#)

Movies [edit](#)

[Showtimes for 76208 »](#)

Must Love Doos 1hr 30min - Rated PG-13

Featured

Entertainment

Sports

Money



Animal cams gone wild

Webcams that view pandas in action are perpetually popular, while live eagle cams are taking flight. [» More](#)

[Panda pics](#) [Webcams](#)

• More Yahoo! Buzz Log



Celebrity spirits haunt Hollywood hot spots



San Jose Sharks fans should be booed



The wild world of animal webcams



Four-day rain swamps New England

[» More Featured](#)

Use in-context expands

For editing part of a collection

Need to see surrounding context

For managing content modules

Schedule View

Map View

Expand all

[+ Add](#)
[Hotels](#)
[Things to do](#)
[Restaurants](#)
[Shopping](#)
[Entertainment](#)
[+ Create Item](#)

Trip Album
[Add Photos »](#)

Yosemite National Park

☒ [John Muir Vernal Falls Mist Trail Hike](#) [» Schedule](#)

Scheduled Items

Wed 11/23/05 (day 1) - Yosemite Natl Pk, Yosemite National Park

Hi, **b.scott** [Sign Out](#)

[Mail](#)

[Messenger](#)

[Radio](#)

From	Subject	Date
Bill Scott	test	May 15, 2006
Kirk Vorsatz	Contact Info f...	May 15, 2006
Nate Koechley	RSVP, Attendi...	May 15, 2006
PayPal	PayPal Securi...	May 15, 2006

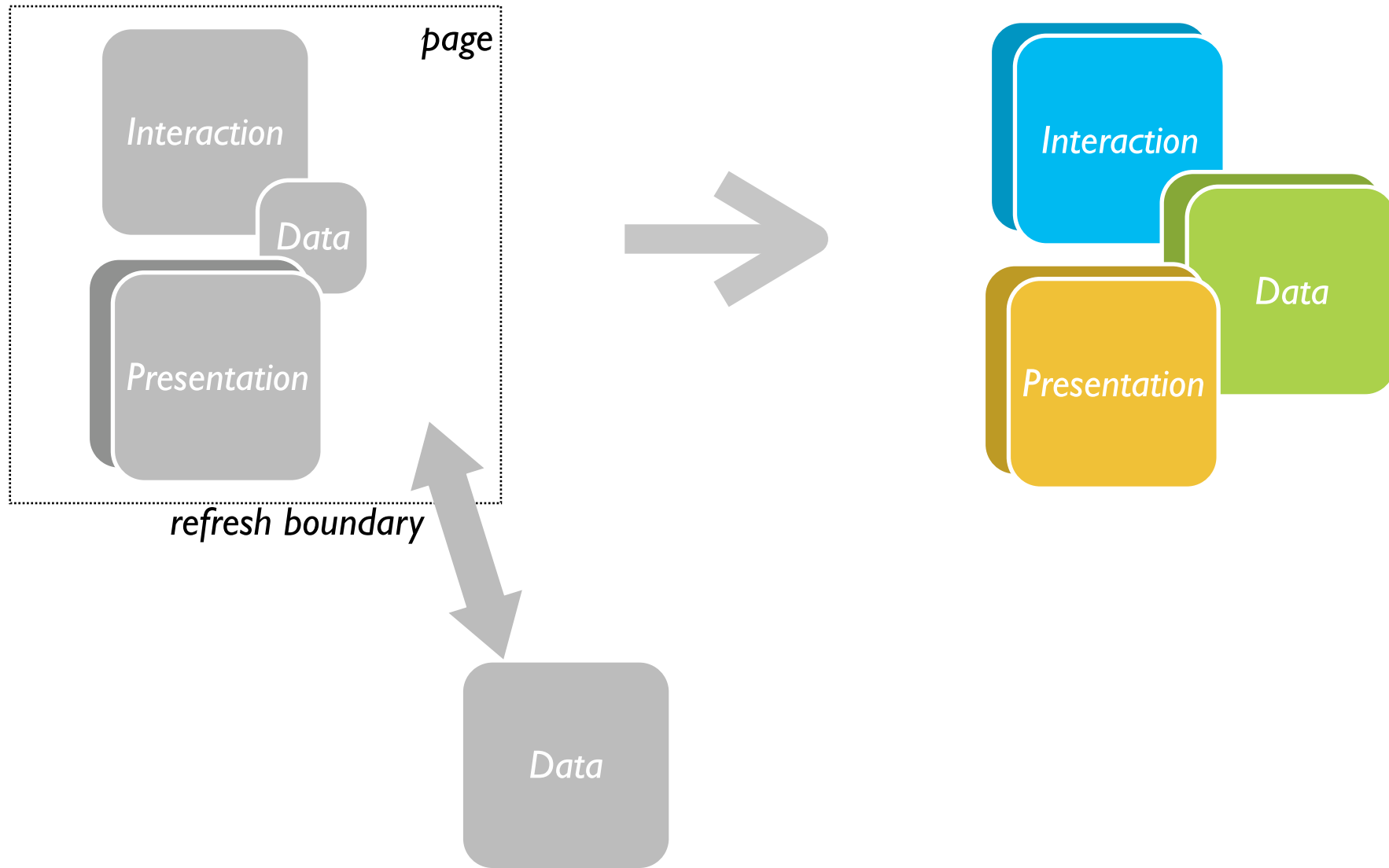
[» View All Mail](#)

Weather
59° - 88°

Local

Movies

*Prefer direct, lightweight,
in-page interaction.*



4

Provide live feedback

Principle. **Provide Live Feedback**

Ask Your Question

1. Enter your question

You can ask 5 more questions today.








You have 110 characters to work with. Add details below.

2. Add details (optional)

No spam, please! When in doubt, please refer to our [community guidelines](#).

You have 1000 characters to work with.

pattern. live suggest.

To:	<input type="text"/>	Show BCC
Cc:	<input type="text"/>	
Subject:	<input type="text"/>	Plain Text
Times New Roman 12 B <i>I</i> <u>U</u>       		

pattern. auto complete.

Find Athletes and Countries				
<input type="text"/>				
Medal Count				
PRESENTED BY  CHEVROLET				
				TOTAL
 GERMANY	11	12	6	29
 UNITED STATES	9	9	7	25
 CANADA	7	10	7	24
 AUSTRIA	9	7	7	23
 RUSSIA	8	6	8	22
» Full Medal Count				
 				

Keep the goal in mind


Design for immediacy

Is it narrowing or is it distracting

Most Popular

Most Emailed | Most Viewed | Most Recommended | My Sources

- Lonely elephants, edgy apes baffled by post-Katrina life at zoo Knight Ridder - Sun Oct 16, 4:40 PM ET
- Scientists Study Gorilla
- Inflation Soars Higher
- Rick Springfield's Soa
- Feds Want Banks to S
- » All Most Emailed



NEW ORLEANS - An AWOL alligator has resurfaced, elephants are forlorn and apes are agitated at Audubon Zoo, one of the nation's most renowned animal sanctuaries, left by Hurricane Katrina both broken and broke.

World

Just-in-time data

Students to Enroll

Crew Id	Last Name	First Name
400922	Peterson	Shelley
349294	Craft	Adrian
432939	Douglas	Elyne
468370	Hill	Petra
999390	Barnes	James
344935	Smith	James
139204	Miller	Gordon

Students to Enroll

Crew Id	Last Name	First Name
400922	Peterson	Shelley
349294	Craft	Adrian
432939	Douglas	Elyne
468370	Hill	Petra
999390	Barnes	James
344935	Smith	James
139204	Miller	Gordon

Course Calendar

DEC 2005							
S	M	T	W	T	F	S	S
					1	2	3
4	5	6	7	8	9	10	
11	12	13	14	15	16	17	
18	19	20	21	22	23	24	
25	26	27	28	29	30	31	

Course Calendar

DEC 2005							
S	M	T	W	T	F	S	S
4	5	6	7	8	9		
11	12	13	14	15	16		
18	19	20	21	22	23		
25	26	27	28	29	30		

Just-in-time logic

YAHOO! PLUS SEARCH

Instant Search **BETA**

Search the Web

Instant Search gives you answers as you type -- no more waiting!

Why feel lucky when you can be right? With Instant Search, results instantly appear for [Yahoo! Shortcuts](#) and common searches. Give it a spin! Type in these examples below, or try your own searches:

- boston weather
- wikipedia
- nfl
- 22 5th ave new york ny
- san francisco coffee shops
- dmV

Google
Suggest **BETA**

Web [Images](#) [Groups](#) [News](#) [Froogle](#) [Local](#) [more »](#)

Google Search I'm Feeling Lucky

pe, Google will offer suggestions. Use the arrow keys to navigate the results. [L](#)

[Feedback](#) - [Discuss](#) - [Terms of Use](#) - [FAQ](#)

©2006 Google

Keep the goal in mind

Design for immediacy

Is it narrowing or is it distracting

Use feedback to boost confidence

Let the user iterate where possible

The screenshot shows the alltheweb search engine interface. The search bar contains the text 'monterrey'. Below the search bar, there is a list of suggestions: 'monterrey', 'monterrey mexico', 'monterrey nl mexico', 'arena monterrey', 'tec de monterrey', 'tecnologico de monterrey', 'monterrey nuevo leon', 'monterrey mexico map', 'universidad de monterrey', and 'cablevision monterrey'. To the right of the search bar, there are links for 'Options', 'Go to...', and 'Help'. Below the suggestions, there is a 'Refine Search' button. On the right side of the page, there are search results for 'monterrey'. The results include a 'Did you mean: monterrey' suggestion, a 'SPONSOR RESULTS' section with links to 'Save on Monterrey Hotels at Expedia.com', 'Monterrey Vacations with Travelocity', and 'News Results for monterrey', and a 'Yahoo! Shortcut - About' link. Below the sponsored results, there is a 'Yahoo!'s' section with a link to 'Report them' and a 'Bucket test: NONE' message. The main search results section includes a link to 'All About Monterrey' and a link to 'Monterrey - Wikipedia, the free encyclopedia'. The Wikipedia link is highlighted with a blue background. Below the Wikipedia link, there is a link to 'International Conference on Financing for Development-2003-main'.

alltheweb
livesearch

Options Go to... Help

monterrey

monterrey mexico

monterrey nl mexico

arena monterrey

tec de monterrey

tecnologico de monterrey

monterrey nuevo leon

monterrey mexico map

universidad de monterrey

cablevision monterrey

Refine Search

Tell a Friend

Feedback

Results 1 - 10 of about 8,620,000 for **monterrey** [\(About this page\)](#)

Did you mean: [monterrey](#)

SPONSOR RESULTS

[Save on Monterrey Hotels at Expedia.com](#)
www.expedia.com Save up to 50% on Monterrey hotels at Expedia.com, your one-stop...

[Monterrey Vacations with Travelocity](#)
www.travelocity.com Get access to special Monterrey rates when you book your flight and...

[News Results for monterrey](#)
FC Dallas [traveling roster to Monterrey](#) - OurSports Central - Jul 24 6:16 PM

[Yahoo! Shortcut - About](#)

SPONSOR RESULTS

[Monterrey - Weichert](#)
View Color photos, Virtual Tours and Thousands of Open Houses.
[weichert.com](#)

[See your message here...](#)

Yahoo!'s: Seeing bad search results or ads for this query? [Report them](#). Bucket test: **NONE**

[All About Monterrey](#)
City guide includes information about hotels, restaurants, nightlife, entertainment, maps, and more. ... **Monterrey** is a unique city which is often called the richest city in México. **Monterrey** is also a powerhouse in the business ...
[www.allaboutmonterrey.com](#)

[Monterrey - Wikipedia, the free encyclopedia](#)
Monterrey is the capital city of the northeastern Mexican state of Nuevo León and the municipal seat of the municipality of the same name. ... The divided highway **Monterrey-Saltito-Matehuala-Mexico City** is the main land ... Nuevo Laredo-Mexico City, **Monterrey-Tampico**, and **Monterrey-Pacific (Mazatlán)**. Passenger trains ... Quick Links: [Geography](#) - [Government, Transportation, and Public Safety](#) - [Industry and business](#)
[en.wikipedia.org/wiki/Monterrey](#)

[International Conference on Financing for Development-2003-main](#)

Keep the goal in mind

Design for immediacy

Is it narrowing or is it distracting

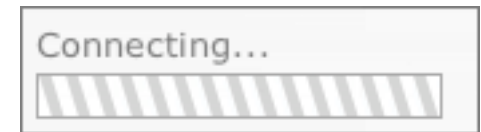
Use feedback to boost confidence

Let the user iterate where possible

Keep the user engaged

Time passes faster

Look for engaging moments



Keep the goal in mind

Design for immediacy

Is it narrowing or is it distracting

Use feedback to boost confidence

Let the user iterate where possible

Keep the user engaged

Time passes faster

Look for engaging moments

Find a domain name:

www.
 (ex. widgetdesigns.com)

Search

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

Use live-previews

Look before you leap

Keep the goal in mind

Design for immediacy

Is it narrowing or is it distracting

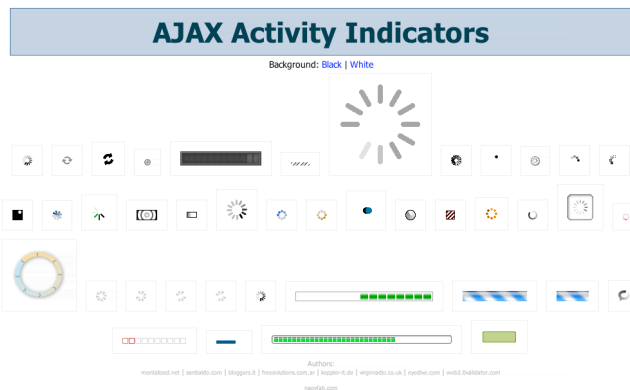
Use feedback to boost confidence

Let the user iterate where possible

Keep the user engaged

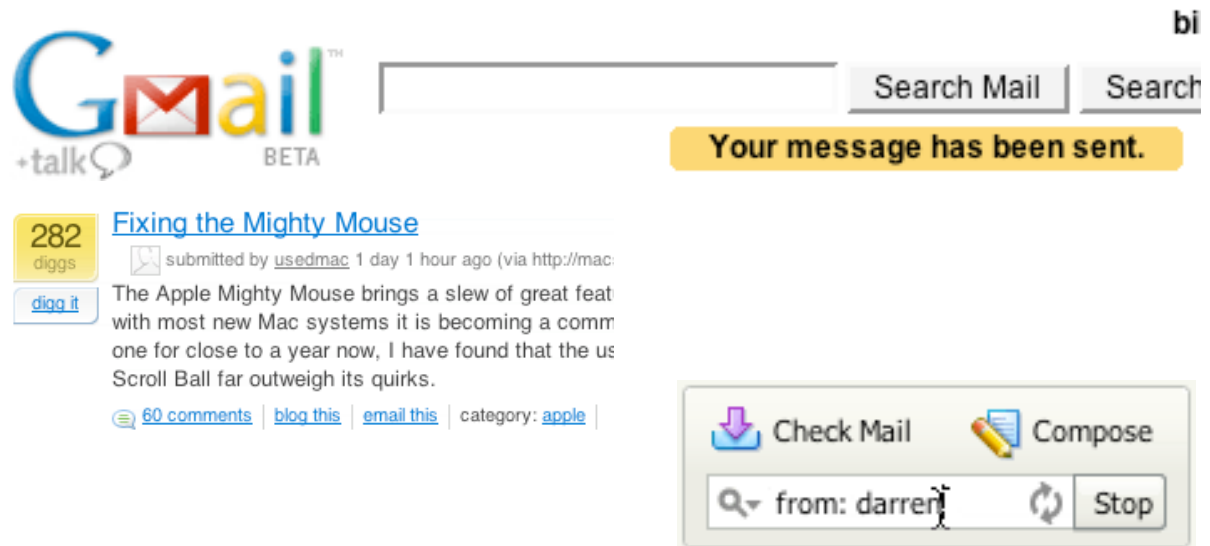
Time passes faster

Look for engaging moments



Use live-previews

Look before you leap



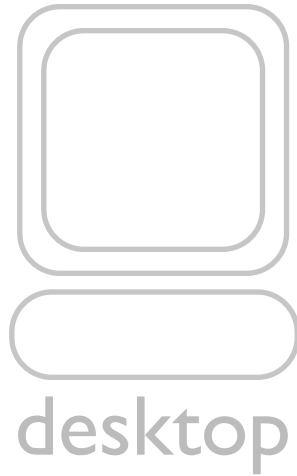
Keep feedback focused

Keep it in context

Updating too many areas at once will be confusing

Show dynamically what is relevant

Avoid creating feedback noise/jitter



hover blur focus **click** key
shiftclick doubleclick
drag dragdrop dragflipdrop
shiftdoubleclick tripleclick shifttripleclick

hover blur focus **click** key
shiftclick doubleclick
drag dragdrop dragflipdrop
shiftdoubleclick tripleclick shifttripleclick

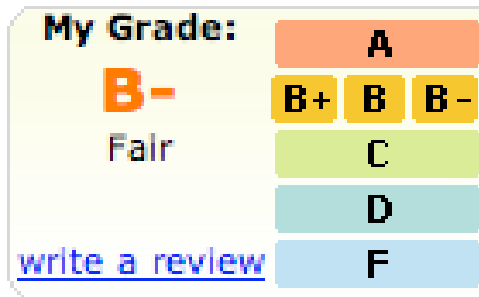


hover blur focus **click**
key shiftclick doubleclick dragdragdrop

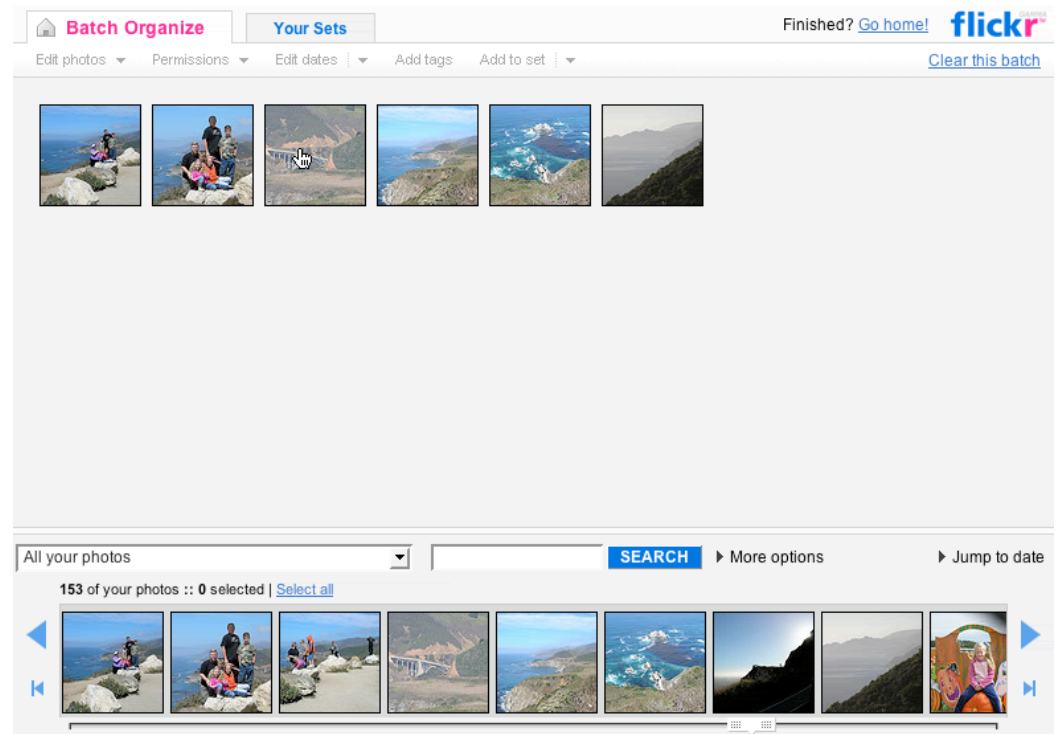
hover blur focus **click**
key shiftclick doubleclick drag dragdrop



Offer an invitation

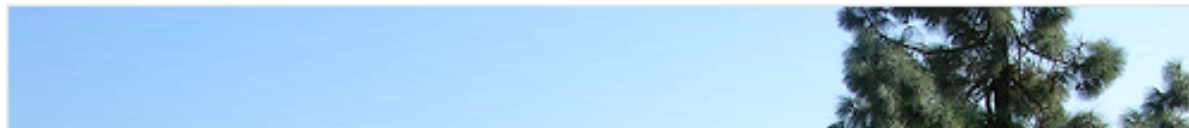


pattern. hover invitation.



pattern. drop invitation.

Park near our new home



pattern. tooltip invitation + hover invitation.

Make it engaging

Use lightweight events as a welcome mat

Rediscover the hover

My Grade:

A		
B+	B	B-
C		
D		
F		

B-

Fair

[write a review](#)

Lists

☐ Remove this item

Add item or I'm done adding items

[Make a new list](#)

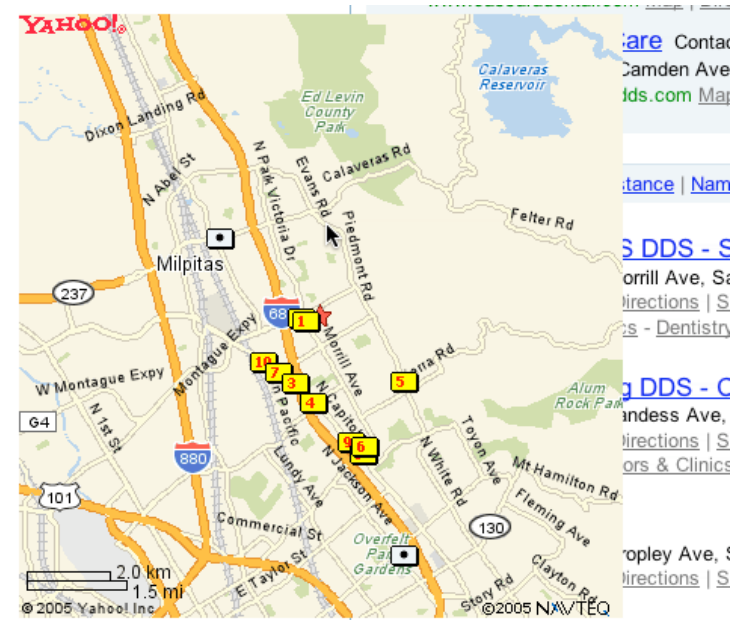
Make it engaging

Use lightweight events as a welcome mat
Rediscover the hover



Keep actions out of it

Don't make the user afraid to explore
Don't proselytize



Forty Associates recently added product previews to their Web site as part of a small beta program. During the beta, visitors to Associate sites who viewed a product preview clicked through to Amazon.com over 4% of the time; those clicks resulted in a purchase nearly 6% of the time.

Now we're opening the beta up to all Associates to further improve product previews. The first 500 Associates who refer a sale through a product preview-enhanced link will receive a \$5 Amazon gift certificate. [Click here to join your fellow Associates in beta testing product previews.](#)

Don't worry if you don't already have Basic Display Product Links on your Web site. You can create them as part of the sign-up process. [Click here](#) for answers to questions you might have about the beta program.

Make it engaging

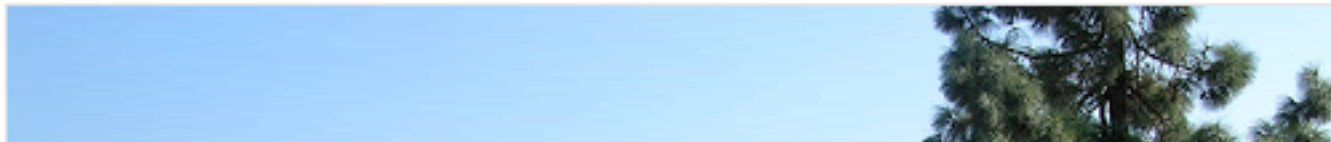
Use lightweight events as a welcome mat
Rediscover the hover

Keep actions out of it

Don't make the user afraid to explore
Don't proselytize

Park near our new home

 ADD NOTE  SEND TO GROUP  ADD TO SET  BLOG THIS  ALL SIZES  ORDER PRINTS  ROTATE  DELETE 



Get the actors involved

Hover Invitation

Cursor Invitation

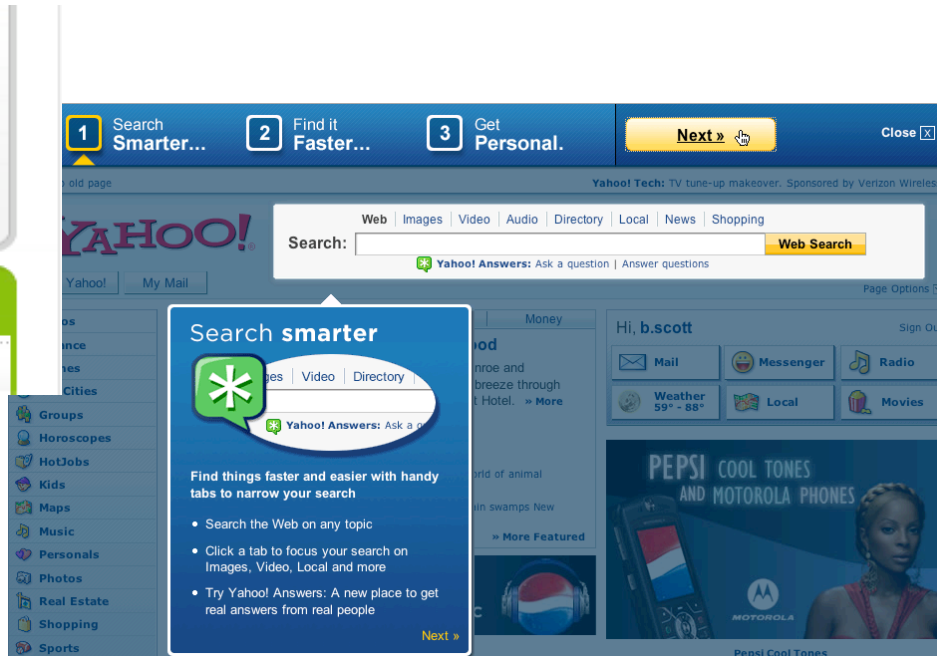
Tooltip Invitation

Make it engaging

Use lightweight events as a welcome mat
Rediscover the hover

a digital SLR?
Rs are pro-quality digital
with interchangeable
hile they take amazing
ey're expensive and
use.
[more about digital cameras](#)

See All Digital Cameras



Keep actions out of it

Don't make the user afraid to explore
Don't proselytize

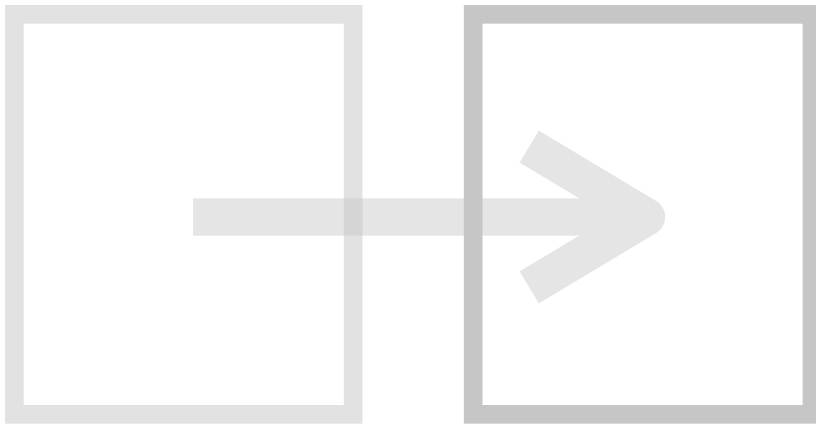


Get the actors involved

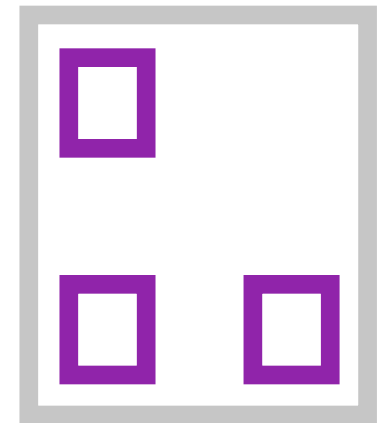
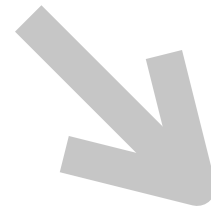
Hover Invitation
Cursor Invitation
Tooltip Invitation

Use invitations to aid discoverability

Two challenges: idiom & feature
Adding signposts, always-on clues doesn't scale
Add tours, help pedals, tips, spotlights



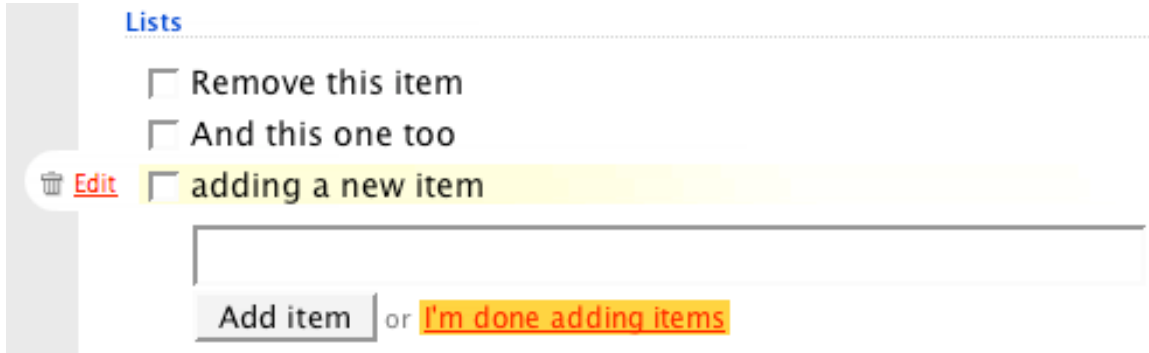
page-based transitions



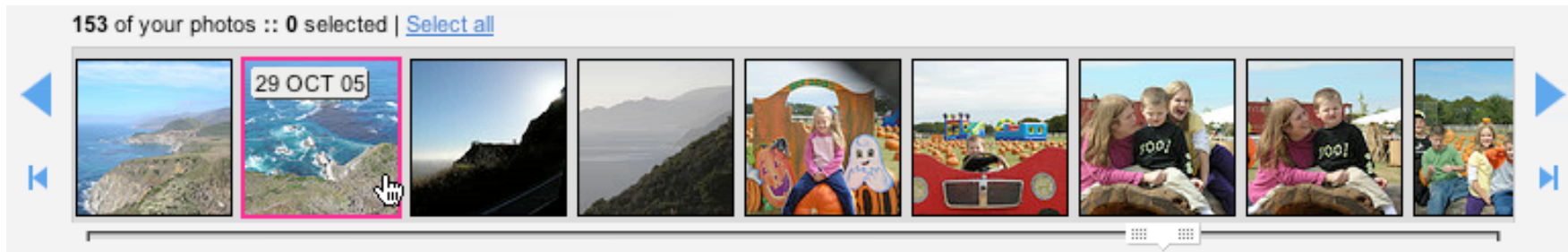
multiple transitions,
single page



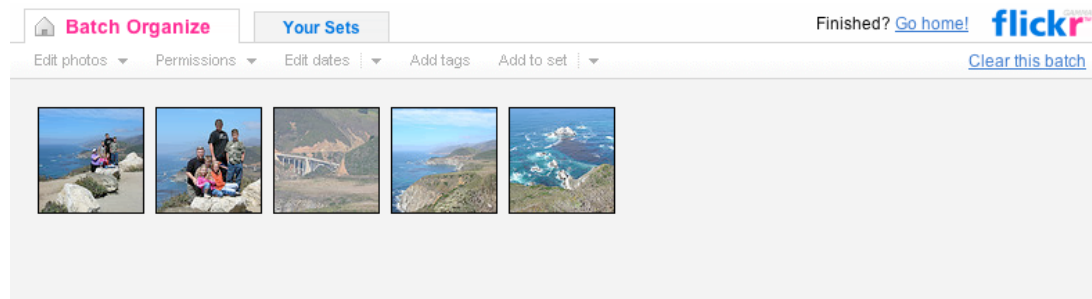
Show transitions



pattern. fade transition + self-healing transition.



pattern. slide + animate.



pattern. spotlight.

Speak to the BRAIN

Understanding attention processing

MIND HACKS

Tips & Tools for Using Your Brain



**Tom Stafford &
Matt Webb**

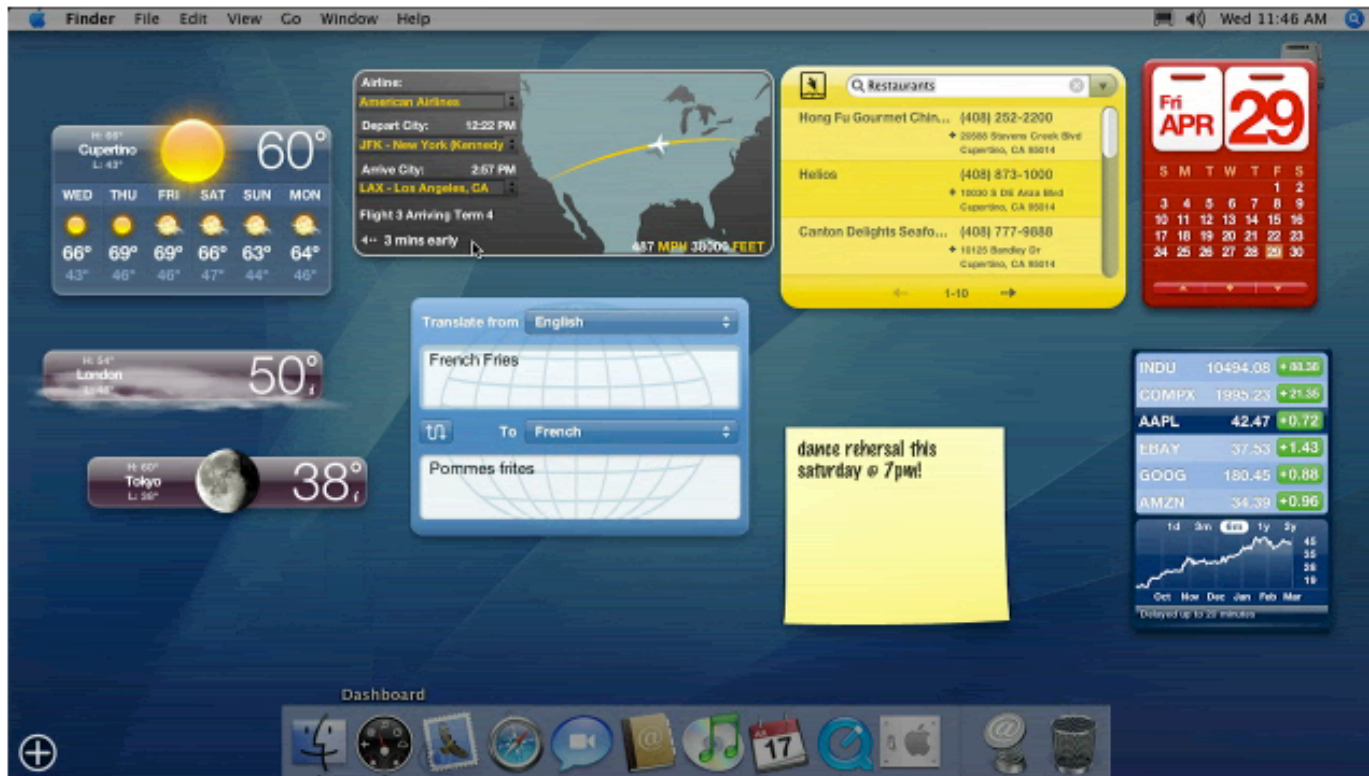
O'REILLY®

Foreword by Steven Johnson, author of Mind Wide Open

Speak to the BRAIN

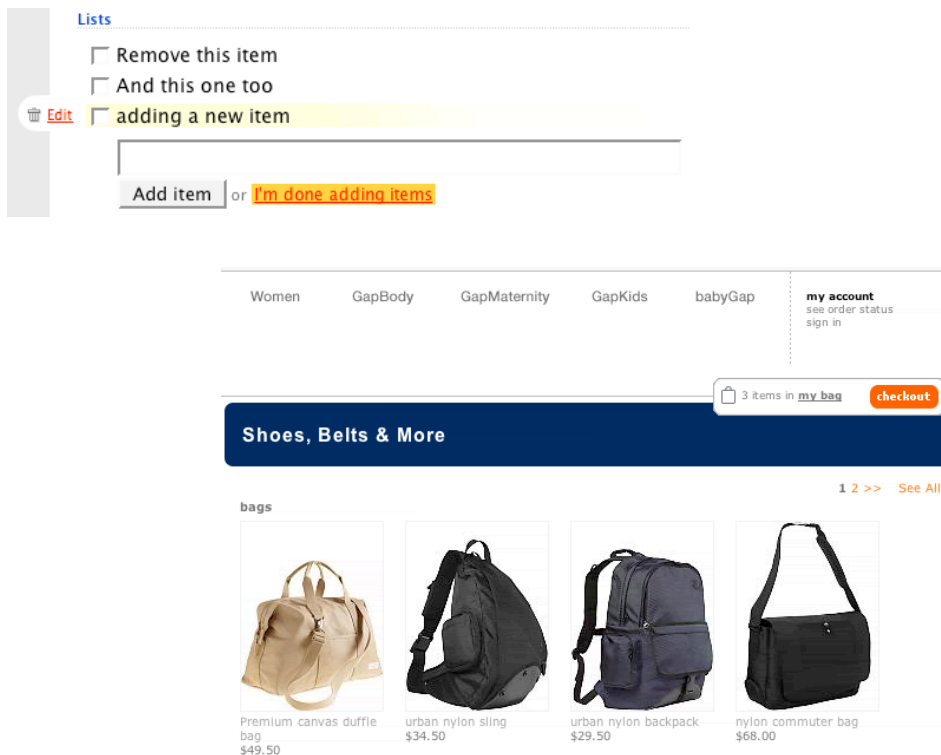
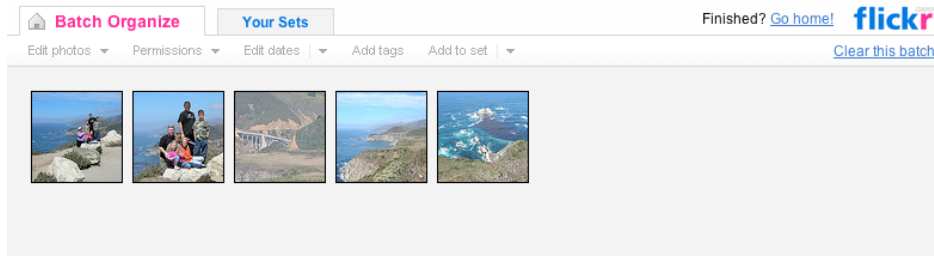
Understanding attention processing

Sending the wrong message



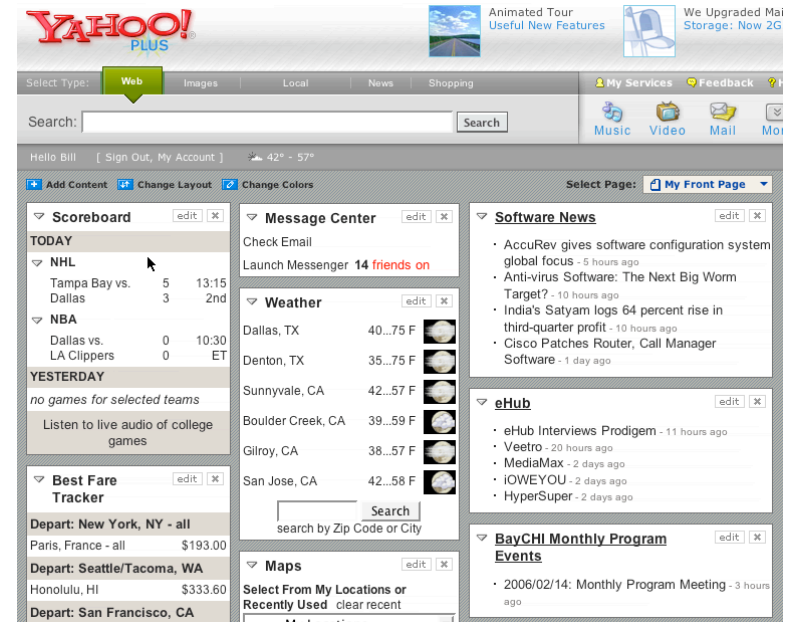
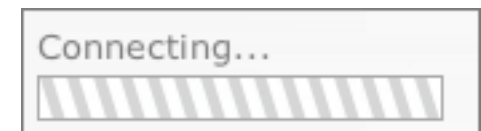
Speak to the BRAIN

Understanding attention processing
Sending the wrong message



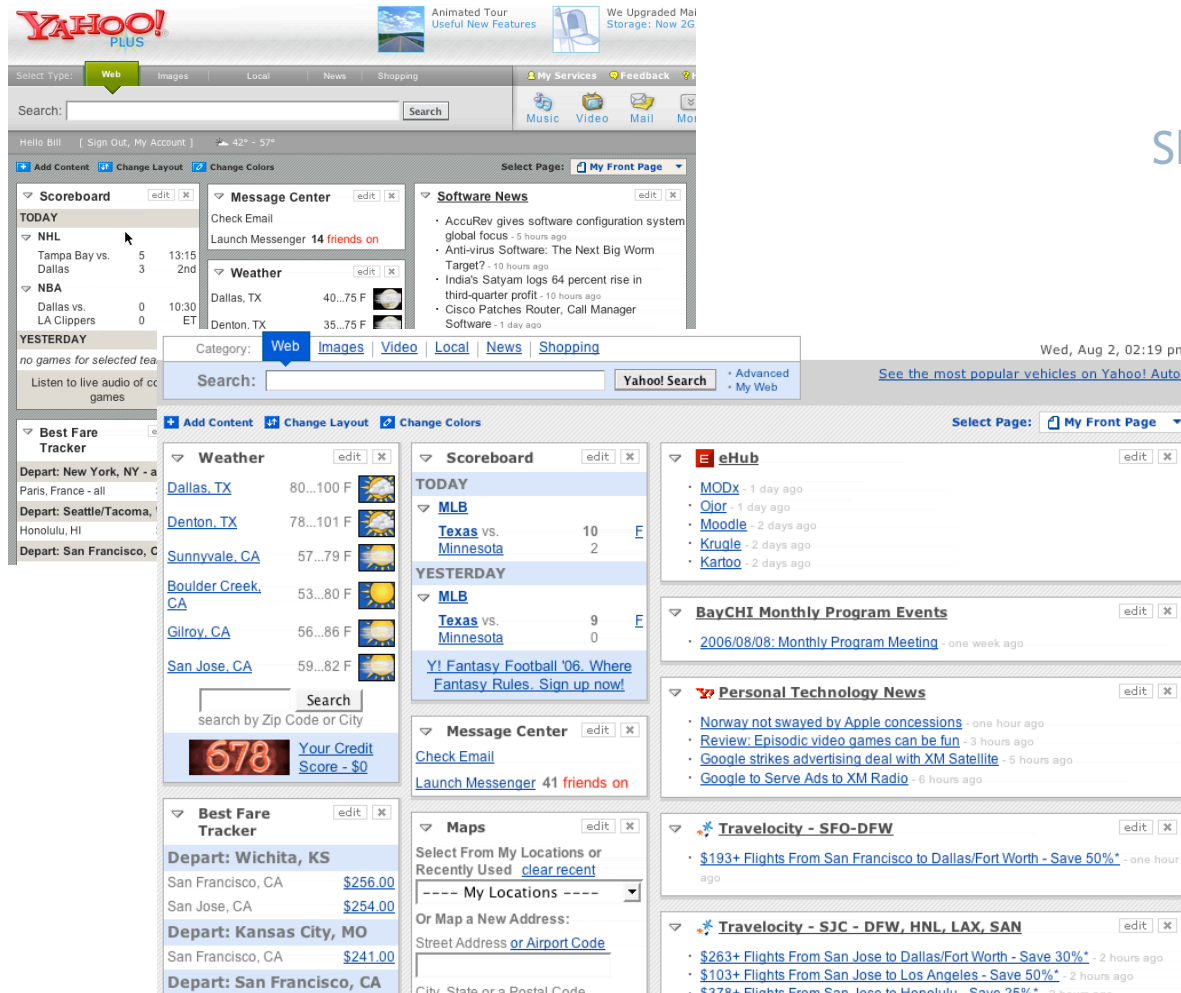
What you can communicate

Speed up time
Slow down time
Show state change
Show relationships between objects
Focus attention



Speak to the BRAIN

Understanding attention processing
Sending the wrong message



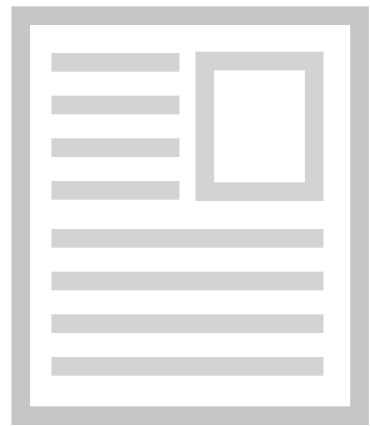
What you can communicate

Speed up time
Slow down time
Show state change
Show relationships between objects
Focus attention

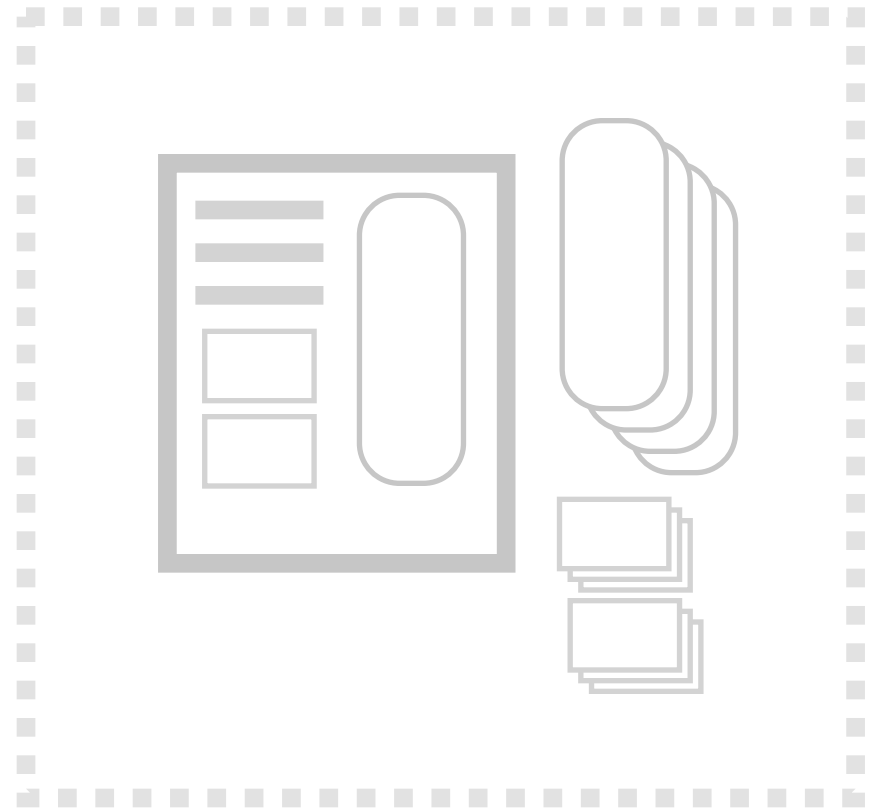
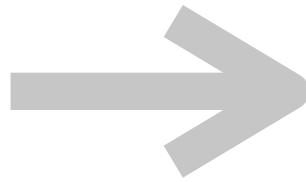
Keep it sane

“Cut in half” rule of thumb
Use a “contrast knob” approach
Don’t overuse

*Provide invitations beforehand,
transitions during,
and feedback after interaction*



page



objects





Think in objects

	Page-Based Web	Rich Internet App
Richer Model	Document	Rich Internet Object
Longer Lifecycle	Transient	Permanent
Community/ Sharing	Bookmark	Content, properties, and behaviors


[Schedule View](#) [Map View](#) [Expand all](#)

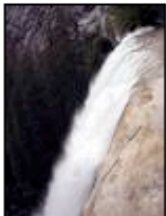
[+ Add](#) [Hotels](#) [Things to do](#) [Restaurants](#) [Shopping](#) [Entertainment](#) [+ Create Item](#)

Yosemite National Park

  [John Muir Vernal Falls Mist Trail Hike](#) [Schedule](#) [View](#) [Delete](#)

+1 209 372 0200
Happy Isle Shuttle Stop #16
Yosemite National Park, CA 95389
United States



This hike is also known as the Mist Trail because it passes right beside Vernal Falls, which in the spring blows a heavy mist everywhere. This 1.4 mile roundtrip hike is considered a moderate 







Notes: [\[Edit \]](#)
Tags: [\[Edit \]](#)
Dates: [\[Add \]](#)

Scheduled Items

[Wed 11/23/05 \(day 1\)](#) - Yosemite Natl Pk, Yosemite National Park

  **Yosemite Lodge**

  **Tunnel View**

  **Bridalveil Falls Day Hike**

Other trips you might like ...

[Browse All Public Trips »](#)

The Ultimate A ...
by [ajrao1918](#)
[Copy this trip](#)



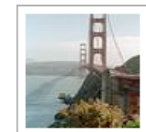
SF Trip
by [pilak_shah](#)
[Copy this trip](#)



6 Parks in 8 d ...
by [jacorebb](#)
[Copy this trip](#)



Yosemite
by [whiskeywom...](#)
[Copy this trip](#)




Cali Baby!
by [ibily78](#)
[Copy this trip](#)

Rethinking the model

What is the user's mental model?

How to distinguish from content?



Yosemite Thanksgiving [\[Edit \]](#)

A trip to YOSEMITE NATIONAL PARK
Fun in Yosemite with Daniel & Kids









☐ [This trip is public](#)
[• Sharing settings](#)
[• Email this trip](#)

[\[Update photos \]](#)

[Schedule View](#)
[Map View](#)
[Expand all](#)


[+ Add](#)
[Hotels](#)
[Things to do](#)
[Restaurants](#)
[Shopping](#)
[Entertainment](#)
[+ Create Item](#)

Trip Album


[Add Photos »](#)

Yosemite National Park


☒

[John Muir Vernal Falls Mist Trail Hike](#)
[» Schedule](#)

Scheduled Items


Wed 11/23/05 (day 1) - Yosemite Natl Pk, Yosemite National Park


[Yosemite Lodge](#)

From \$97.00 to \$146.00 per night.
 [• Reserve Now](#)

 559-252-4848
 Yosemite Natl Pk, CA 95389
 United States
 In the valley of Yosemite National Park

Notes: [\[Edit \]](#)
Tags: [\[Edit \]](#)
 yosemite, hiking



Rethinking the model

What is the user's mental model?

How to distinguish from content?

Y! [Amsterdam Trip Plans on Yahoo! Travel](#)
[Yahoo! Shortcut](#) - [About](#)

Y! [My Web Results for amsterdam trip \(49\)](#)

1. [Trip to Amsterdam - photos, history, maps - Virtual trip to Amsterdam](#)

Web trip to **Amsterdam**. Historical and sightseeing overview ... **Trip to Amsterdam**. To begin with **Amsterdam** we should first note, that this city has two features making ... One will never forget a **Amsterdam trip** around the city by river ...

[www.medievalamsterdam.com](#) - 9k - [Cached](#) - [More from this site](#) - [Save](#)

The power of sharing

Bloggable, shareable, findable

How to dial-in community

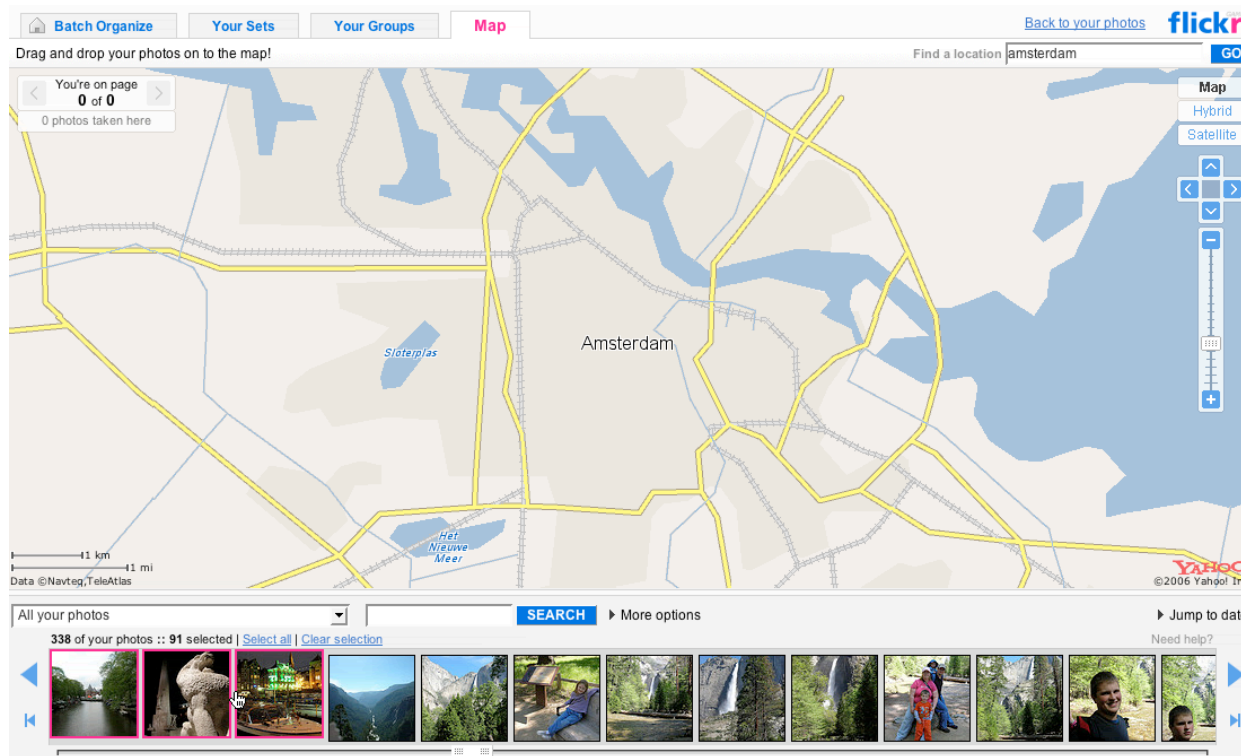
Collections

The screenshot shows the Yahoo! Travel Trip Planner interface. At the top, there's a header with the Yahoo! Travel logo, a user greeting 'Welcome, b.scott' with links for 'Sign Out' and 'My Account', and navigation links for 'Travel Home', 'My Travel', and 'Help'. Below the header is a green banner with the 'TRIP PLANNER' title and buttons for 'Explore', 'Browse Trips', and 'Create a Trip'. A search bar is on the right of the banner. Below the banner, a promotional message says 'We're giving away two plane tickets a day! Create a trip for your chance to win.' The main section is titled 'Public Trips' and features a search bar with 'yosemite' entered. Below the search bar, it says '164 trips found'. Three trip listings are shown, each with a thumbnail image, a title 'Yosemite', a description, and a 'Copy and customize' link. The first listing is a 10-day trip by tabicat_2005, the second is a spring trip by matt_mlinac, and the third is a 12-day trip by wasitova. Each listing also shows the number of people who have copied or customized the trip.

Rethinking the model

What is the user's mental model?

How to distinguish from content?



The power of sharing

Bloggable, shareable, findable

How to dial-in community

Collections

Web 2.0 as a platform

Rich objects fit the SOA model

Creates a good separation of concerns, microformats

Mashups

Think in terms of the user's mental model and their primary goals

Prefer direct, lightweight, in-page interaction.

Provide invitations beforehand, transitions during, and feedback after interaction.

Think in terms of the user's mental model and their primary goals.