Designing with Patterns

WebVisions Workshop
Bill Scott
May 20, 2009. 2-5 pm.

http://billwscott.com/share/presentations/2009/webvisions/DWI-Workshop.pdf

Workshop Schedule

2:00 - 2:20. Pattern Overview.

2:20 - 2:50. Design Principles. Make it Direct.

2:50 - 3:05. Exercise 1.

3:05 - 3:20. Present Solutions.

3:20 - 3:30. Bio Break/ Q & A.

3:30 - 3:45. Keep it Lightweight. Stay on the Page.

3:45 - 4:20. Provide an Invitation. Use Transitions. React Immediately.

4:20 - 4:35. Exercise 2.

4:35 - 4:50. Present Solutions.

4:50 - 5:00. Q & A.

Design Patterns

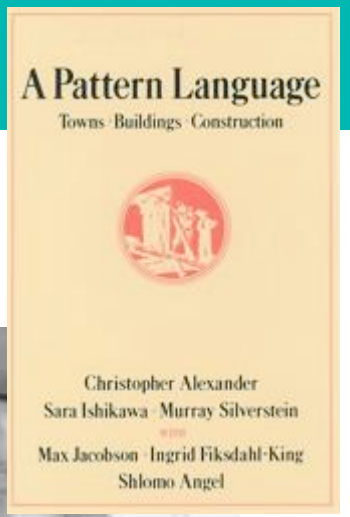
Definition

A formally described solution to a design problem

Purpose

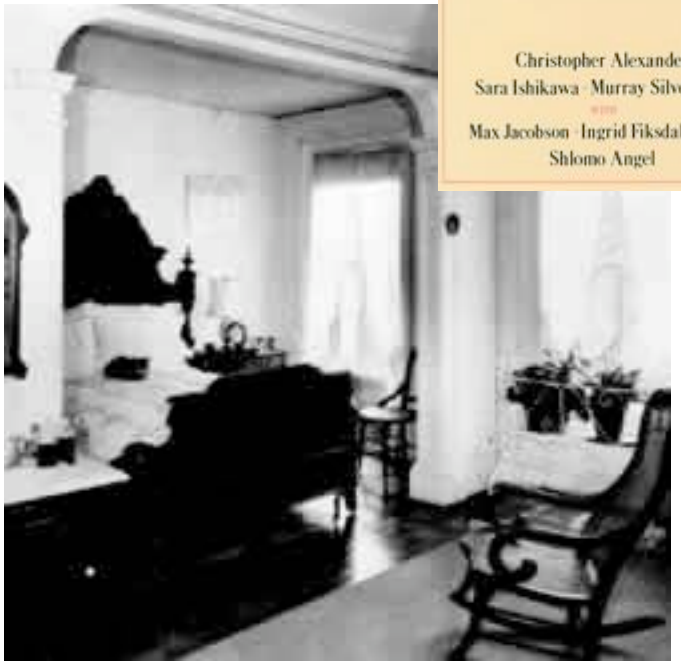
Capture a problem (conflict) and provide a solution (resolution).

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, Office Connections, Children's Home

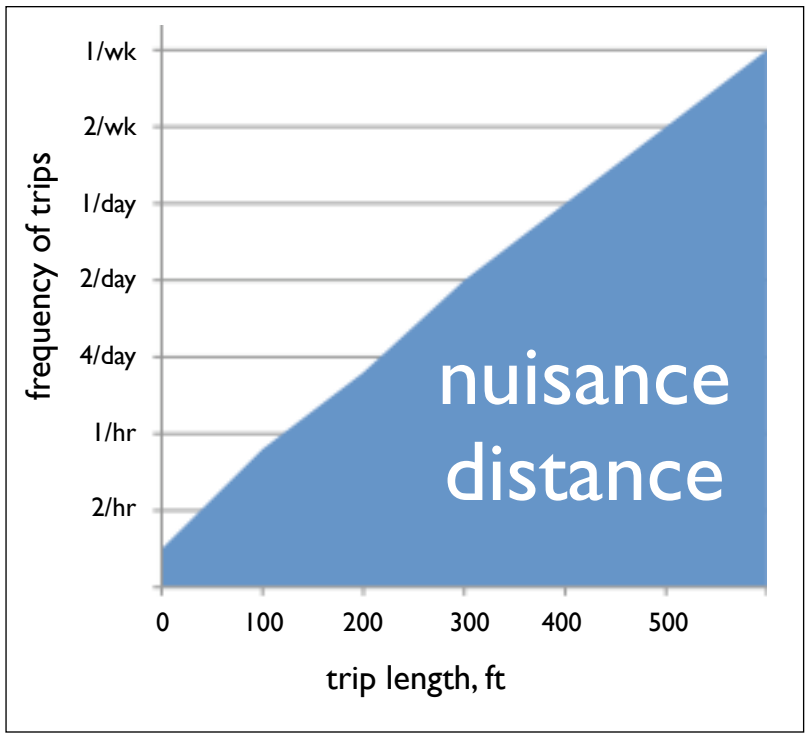
Office Connections

Conflict

If two parts of an office are too far apart, people will not more between them as often as they need to; and if they are more than one floor apart, there will be almost no communication between the two.

Resolution

To establish distances between departments, calculate the number of trips per day made between each two departments; get the "nuisance distance" from the graph; then make sure that the physical distance between the two departments is less than the nuisance distance. Reckon one flight of stairs as about 100 feet, and two flights of stairs as about 300 feet.



Origin of Patterns

Software Patterns

1995. Gang of Four book

Challenge to UX

1996. Alexander challenges HCI community

UX Patterns

1997. Tidwell's Common Ground

Welie's pattern site

Design of Sites book

2005. Tidwell, Designing Interfaces

2006. Y! Pattern Library

surfacing vocabulary

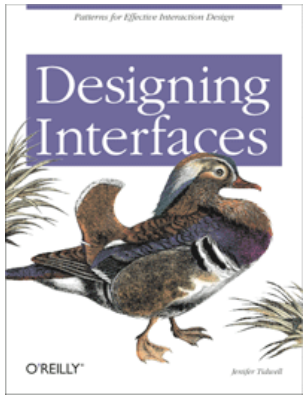
Pattern Libraries

Tidwell's Patterns

Original site: Common Ground

http://www.mit.edu/~jtidwell/interaction_patterns.html

Designing Interfaces book, 2005



Organization of patterns

Information architecture for applications

Navigation

Page layout

Maps, graphs, and tables

Forms

Graphic editors

Color, typography, and look-and-feel

Organizing the Content
- Two-Panel Selector
- One-Window Drilldown
- Wizard
- Extras On Demand
- Intriguing Branches

Getting Around
- Clear Entry Points
- Global Navigation
- Color-Coded Sections
- Animated Transition

Organizing the Page
- Visual Framework
- Center Stage
- Titled Sections
- Card Stack
- Closable Panels
- Movable Panels
- Diagonal Balance
- Responsive Disclosure
- Responsive Enabling
- Liquid Layout

Commands and Actions
- Action Panel
- Smart Menu Items
- Progress Indicator
- Multi-Level Undo
- Command History

Showing Complex Data
- Overview Plus Detail
- Row Striping
- Sortable Table
- Jump to Item
- Cascading Lists
- Tree-Table

Welie Pattern Library

http://www.welie.com/patterns/

User needs

Patterns that meet a direct need of the user.

Navigating around

- Accordion
- Headerless Menu
- Breadcrumbs
- Directory Navigation
- Doormat Navigation
- Double Tab Navigation
- Faceted Navigation
- Fly-out Menu
- Home Link
- Icon Menu
- Main Navigation
- Map Navigator
- Meta Navigation
- Minesweeping
- Panning Navigator
- Overlay Menu
- Repeated Menu
- Retractable Menu
- Scrolling Menu
- Shortcut Box
- Split Navigation
- Teaser Menu
- To-the-top Link
- Trail Menu
- Navigation Tree

Basic interactions

- Action Button
- Guided Tour
- Paging
- Pulldown Button
- Slideshow
- Stepping
- Wizard

Searching

- Advanced Search
- Autocomplete
- Frequently Asked Questions (FAQ)
- Help Wizard
- Search Box
- Search Area
- Search Results
- Search Tips
- Site Index
- Site Map
- Footer Sitemap
- Tag Cloud
- Topic Pages

Dealing with data

- Carrousel
- Table Filter
- Collapsible Panels
- Details On Demand
- Collector
- Inplace replacement
- List Builder
- List Entry View
- Overview by Detail
- Parts Selector
- Tabs
- Table Sorter
- Thumbnail
- View

Personalizing

- Customizable Window
- Login
- Registration

Shopping

- Booking
- Product Comparison
- Product Advisor
- Product Configurator
- Purchase Process
- Shopping Cart
- Store Locator
- Testimonials
- Virtual Product Display

Making choices

- Country Selector
- Date Selector
- Language Selector
- Poll
- Rating

Giving input

- Comment Box
- Constraint Input
- Form

Miscelleaneous

- Footer Bar
- Hotlist
- News Box
- News Ticker
- Send-a-Friend Link

Application needs

Patterns that help the application, or you the designer, communicate better with the user

Drawing attention

- Captcha
- Center Stage
- Color Coded Section
- Premium Content Lock
- Grid-based Layout
- Liquid Layout
- Outgoing Links
- Alternating Row Colors

Feedback

- Input Error Message
- Processing Page

Simplifying intera

- Enlarged Clickarea
- Font Enlarger

Context of design

The context of the design

Site types

- Web-based Application
- Artist Site
- Automotive Site
- Branded Promotion Site
- Campaign Site
- E-commerce Site
- Community Site
- Corporate Site
- Multinational Site
- Museum Site
- Personalized 'My' Site
- News Site
- Portal Site
- Travel Site

Experiences

- Community Building
- Information Management
- Fun
- Information Seeking
- Learning
- Assistence
- Shopping
- Story Telling

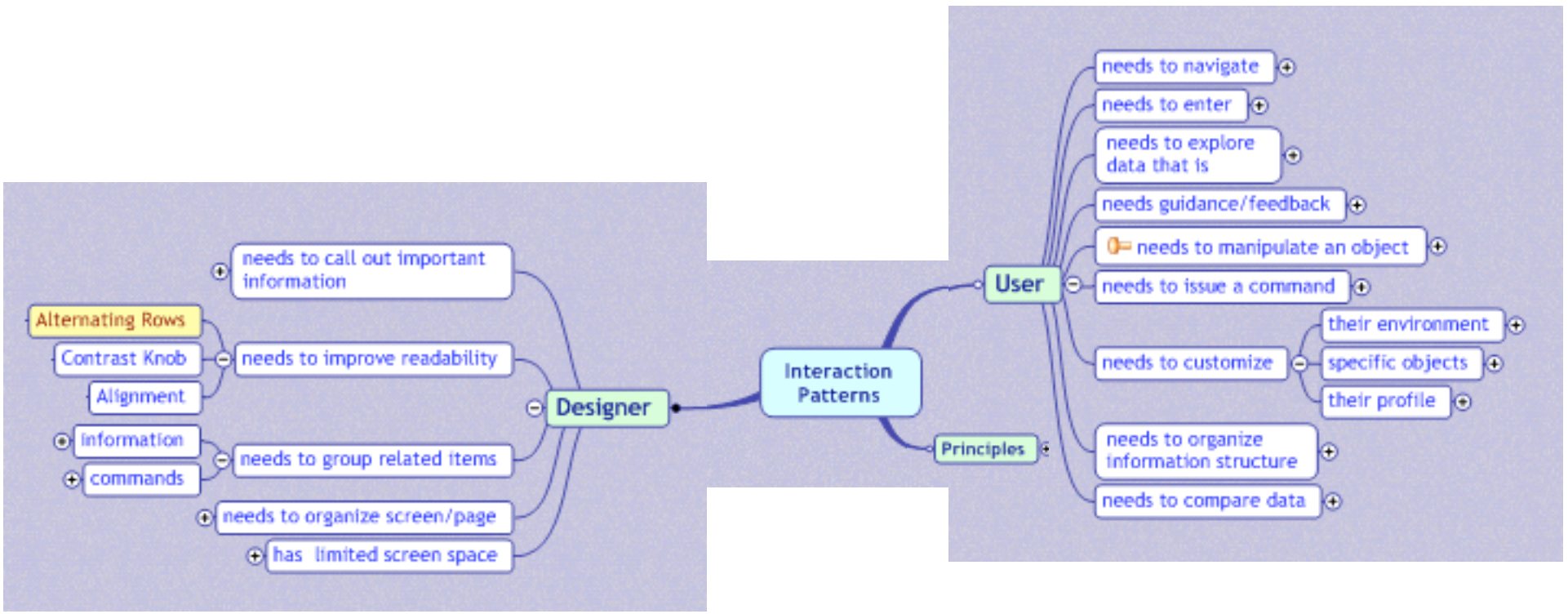
Page types

- Article Page
- Blog Page
- Case Study
- Contact Page
- Event Calenda
- Forum
- Guest Book
- Help Page
- Homepage
- Newsletter
- Printer-friendl
- Product Page
- Tutorial

120+ Patterns

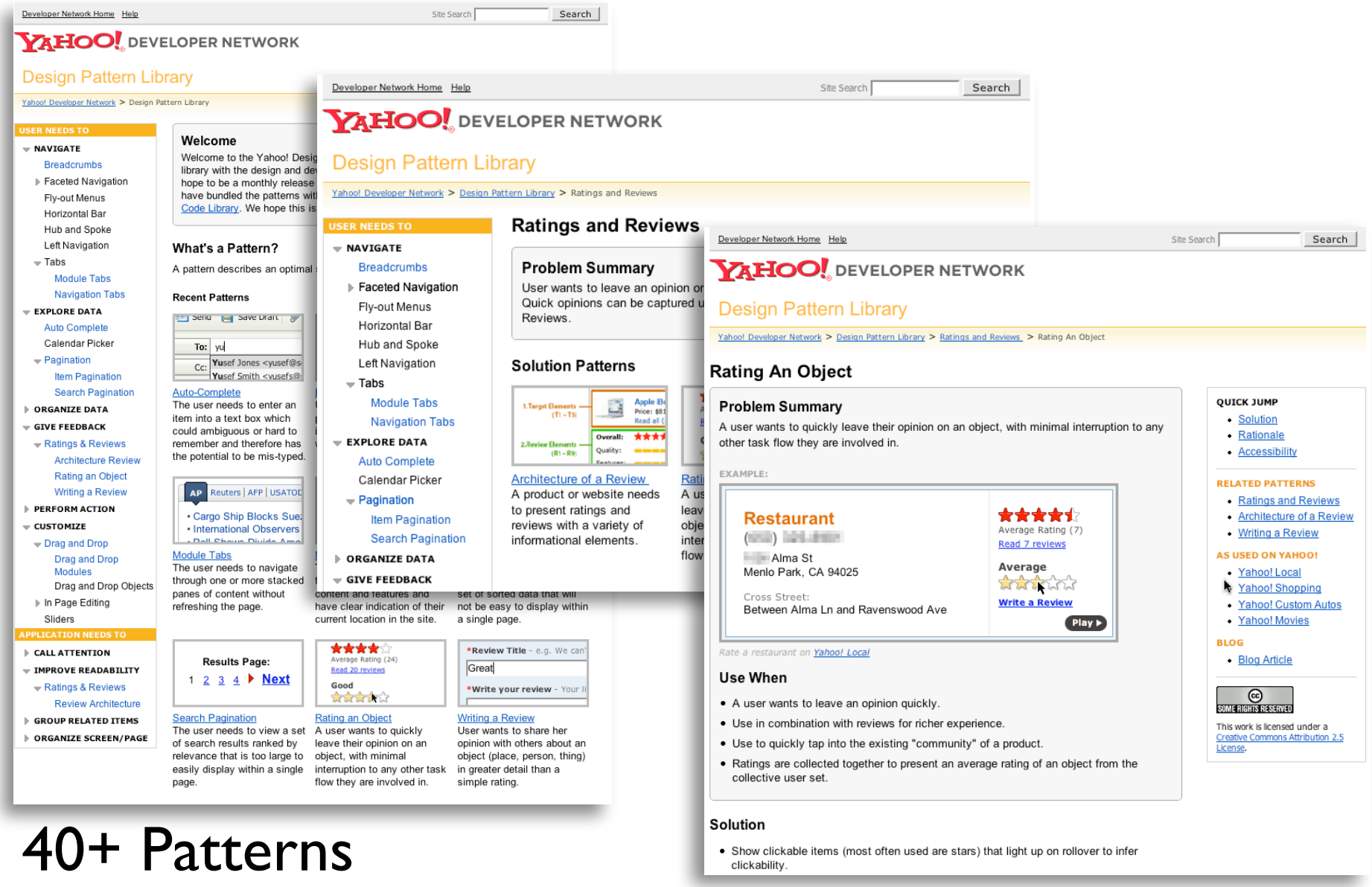
Pattern Taxonomy

http://tr.im/ly6E



Yahoo! Pattern Library

http://developer.yahoo.com/ypatterns



40+ Patterns

Internal Yahoo! Pattern Library

Creators

Erin Malone

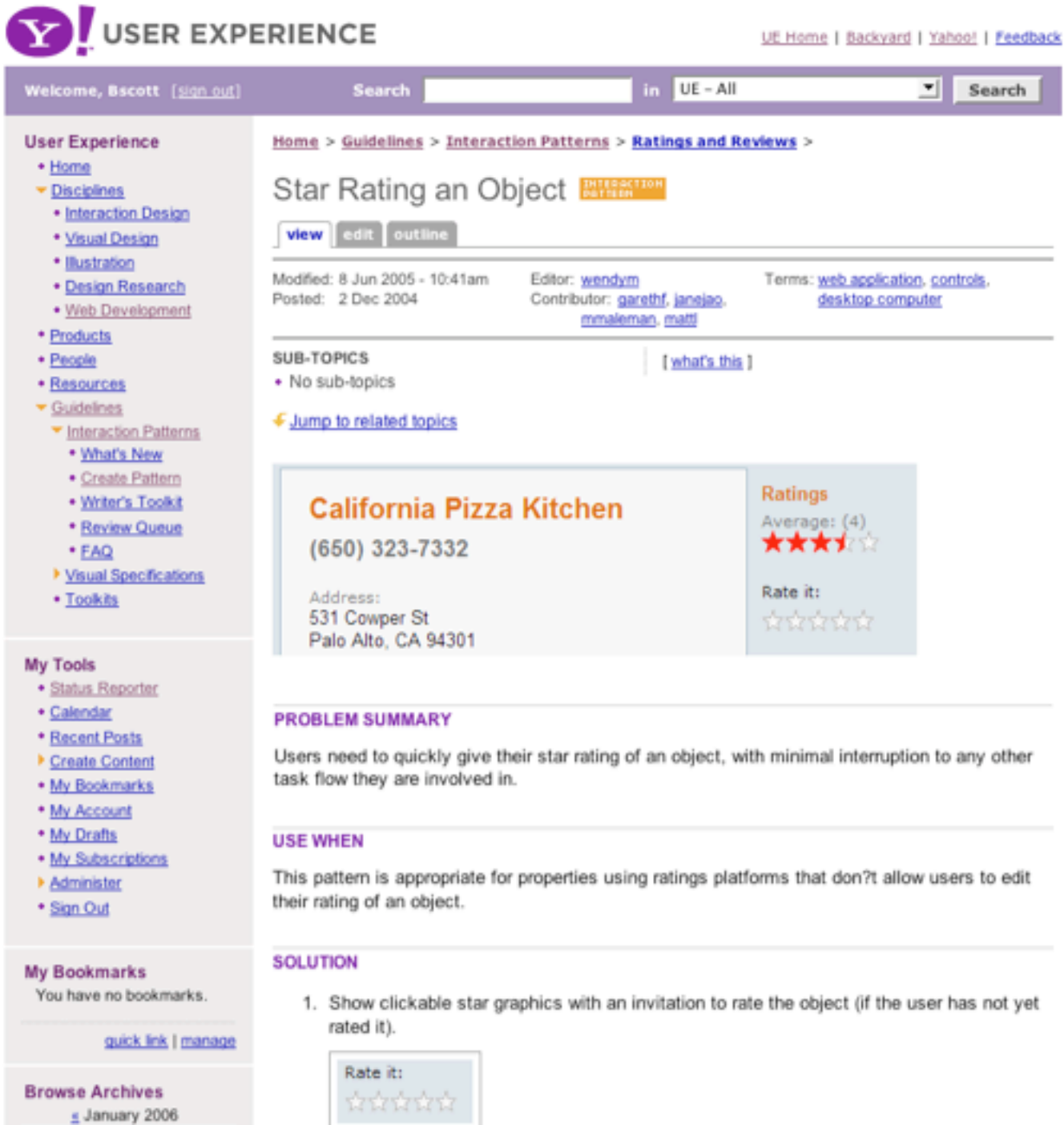
Matt Leacock

Chanel Wheeler

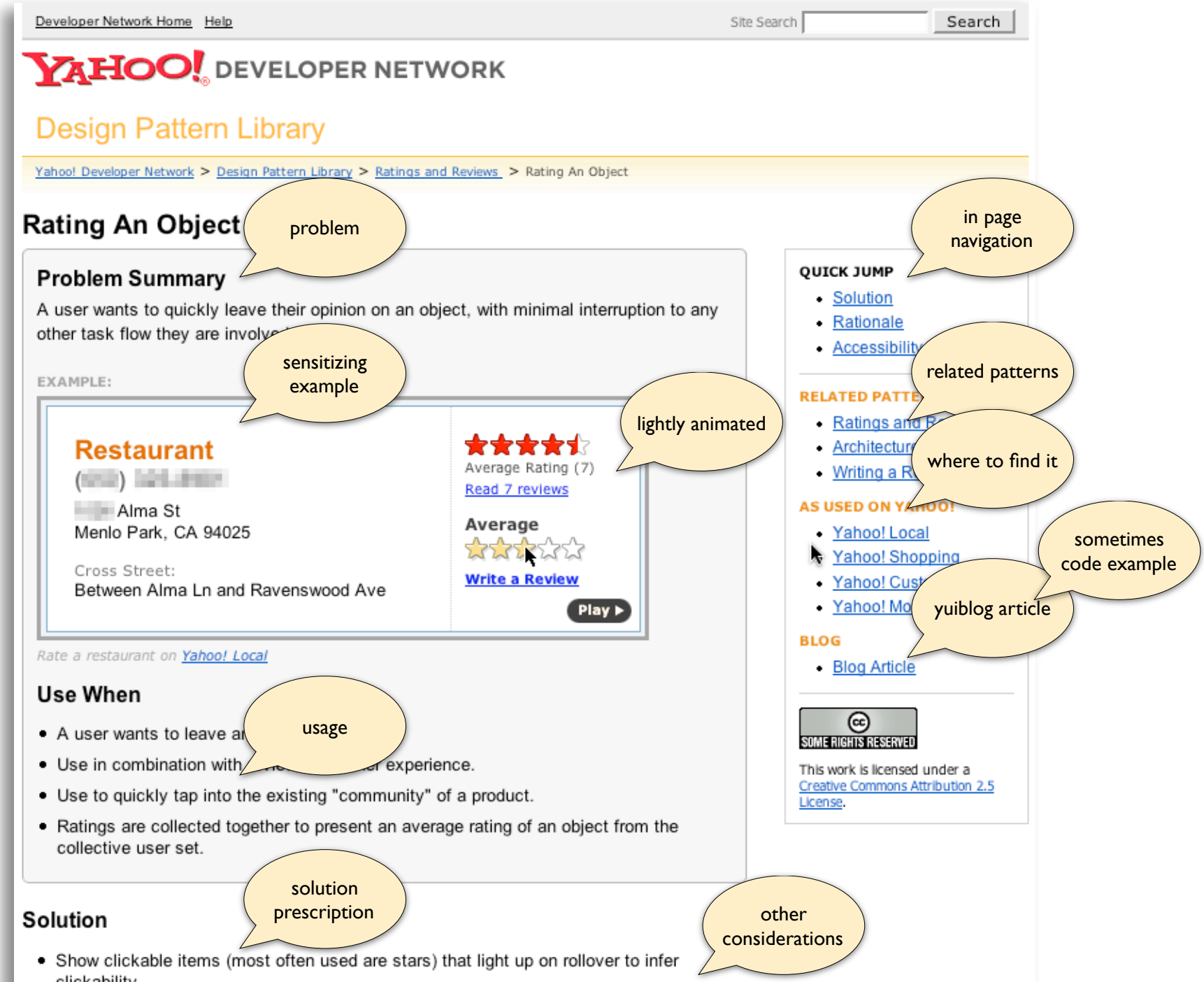
Pattern Curators

Bill Scott (2005-2006)

Christian Crumlish (present)



Yahoo! Pattern Library



Designing Social Interfaces

http://www.designingsocialinterfaces.com/
Erin Malone & Christian Crumlish

Principles

cute name: Social to the Core

Fundamental Principles

- Design for Everyone
  - Deliberately Leave Things Incomplete
  - Pave the Cowpaths
  - Strict vs. Fluid Taxonomies
  - Palimpsest
- Talk Like a Person
  - Conversation
  - Self-Deprecating Error Messages
  - Ask Questions
  - Your vs. My
  - No Joking Around
- Be Open
- Be a Game
- The Ethical Dimension
- Cargo Cult (antipattern)
- Marketing
  - Monetize
  - Underpants Gnomes
- *what other high-level principles are we missing?*

Self

Engagement

cute name: You're Invited

- Sign Up or Registration

Activities

cute name: Where's the Action?

Collecting

cute name: Hunters Gather

- Collecting
  - Saving
  - Favorites
  - Displaying
  - Add / Subscribe
- Tagging
  - Tag an Object
  - Find with Tags
  - Tag Cloud

Sharing

cute name: Potlatch

- Sharing
- Tools for Sharing
  - Bookmarklet
  - Share This
  - Activity Streams
- Direct Sharing
  - Send This
  - Casual Privacy
  - Share Application
  - Give Gift
- Public Sharing
  - Many Publics

Community

cute name: One of Us, One of Us"

Personal Connections

cute name: We Need to Talk"

- Relationships
  - Relationship terminology (friend, family, fan, follower, contact, colleague, connection, cohort)
  - Find People
    (Browsing for people / Friends of friends. Searching for people, Finding friends from Email or IM Buddy Lists, Recommendations)
  - Adding Friends
    - (Confirming Friendship, One-Way Following, Ignore Me)
    - Implicit & Explicit Relationships
    - Fans and Fame
  - Circle of Connections
  - Publicize Relationship
  - Unfriending

Fluid OSDPL

http://uidesignpatterns.org/designPatterns

Fluid OSDPL Open Source Design Pattern Library

Open Source UI Design Patterns

Home › Design Patterns › All Design Patterns

All Design Patterns

Register

Quick and easy! Create patterns and join discussions on draft patterns! Go here to Register

Login

Already a member? Go here to Login now.

Browse Patterns

- Content Management
- Information Organization
- Input Forms
- Navigation
- All Patterns

Top Rated Patterns

- Comprehensive File Upload ★★★★½
- Drag and Drop – Layout Preview ★★★★☆

	Category	Pattern	Design Problem
	Content Management	Comprehensive File Upload	While interacting with a remote service, the user needs to upload one or more files, and would like t do so without disturbing or leaving the current context of interaction.
	Content Management	Simple File Upload	The user needs to upload a single file and does no need any additional information or functionality during the upload.
	Information Organization	Drag and Drop	The user needs a way to visually change the order manipulate the position of elements on the screen.
	Information Organization	Drag and Drop – Layout Preview	User needs a way to visually preview the new layou of a group of items after one item is dragged to a new position.
	Information Organization	Item Pagination	The user needs to view a large set of data that cannot easily be displayed in one chunk.
	Information		**A needle in a haystack.** A list contains enough ite so that a user may find it difficult to locate the iten

Accessibility Considerations

- Provide keyboard-only equivalents of mouse-based actions. Keyboard accessibility can be facilitated by providing keyboard-only equivalents of "drag and drop" functionality. Suggested keystrokes for applications are described in the sub-patterns.
- Describe how the feature works using the keyboard. A description of how the drag and drop operation works with the keyboard should be provided, i.e., "After selecting the object using the tab key, move the object by pressing 'Control' in combination with the relevant arrow key." Ideally, this information will be visible to all users, so that persons who are sighted but don't use a mouse will also benefit.
- Provide additional detail. Additional detail of how the feature works can be provided by users clicking on a nearby "i" or "?" button, i.e., "Objects replace the location of the existing item, causing it to move one cell over."
- Make Assistive Technology (AT) users aware of object positions. AT users must be made aware of the position of objects relative to one another. This can be done by placing objects within a borderless table, transparent to sighted users, but with column and row headings for persons using AT. They should also be told if the operation has been completed successfully. This message can be hidden from sighted users.
- Include correct *ARIA* role markup. Including correct ARIA role markup within your HTML is a way to ensure that Accessibility Technologies are able to interpret the layout and context of your DnD interface. Below is an example of ARIA markup for a draggable grid-cell. The cell is represented as an HTML DIV element, and the *aaa:grab* attribute specifies to ATs that the item is draggable.

```
<div rsf:id="scr=ignore" class="orderable" id="cell::13:"
xhtml10:role="wairole:gridcell"
aaa:selected="true"
aaa:readonly="false"
```

Quince Pattern Explorer

http://quince.infragistics.com

Sign In

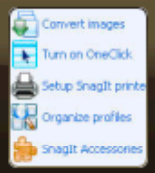
Search

keywords

Quince

ALL PATTERNS

CLEAR A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



Action Links

Use links instead of buttons to minimize visual noise, conserve screen real estate, or to contrast with buttons to indicate importance or precedence.

EXPLORE RELATED

Active Filtering

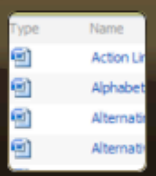
Enable people to change filters on a large set of information and see the results actively update as they do so.

EXPLORE RELATED

Alphanumeric Filter Links

Show a list of alphabetical links that filter the list with the words that start with the selected character.

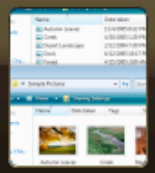
EXPLORE RELATED



Alternating Row Colors

Alternate the background color of rows to subtly differentiate each row from surrounding rows.

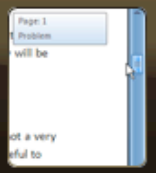
EXPLORE RELATED



Alternative Views

Create multiple, alternative views of the same interface that address competing design needs.

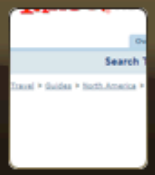
EXPLORE RELATED



Annotated Scrollbar

Provide an indicator of significant sections in or near the scrollbar.

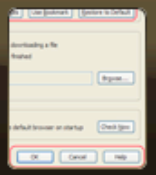
EXPLORE RELATED



Breadcrumbs

Provide a list of side-by-side links that give users a sense of where they've been or where they are and how it fits in the overall structure of your site or application.

EXPLORE RELATED



Button Groups

Display related commands using buttons that are grouped together and similarly aligned and styled.

EXPLORE RELATED

Cascading Lists

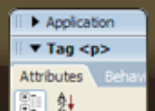
Show a few lists next to each other that allow users to drill down into hierarchical information.

EXPLORE RELATED

Clear Entry Points

Give people a set of clear entry points into the application or Web site based on their most common tasks or destinations.

EXPLORE RELATED



Closable Panels

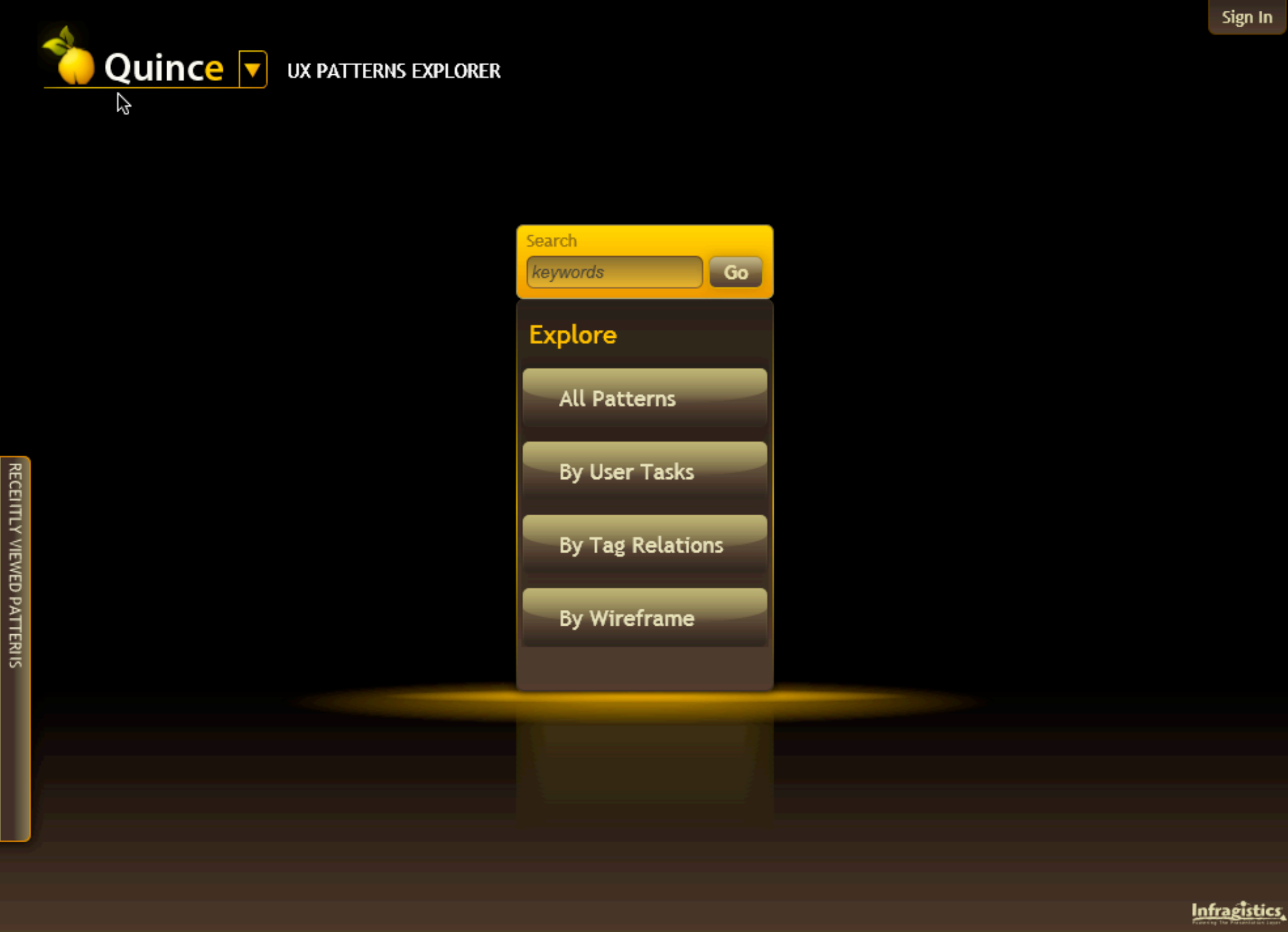
Put some or all of your ancillary things, such as tools, controls, or extra information, into distinct panels that users can close or open individually as needed.

Command Area

Group commands together into a unified area of the interface.

Filter these by:

- Help
- Hierarchy
- Information Archite
- Information Design
- Interaction Design
- Layout
- Map
- Masked Edit
- Multiple Selection
- Navigation
- Notifications
- Numeric Input
- Page Layout
- Rating
- Search
- Selection
- Selector
- Tagging
- Text Input
- Tree
- Usability
- Visual Design

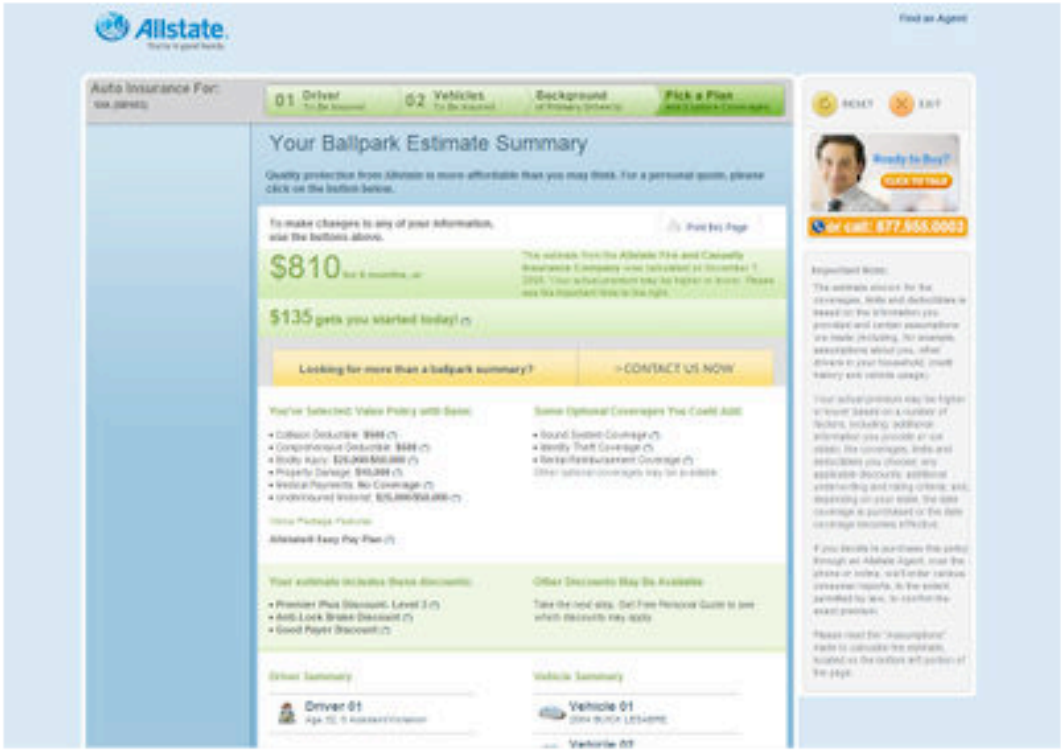

Sign In
Quince
UX PATTERNS EXPLORER
Search
keywords
Go
Explore
All Patterns
By User Tasks
By Tag Relations
By Wireframe
RECENTLY VIEWED PATTERNS
Infragistics

Blink Design Library

blink design library

Button Identity Disorder

A colleague sent me this example of "button identity disorder." *(Click to see full-sized image)*



Some buttons on this page are obvious, for example "Click to Talk." What is less obvious is the function of dimensional-looking yellow bar across the middle of the page. The first set of text ("Looking for more than a ballpark summary?") is not

blink

About

Blink Interactive is a Seattle-based user experience consulting firm. Our design library is an informal collection of design examples with commentary.

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Categories

Add to Cart Alerts Back Bad Blog Browser Browse Back Buttons Calendar Cancel Card Stack Clea Button Confirmation Message Contextual Menu Customize Dates Dialog box Downloading Downtime Drag-and-drop Drop-down Menu Dynamic Dynami Menus Ecommerce Edit Email Entry Suggestions Errors Expand/Collapse Fade Feature comparison Feedback Field Help Fields Filmstrip Navigation Filtering Floating page elements Fluid Display Forms Frames Global Navigation Help Hide/Show History Home page Inactive Page

http://interface.fh-potsdam.de/infodesignpatterns/patterns.php

Information Design Patterns

News | Patterns | About | Contact | Community

Pattern Overview

Category Filter

Display Patterns

- [ ] Correlations (2)
- [ ] Continuous Quantities (4)
- [ ] Discrete Quantities (6)
- [ ] Proportions (2)
- [ ] Flows (2)
- [ ] Hierarchies (2)
- [ ] Networks (3)
- [ ] Spatial Configurations (2)

Behavior Patterns

- [x] Navigation (6)
- [x] Filtering (5)
- [x] Arrangement (4)
- [x] Exploration (2)
- [x] Transition (1)

Interaction Patterns

- [ ] Boolean Selection (3)
- [ ] Linear Adjustment (2)

Simple Zoom
When you have large and detailed datasets at...

Local Zoom
While the conventional Simple Zoom pattern is...

Panning
In maps and network diagrams, the available...

Timeline
An timeline is a simple navigation tool that...

Linked Multiples
When the data you to display consist of multiple...

Overview plus Detail
When you display a large infographic, such as a...

Layering
Too many information in one screen easily...

Active Objects
When dealing with large sets of information that...

Boundary Filter
If the user explores a large set of data items,...

Facet Browsing
Traditional linear search methods often prove...

Dynamic Query
The standard process of a search query involves...

Selective Arrangement
Most data structures can be depicted in more than...

Sortable Columns
When displaying large data amounts in tabular...

Custom Dimensions
When displaying statistical information in...

Isolated Comparison
When displaying multiple data items of which each...

Detail on Demand
In some situations, mostly when displaying data...

Datatip

State Transition

Preview

http://tr.im/lxdu

Interface Design Patterns

Interface Design Patterns

E-Mail
Password
Login
New Account

Patterns | Members | Knowledge Base | About | search pattern

Pattern of the moment

Area Calculation

Filter patterns by

Category

- Graphical Design Patterns [107]
- Application-dependent Patterns [0]
- Interaction Discourse Patterns [33]
- Scenarios [3]
- InfoViz Patterns [48]
- GeoViz Patterns [29]

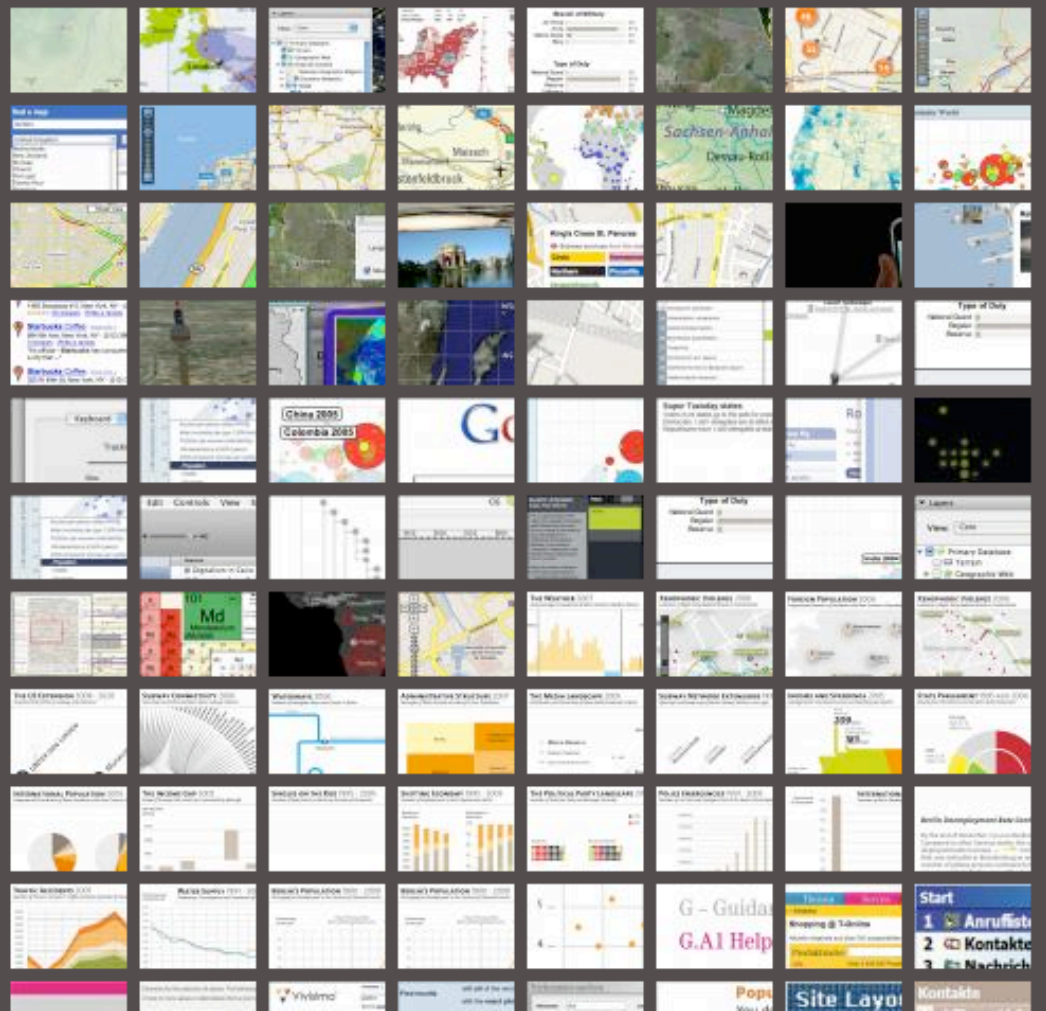
Devices

- [x] All
- [ ] Smartphone [112]
- [ ] MDA/PDA [120]

Patterns overview [220]

View patterns as: Thumbnails

Sort by: Submission Date



Pattern preview

Rollover thumbnails to get more information

Search Patterns

http://www.findability.org/archives/000194.php
Peter Morville

findability.org

Search Patterns

I'm working on a new book (and talk) about the future of search, and I've created a seed collection of patterns and examples to support my research.

Site Search (Small)
1 set | Edit Mosaic

Site Search (Large)
2 sets | Edit Mosaic

E-Commerce
2 sets | Edit Mosaic

Web Search
3 sets | Edit Mosaic

Social Search
2 sets | Edit Mosaic

Enterprise
1 set | Edit Mosaic

Libraries
3 sets | Edit Mosaic

Vertical Search
2 sets | Edit Mosaic

Media Search
5 sets | Edit Mosaic

Personal
2 sets | Edit Mosaic

Local Search
2 sets | Edit Mosaic

Mobile Search
1 set | Edit Mosaic

Spime Search
3 sets | Edit Mosaic

Advanced Search
2 sets | Edit Mosaic

Auto-Suggest
2 sets | Edit Mosaic

UI Pattern Factory

http://uipatternfactory.com/

UI Pattern Factory

Patterns | What? | Pattern Ideas | Feedback | Blog

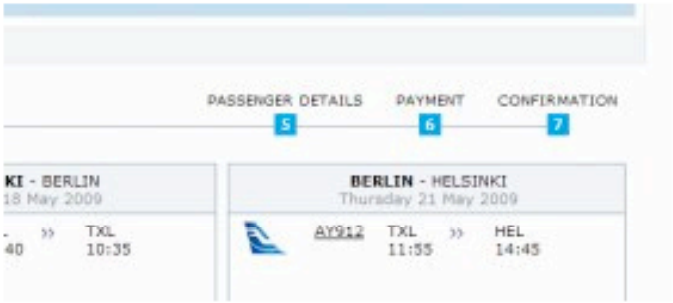
Fresh and Illustrative User Interface Design Patterns

UI Pattern Factory is a mix of user interface design pattern library and UI gallery. It is a place to find user interface best practices, get design inspiration, and share design solutions with others. Our patterns are always fresh with tons of examples, and you can easily add more using Flickr.

Check out also our Pattern Ideas-forum where you can suggest new patterns and vote on other users' ideas!

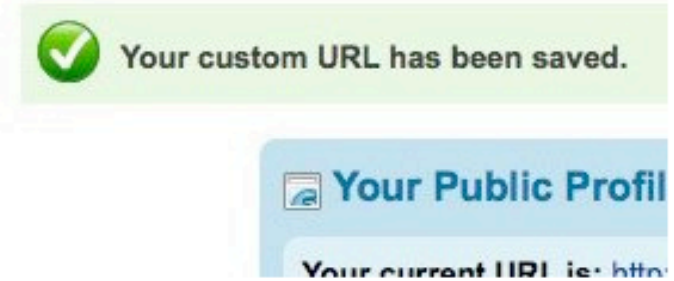
Wizard

Guide the user through a task with several steps by showing a clear path to completion.



Same-Page Feedback Messages

Show a feedback message in context after successful action or if something went wrong.



Refining Search

Information Dashboard

Type and Wait to Search

Tag Cloud

actions browsing buttons confirmation contextual-tools controls data visualization doing-things edit facets feedback fill-in finding-things form graphs grouping headers help information information-architecture information-design input-fields inputs layout list-items lists live menu messages navigation organization organizing process progress scrolling search sections selection-dependent-inputs shopping showing-data validation visual-design visual-hierarchy

UI Pattern Factory Flickr Pool

UIPatternFactory.com

Group Pool | Discussion | 133 Members | Map | Invite Friends

Share This

Group Pool (263 items | Add photos or video)

From Janne L

From Janne L

From Janne L

From Janne L

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From Janne L

From Janne L

» More

UI Patterns.com Library

UI Patterns
User Interface Design Pattern Library

DESIGN PATTERNS | SCREENSHOT COLLECTIONS | USER SETS | BLOG | RESOURCES

DESIGN PATTERNS

Displaying recent design patterns **1 - 10** of **47** in total Next >

Wizard

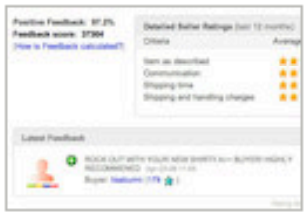
The user wants to achieve a single goal which consists of multiple dependable sub-tasks.

Adaptable View

You want to let the site's presentation of content fit the specific needs of the user.You want to let the site's presentation of content fit the specific needs of the user.

Image Zoom

The user wants to zoom in on an image to view the details in a higher image resolution.



Rate Content

The user wants to promote a specific piece of content in order to democratically help decide what content is of higher quality.

Input Feedback

Account Registration

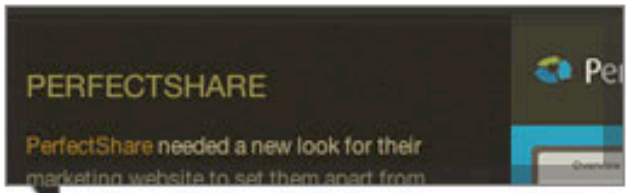
Pattern Tap

http://patterntap.com/collections/

COLLECTIONS

45 Collections

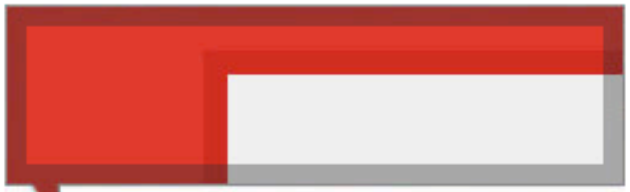
404 Pages 65



Articles 146

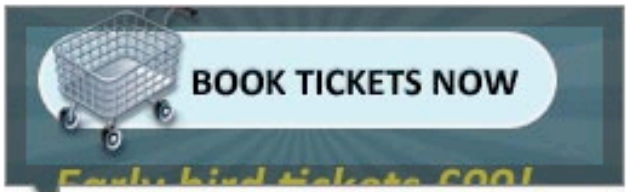
Audio 20

Backgrounds 220

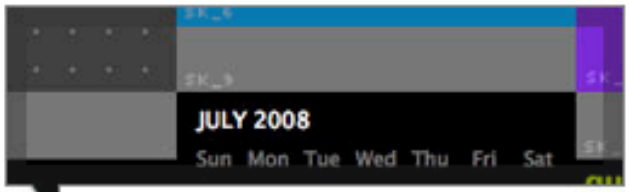


Borders 72

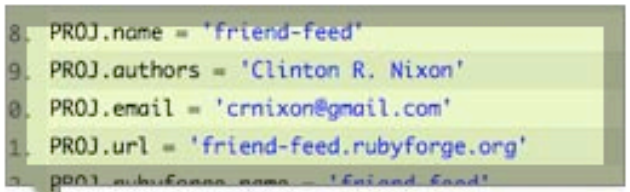
Breadcrumbs 15



Buttons 180



Calendars 63



Code 9

Comments 36

Contact 69

~45 collections,
~5000 screenshots

Konigi

http://konigi.com/

KONIGI

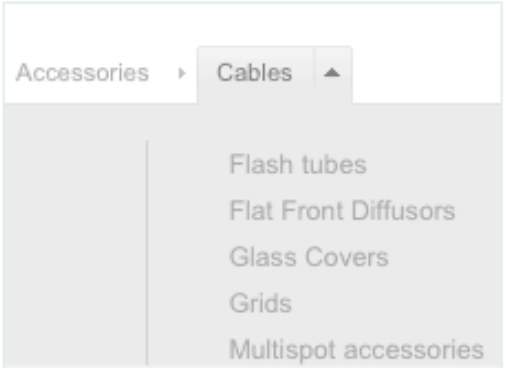
HOME | BLOG | SHOWCASE | TOOLS | WIKI | STORE

Latest | Interface Design | Visual Design

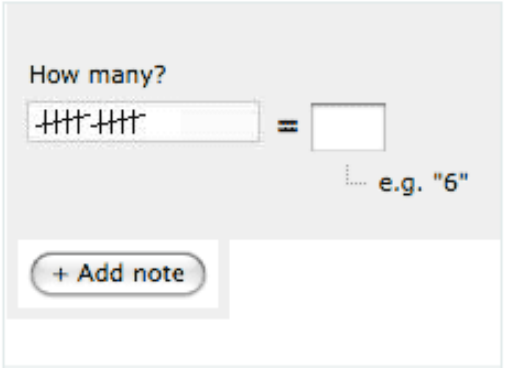
Wireframe & Storyboard Notep
available now via Amazon.

New Featured Interfaces

LATEST FEATURED SUBMISSIONS POPULAR TAGS TITLES (A-Z) POST AN INTERFACE



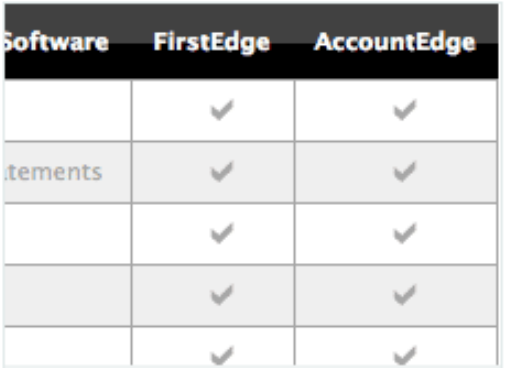
Profoto Breadcrumbs



Interaction-Design.org Tickmark Captcha

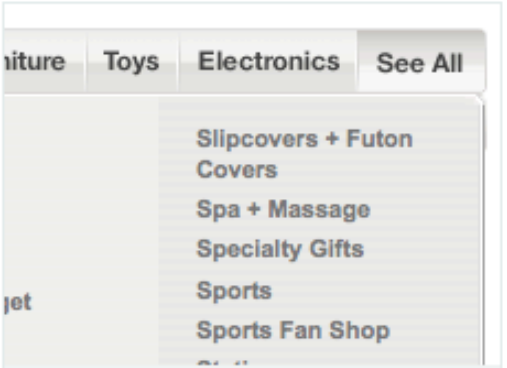
Adobe Product Comparison Table

Basecamp Product Comparis
Table

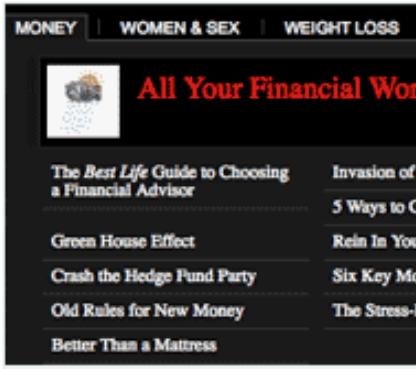


MYOB Product Comparison Table

Quicken Product Comparison Table and Wizard



Target Drop Down Menus



Best Life Magazine Drop Dow
Menus

Flickr. Factory Joe

http://tr.im/lxfR

factoryjoe > Collections

Design Patterns

Reuse, recycle, but don't reinvent the wheel unless necessary.

by Brian Christiansen at UI Engineering. Via.

This collection captures findings of consistent, unique or interesting interfaces and design flows from across the web.

404
151 photos

Adding Friends
86 photos

Alerts, Messages
132 photos

Blog editors
4 photos

Calendar Views
13 photos

Drag'n'drop Interfaces
20 photos

Comment Form Design Patterns
21 photos

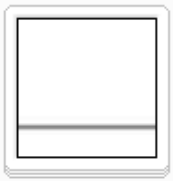
Footers
81 photos

Friend Request Messages
123 photos

Headers
141 photos

Login Forms
484 photos

Navigation
14 photos



Pagination
16 photos

Privacy, Publicity and...
29 photos

Shopping & Checkout
59 photos

Tab Design Patterns
228 photos

Flickr. Design Solutions

http://tr.im/lxfZ

guspim > Collections > [Design]

[Design Solutions]

I've a confession to make: I'm addicted to screenshots, it is stronger than me, I can't help it...

I'm a user experience designer focused on making the Web a better place.

The two main projects being developed at my company - Enough Pepper - are Survs, an online survey tool, and xSort, a card sorting application running on Mac OS X.

Digital ID

Blog
Enough Pepper
Survs
xSort
Linkedin
Twitter
guspim store
More...

[404]
40 photos

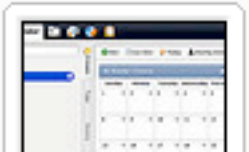
[Autocomplete]
4 photos

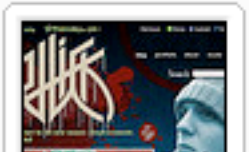
[About pages]
62 photos

[Bars]
14 photos, 1 video

[Buttons]
128 photos

[Breadcrumbs]
18 photos





Flickr. ui/ux collection

http://tr.im/lxgE

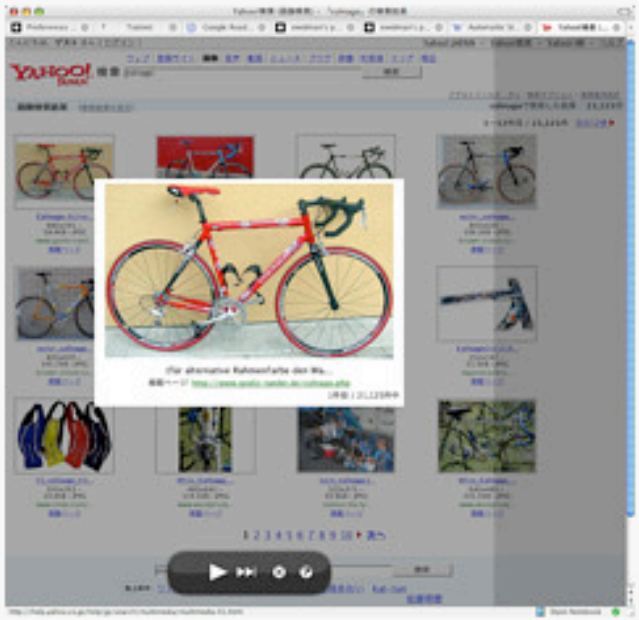
soxiam · Sets

Slideshow

Share Thi

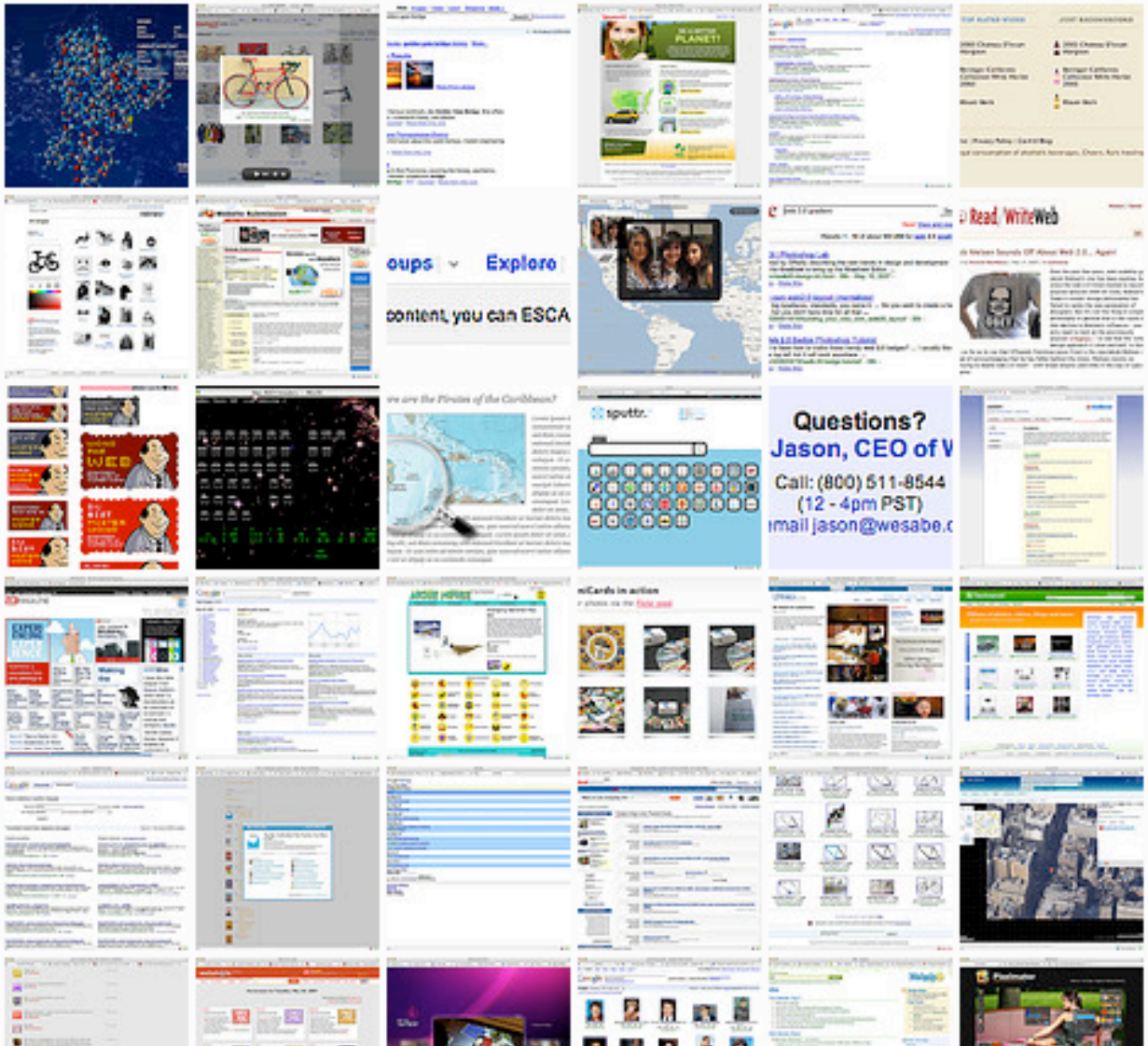
ui/ux

Thumbnails | Detail | Comments



680 photos | 2,307 views | Add a comment?

items are from between 16 Mar 2007 & 11 Jun 2007.



Flickr. Xian Collection

http://tr.im/lxgQ

xian > Collections

Pattern Gallery

Screenshots of examples of interaction design patterns for the Yahoo Pattern Library (YPL)

Terms of Service
3 photos

Carousel
28 photos

Vote to Promote
8 photos

Reputation
1 photo

Sign in to Participate
1 photo

Flickr. DWI Book Figures

http://tr.im/lxgV

Designing Web Interfaces > Collections

DWI: Figures from the Book

This collection contains all of the figures (565 images) from the Designing Web Interfaces: Principles and Patterns for Rich Interaction published by O'Reilly Media by Bill Scott and Theresa Neil.

This material is available for your presentations or other derivative works provided you respect the Creative Commons license and provide attribution to this work.

An attribution usually includes the title, author, publisher, and ISBN.
For example:

"*Designing Web Interfaces*, by Bill Scott and Theresa Neil, Copyright 2009 Bill Scott and Theresa Neil, 978-0-596-51625-3."

Principle One - Make it Direct
4 photos

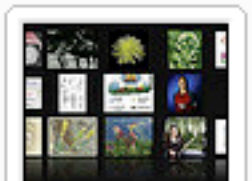
Chapter 1 - In-Page Editing
41 photos

Chapter 2 - Drag and Drop
76 photos

Chapter 3 - Direct Selection
31 photos

Principle Two - Keep it...
6 photos

Chapter 4 - Contextual Tools
50 photos



Flickr. DWI Screencasts

http://tr.im/lxh2

Designing Web Interfaces > Collections

DWI: Supporting Screencasts

For many of the figures it is helpful to see the actual interface in action. This collection contains screencast movies for some of the figures in the book. Additional screencasts that serve as examples for the chapter are also included.

Chapter 1 (SC) - In Page...
28 videos

Chapter 2 (SC) - Drag and Drop
1 photo, 37 videos

Chapter 3 (SC) - Direct...
5 videos

Chapter 4 (SC) - Contextual...
61 videos

Chapter 5 (SC) - Overlays
36 videos

Chapter 6 (SC) - Inlays
10 videos

Chapter 7 (SC) - Virtual Pages
39 videos

Chapter 8 (SC) - Process Flows
15 videos

Chapter 9 (SC) - Static...
6 videos

Chapter 10 (SC) - Dynamic...
14 videos

Designing Web Interfaces Site

http://designingwebinterfaces.com

Designing Web Interfaces

Principles and Patterns for Rich Interaction

All of the examples from the book are available on our companion flickr site. Below are the six design principles that organize the design patterns and best practices found in the book.

Make it Direct

Keep it Lightweight

Stay on the Page

Provide an Invitation

Use Transitions

React Immediately

Use Transitions

Animations, cinematic effects, and various other types of visual transitions can be powerful techniques to enhance engagement and communication.

Chapter 11. Transitional Patterns

Brighten/Dim
Change focus by brightening and dimming items.

Expand/Collapse
Transitions to open and close items.

Chapter 12. Purpose of Transitions

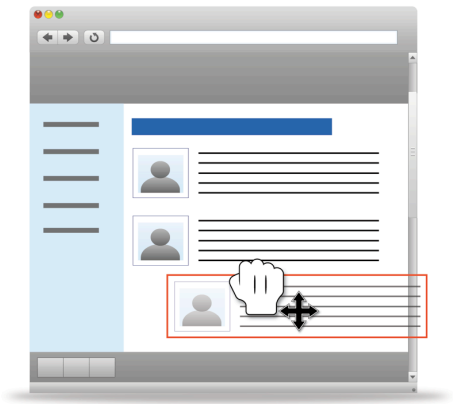
Slide In/Slide Out
Expose a slide out overlay.

Faceplate
Cross-fade between a main screen and configuration panel.

Design Principles

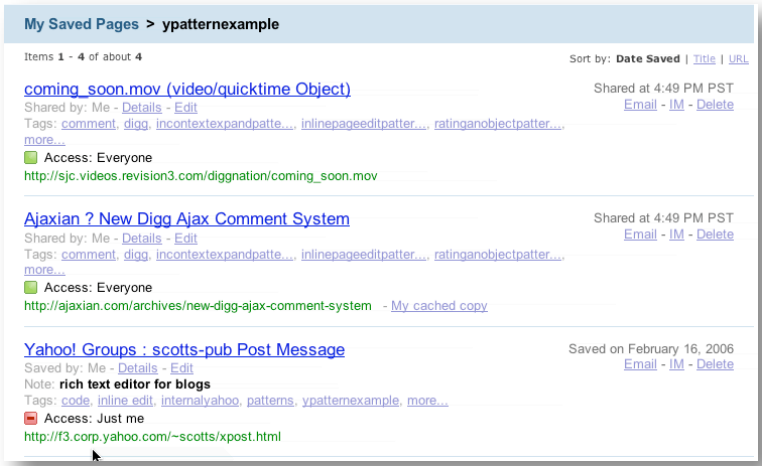
Six Design Principles

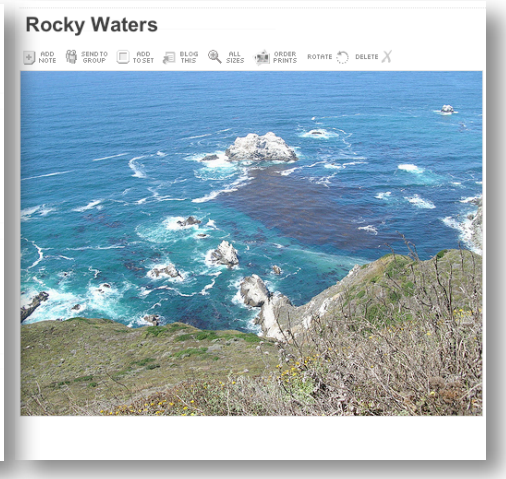
- Make It Direct
- Keep It Lightweight
- Stay on the Page
- Provide Invitations
- Use Transitions
- React Immediately



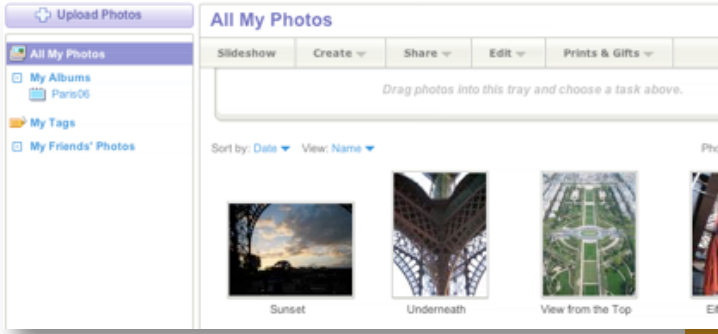
Make It Direct

Make It Direct

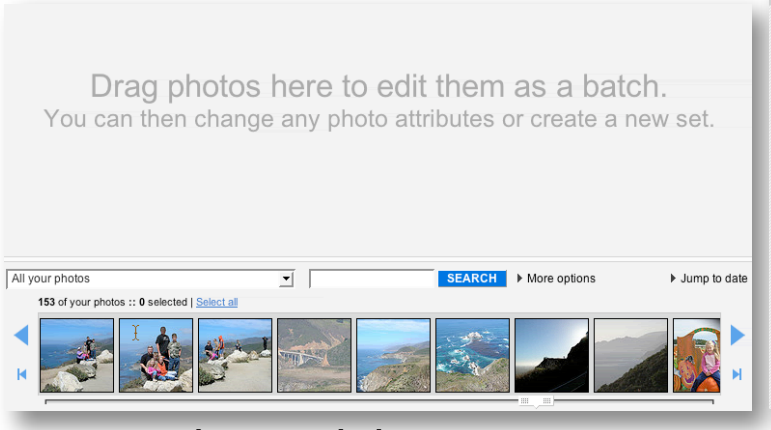


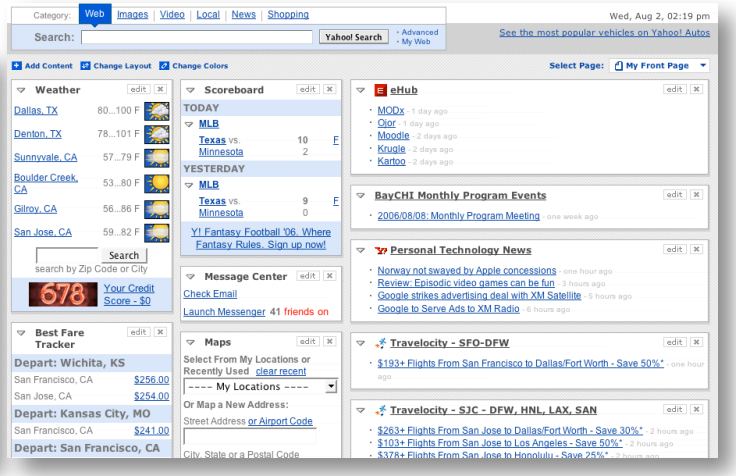


pattern. in-page editing.



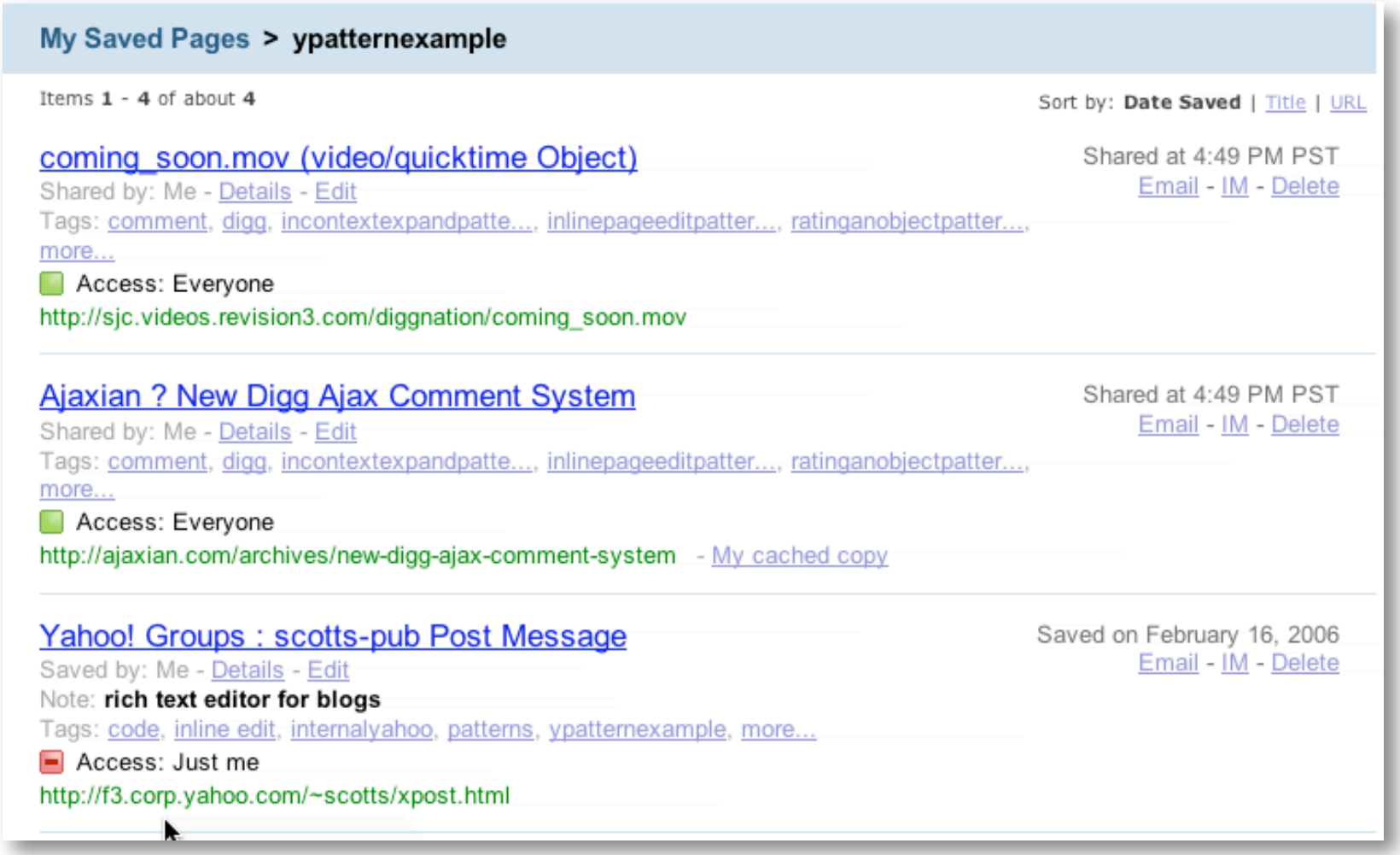
pattern. direct selection





pattern. drag and drop.

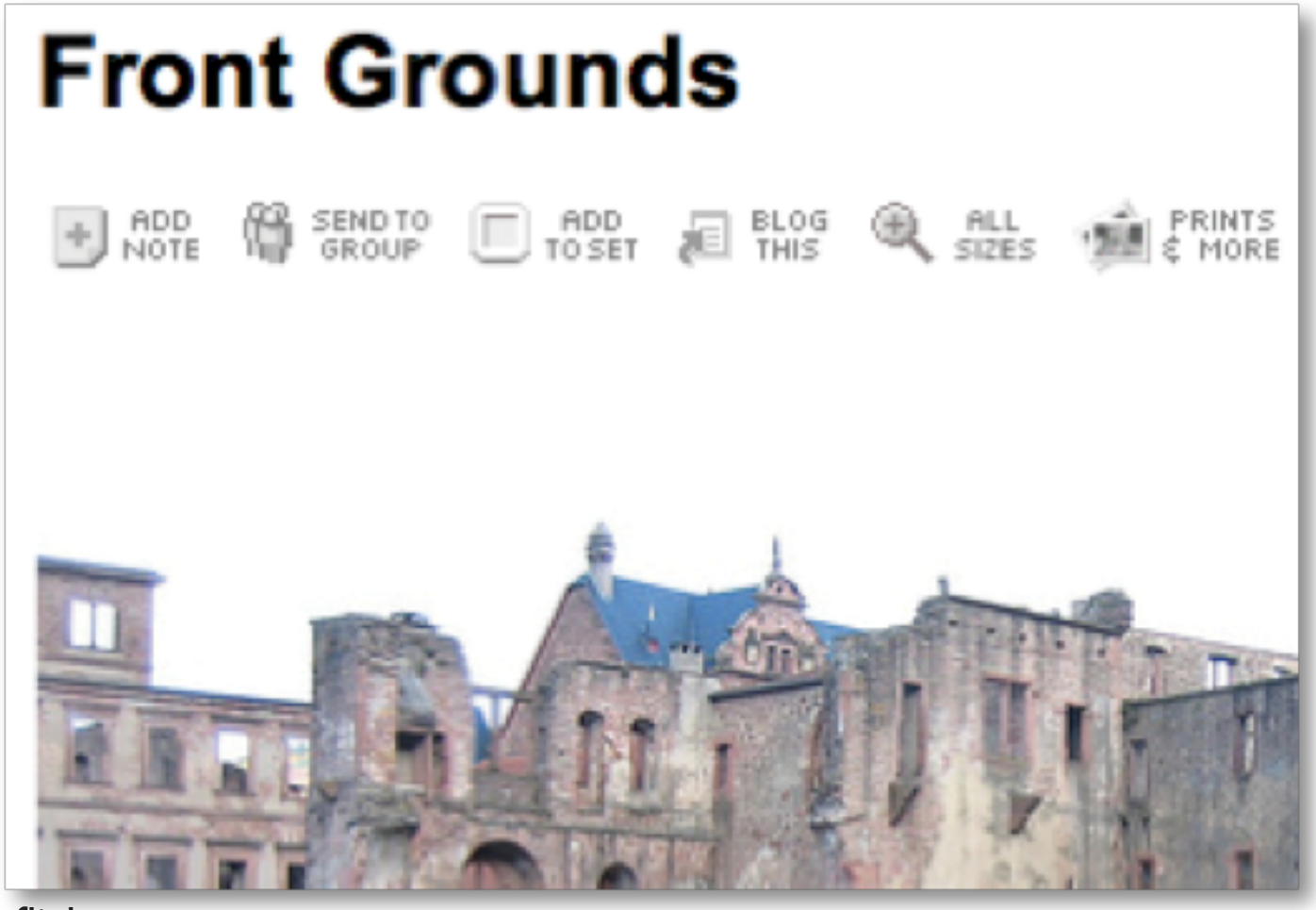
Make It Direct. **In-Page Editing.**



y! bookmarks

considerations

discoverability



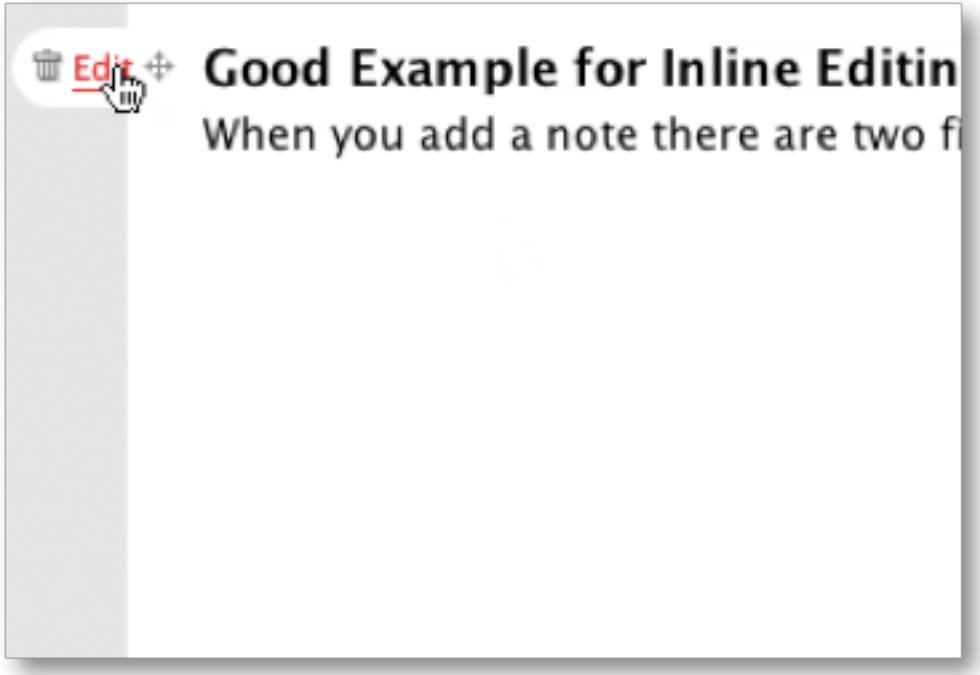
flickr

considerations

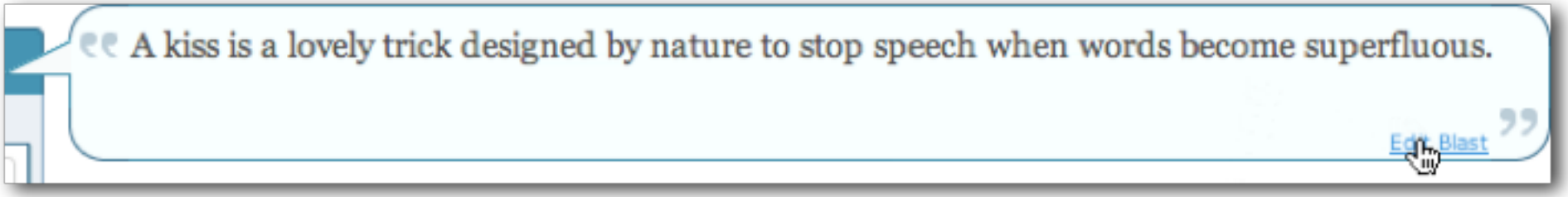
discoverability

complex editing

blending modes



backpackit. **complex inline editing**



Yahoo! 360 blast. **blending display & edit modes**

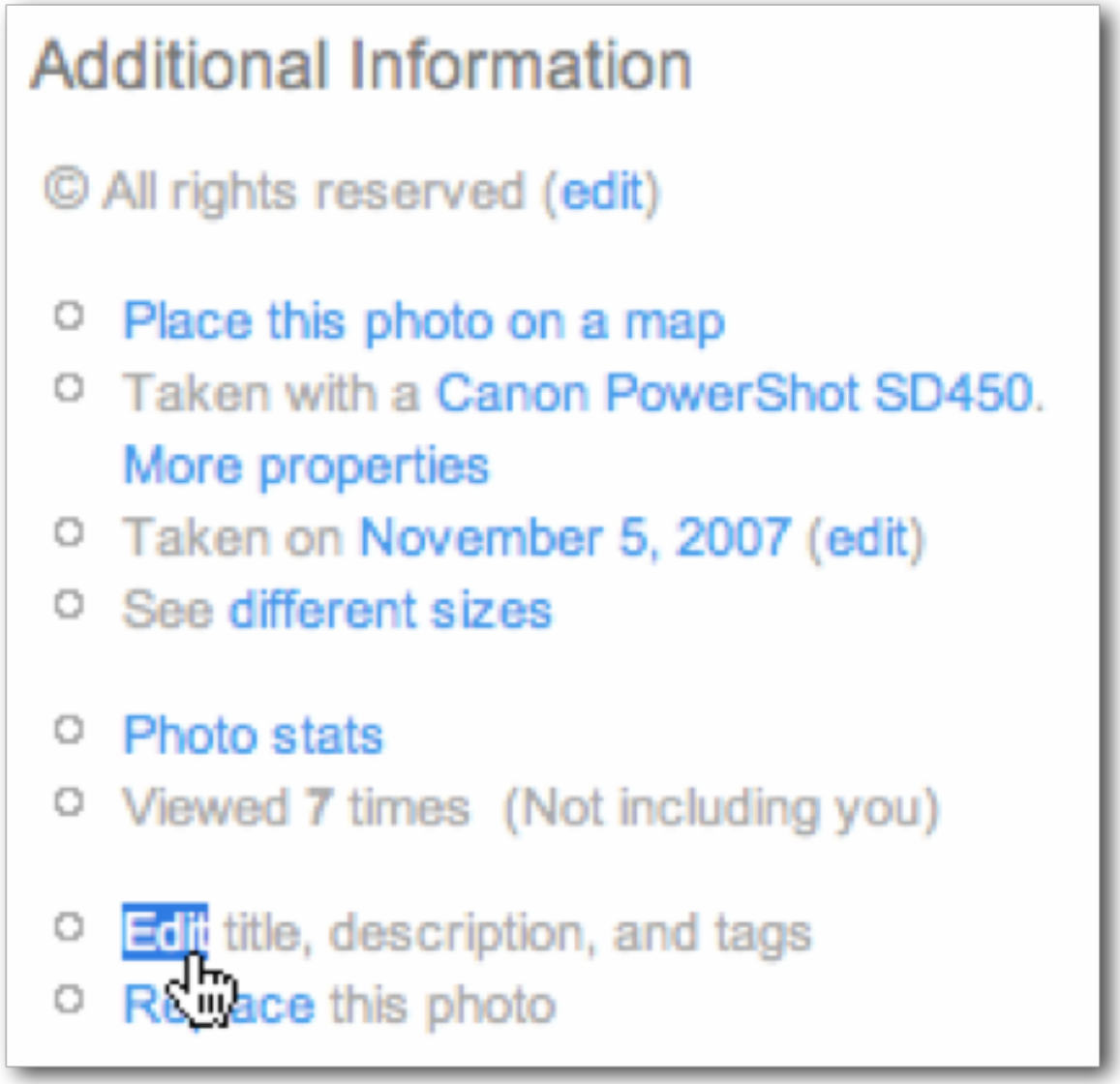
considerations

discoverability

complex editing

blending modes

accessibility



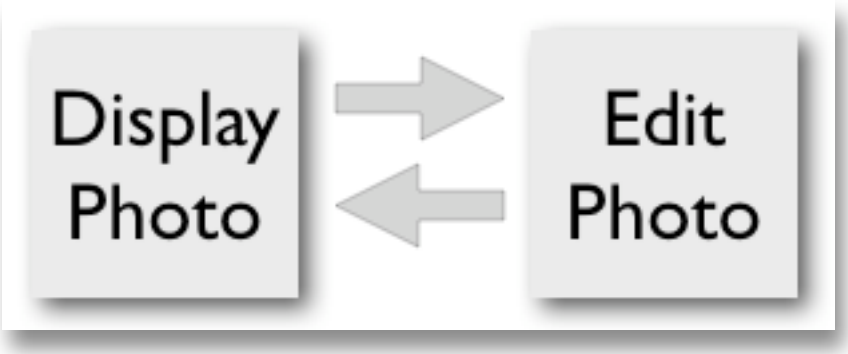
flickr. **alternate edit path**

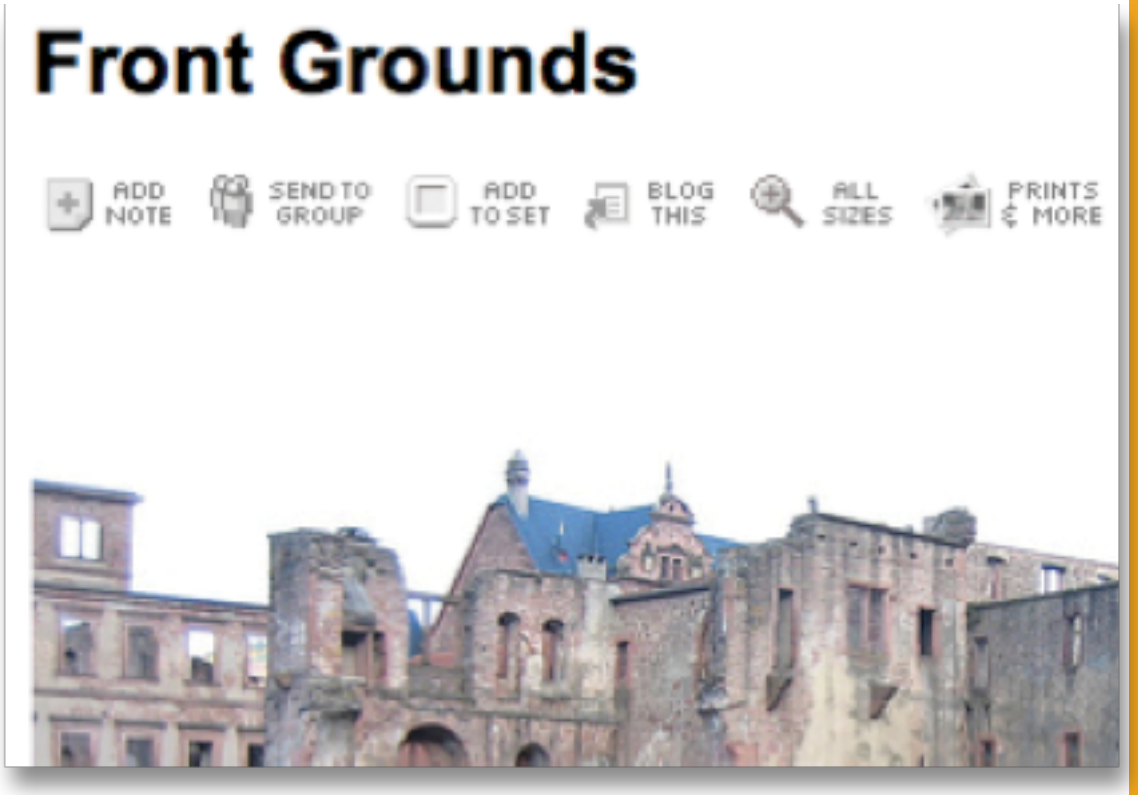
Guidelines

Allow input wherever you have output

Shorten the length of interaction

Make objects directly actionable





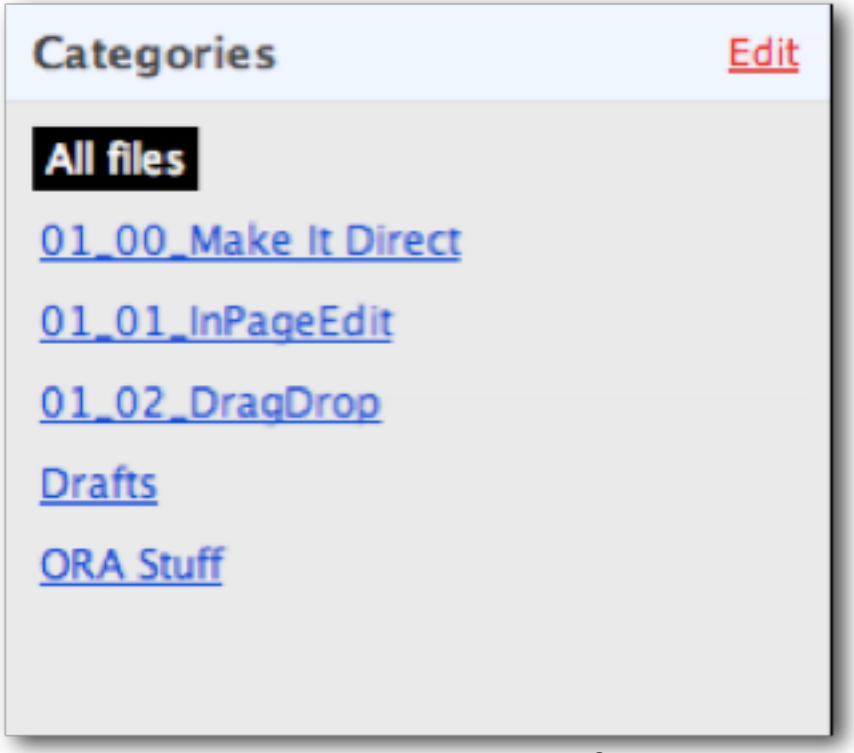
Flickr

group editing

symmetry of interaction

discoverability vs readability

iPhone. **non-symmetrical; readability**



basecamp. **symmetry of interaction**

"If readability is more important than editing
then keep the editing action hidden
until the user interacts with the content."

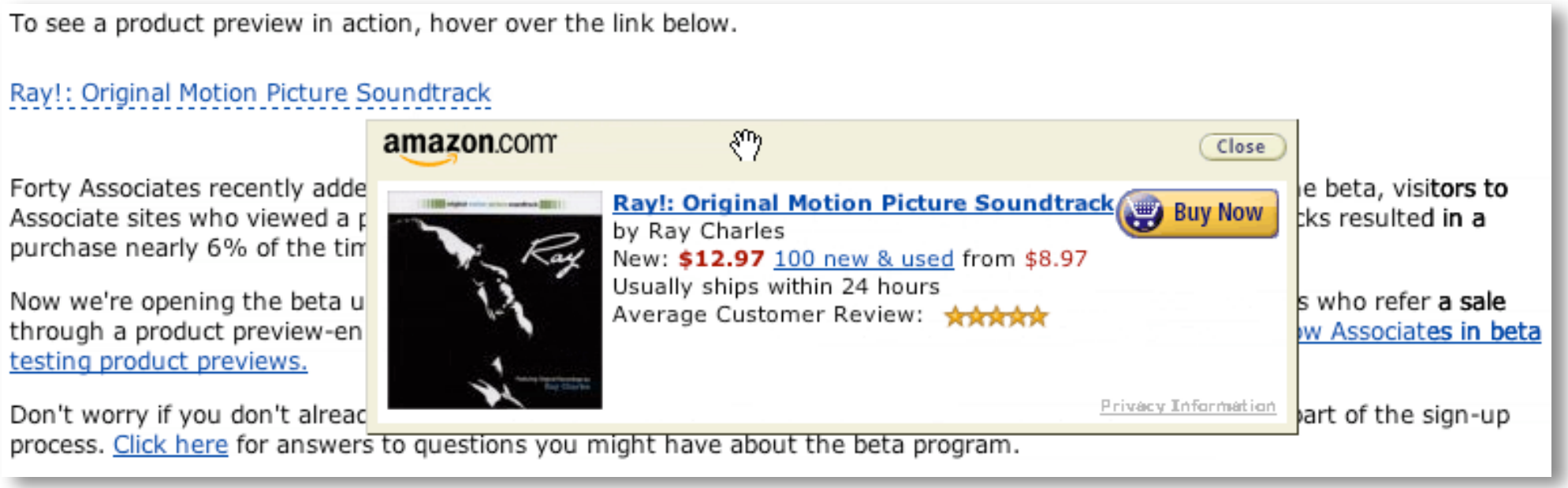
Activation

Mouse hover

De-Activation

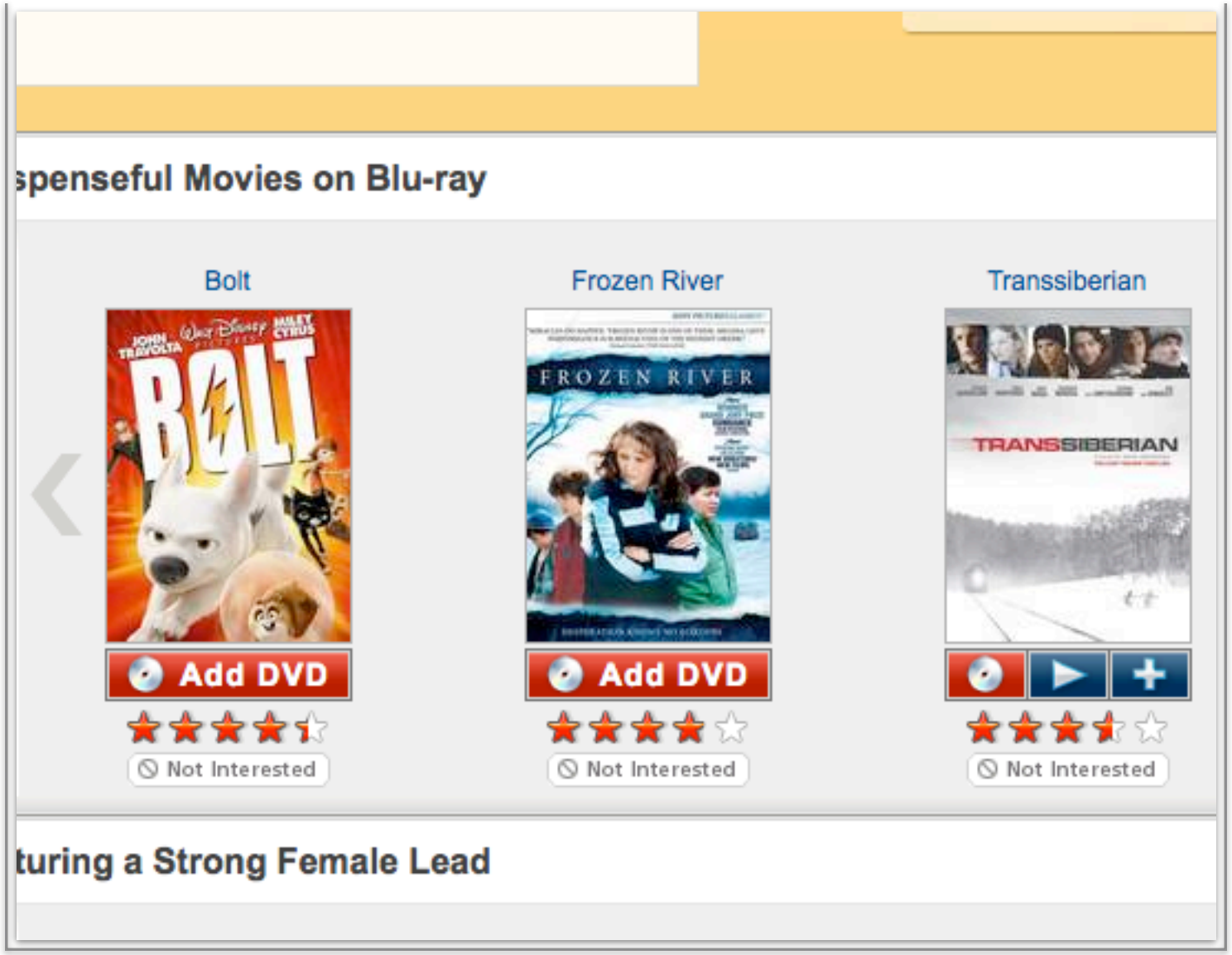
Locate close button

Click small target



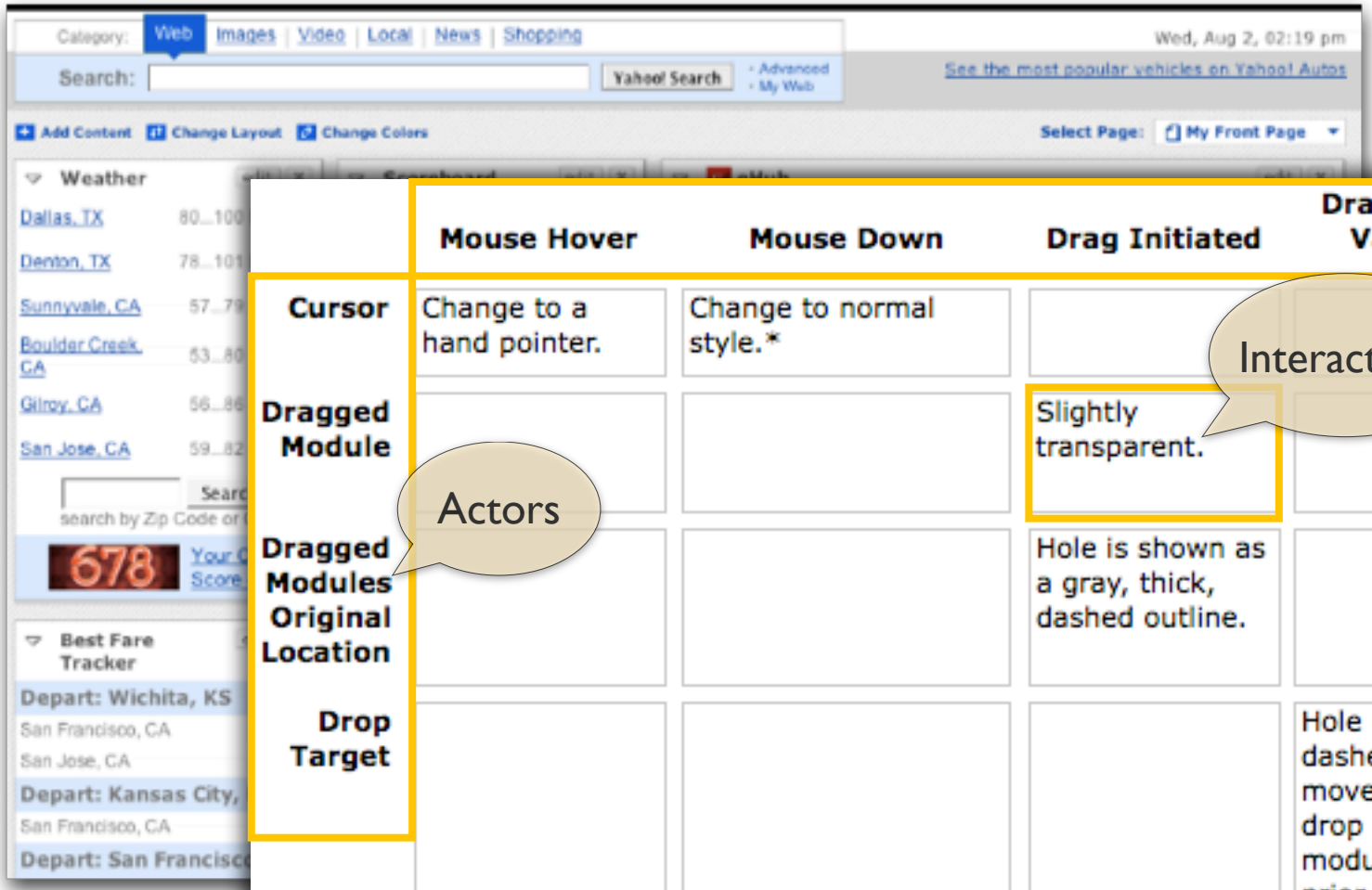
Amazon. **Associates Widget.**

Refactored. **Non-Symmetrical Interaction.**



Netflix. **Symmetrical Interaction**

take care of interesting moments



My Yahoo! **dra**

Moments

Interactions

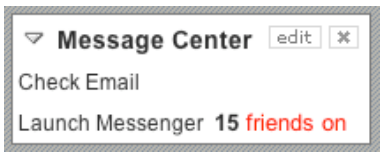
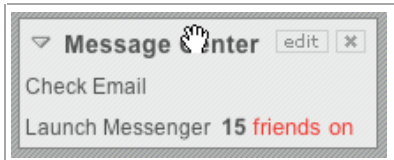
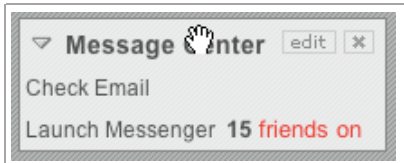
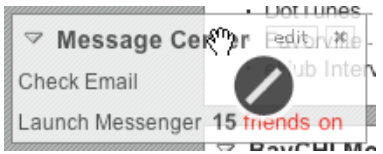
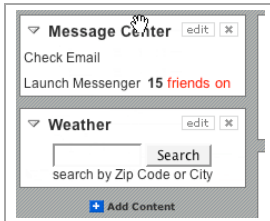
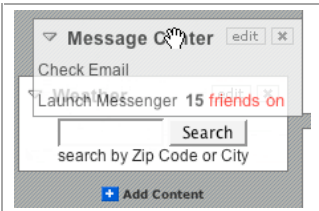
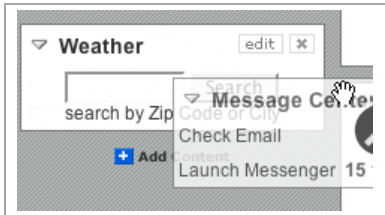
Actors

	Mouse Hover	Mouse Down	Drag Initiated	Drag Hovers over Valid Target*	Drop Accepted
Cursor	Change to a hand pointer.	Change to normal style.*			
Dragged Module			Slightly transparent.		Dragged module removed.
Dragged Modules Original Location			Hole is shown as a gray, thick, dashed outline.		Hole is removed.
Drop Target				Hole (gray, thick, dashed outline) is moved to the new drop spot. Other modules shift to close prior hole.	Module is placed in the new location.
Notes		** A better approach is to switch to a hand that looks like it grabbed the module.*	** Drag initiaties instantly on mouse down.*	** Triggers when the mid-point of the dragged object enters a valid drop target.*	

Drag and Drop Modules - Interesting Moments Gri

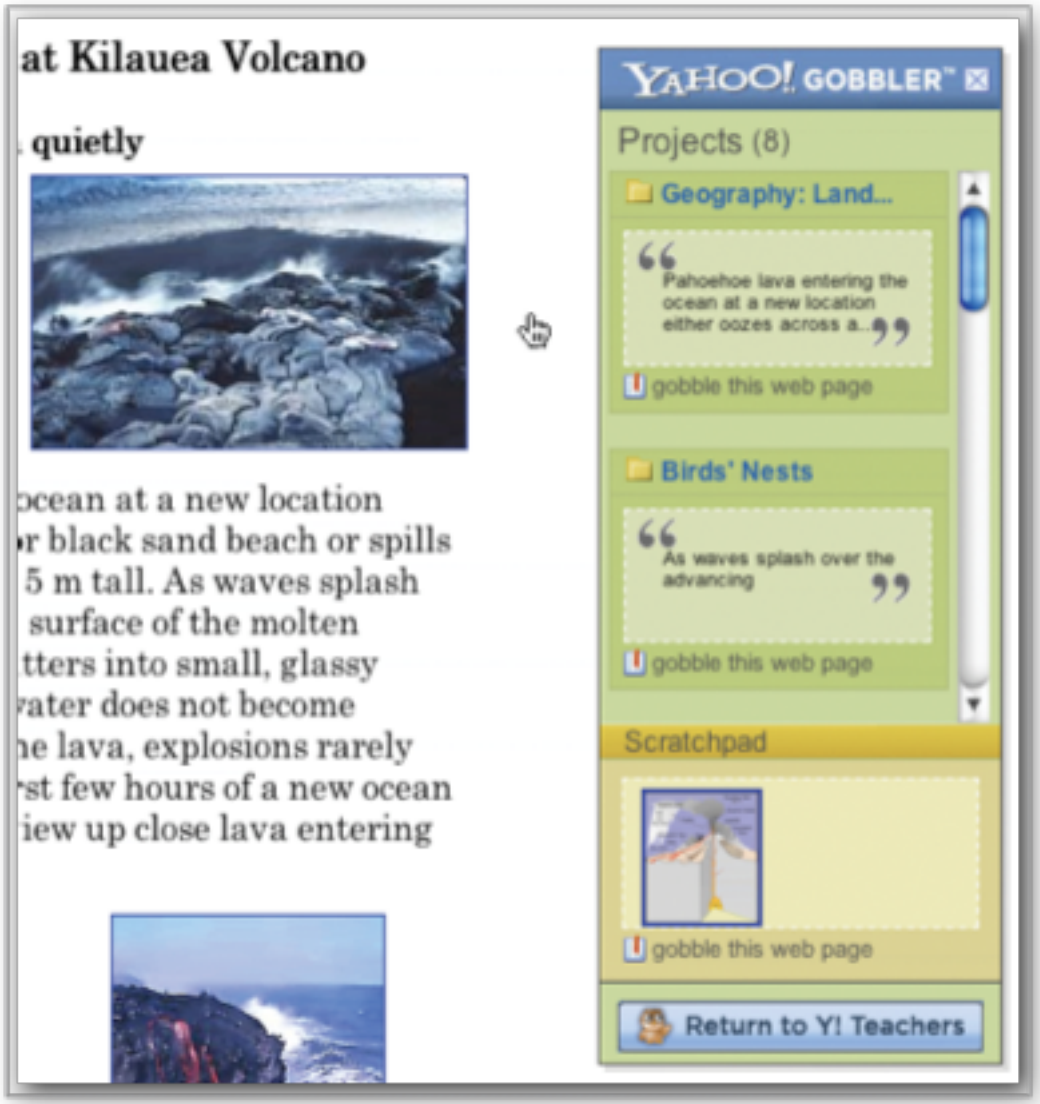
Currently on beta.my.yahoo.com

ID: Bill Scott & Eric Miraglia

	Mouse Hover	Mouse Down	Drag Initiated	Drag Over Valid Target	Drag Over Invalid Target	
Cursor	CSS Move curs	CSS Move cursor	CSS Move cursor	CSS Move cursor	CSS Move cursor	CSS
Tool Tip						
Drag Object		 Full Opacity	 Reduced Opacity	 Reduced Opacity	 Reduced Opacity & Invalid Badge	Redu
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 in

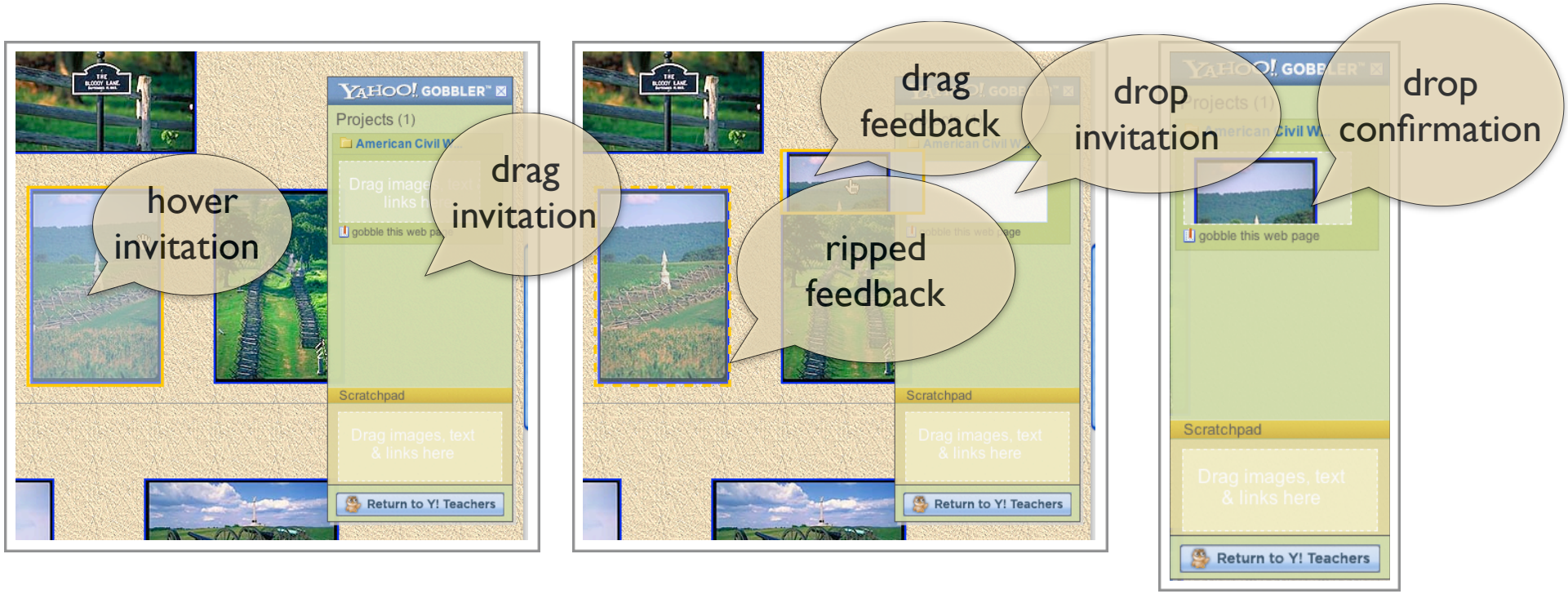
My Yahoo! **drag and drop**

Yahoo! Gobbler interesting moments



yahoo! teachers. **hints during interesting moments**

Interesting moments



summary

Incorrectly constructing a user experience around drag and drop. Usually consists of creating interface elements that only exist for the sake of drag and drop.

examples

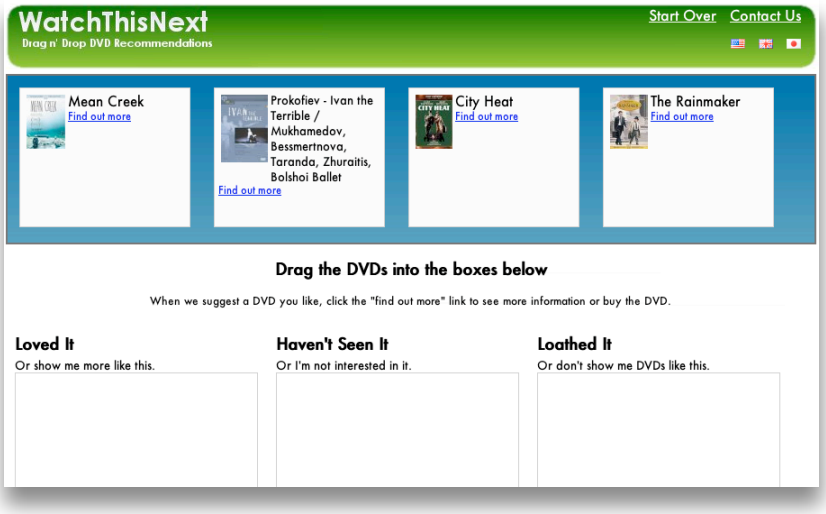
Using drag and drop for simple attribute setting

Anti-Pattern. **Artificial Construct.**

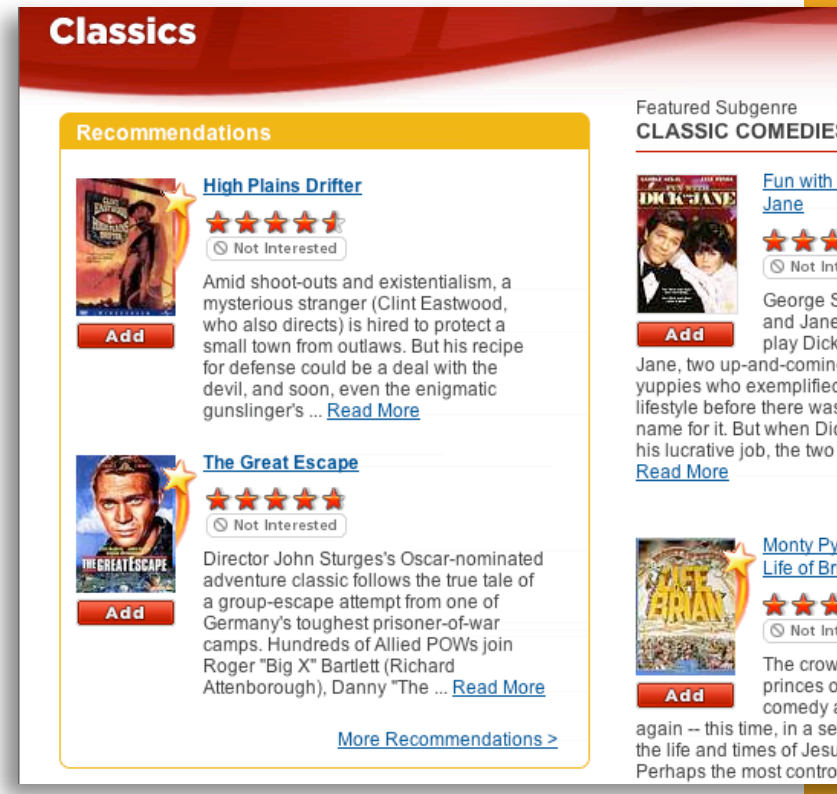
Drag and drop for marking favorites

Don't construct an artificial interface for drag and drop

Drag and drop for rating DVDs



Already solved



summary

Making key interaction points too small increases the likelihood that users will be frustrated with the interface.

Fitts' law

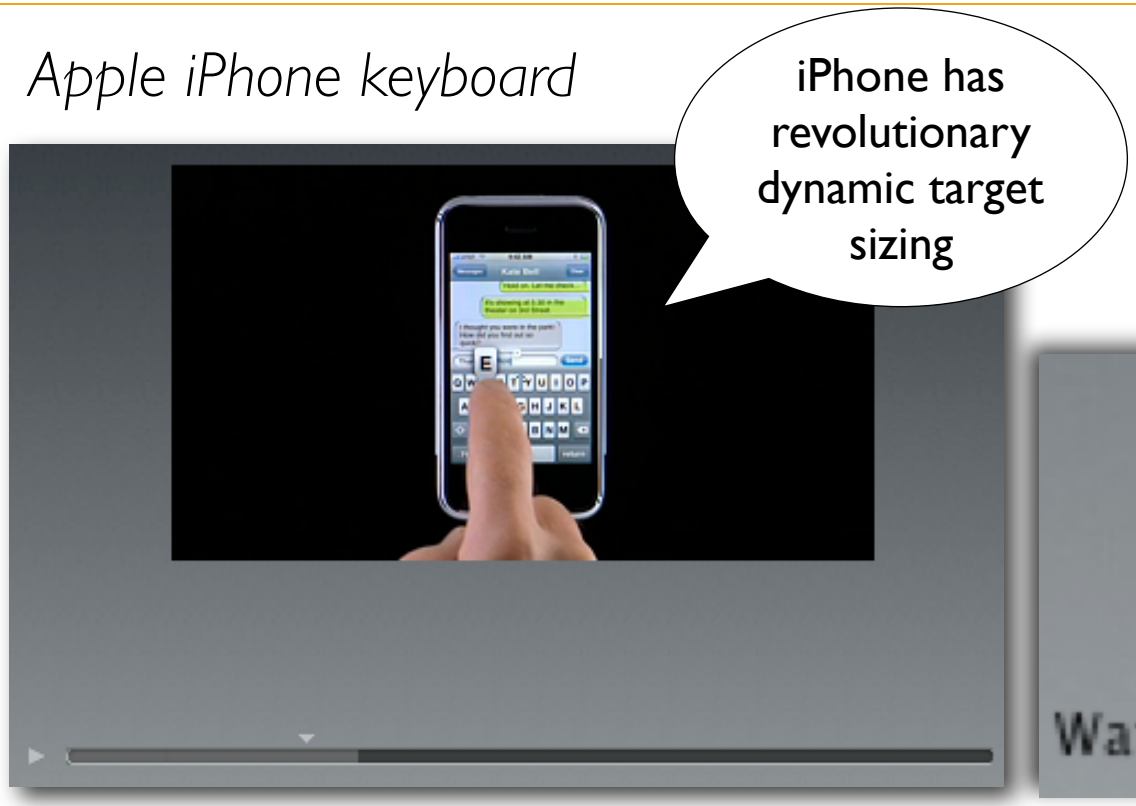
The time to acquire a target is a function of the distance to and size of the target.

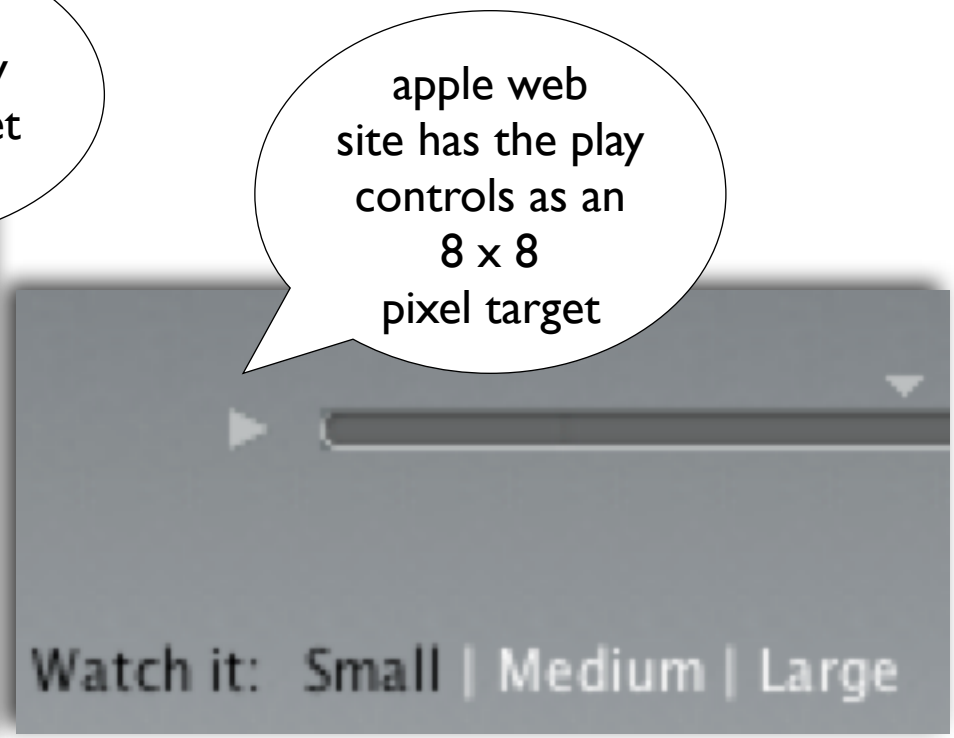
examples

divots for expand/collapse

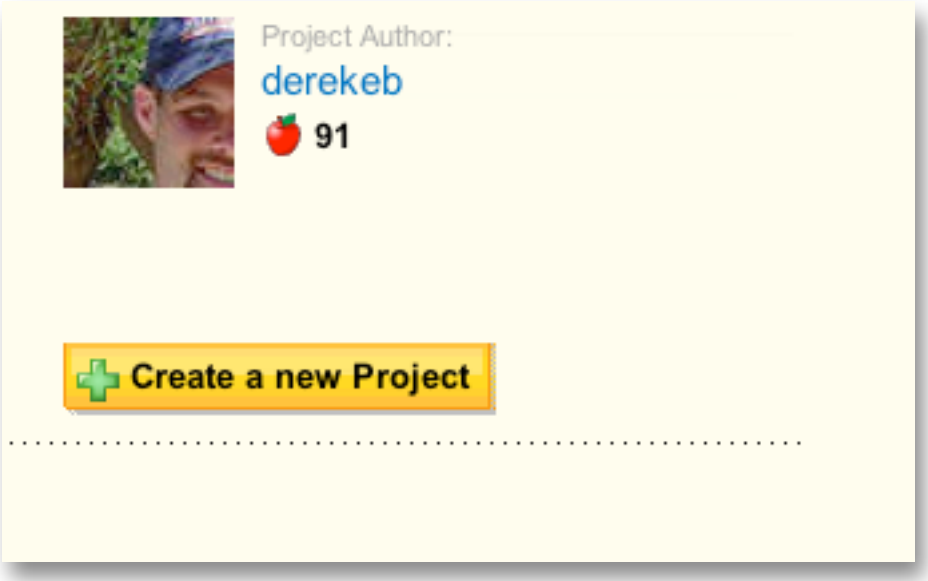
Anti-Pattern. **Tiny Target.**

Apple iPhone keyboard





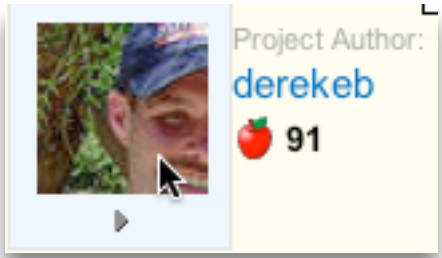
The identity card area has a summary view and an expanded view.



y! teachers. anti-pattern. **tiny target**

Divot for expand/collapse is hidden

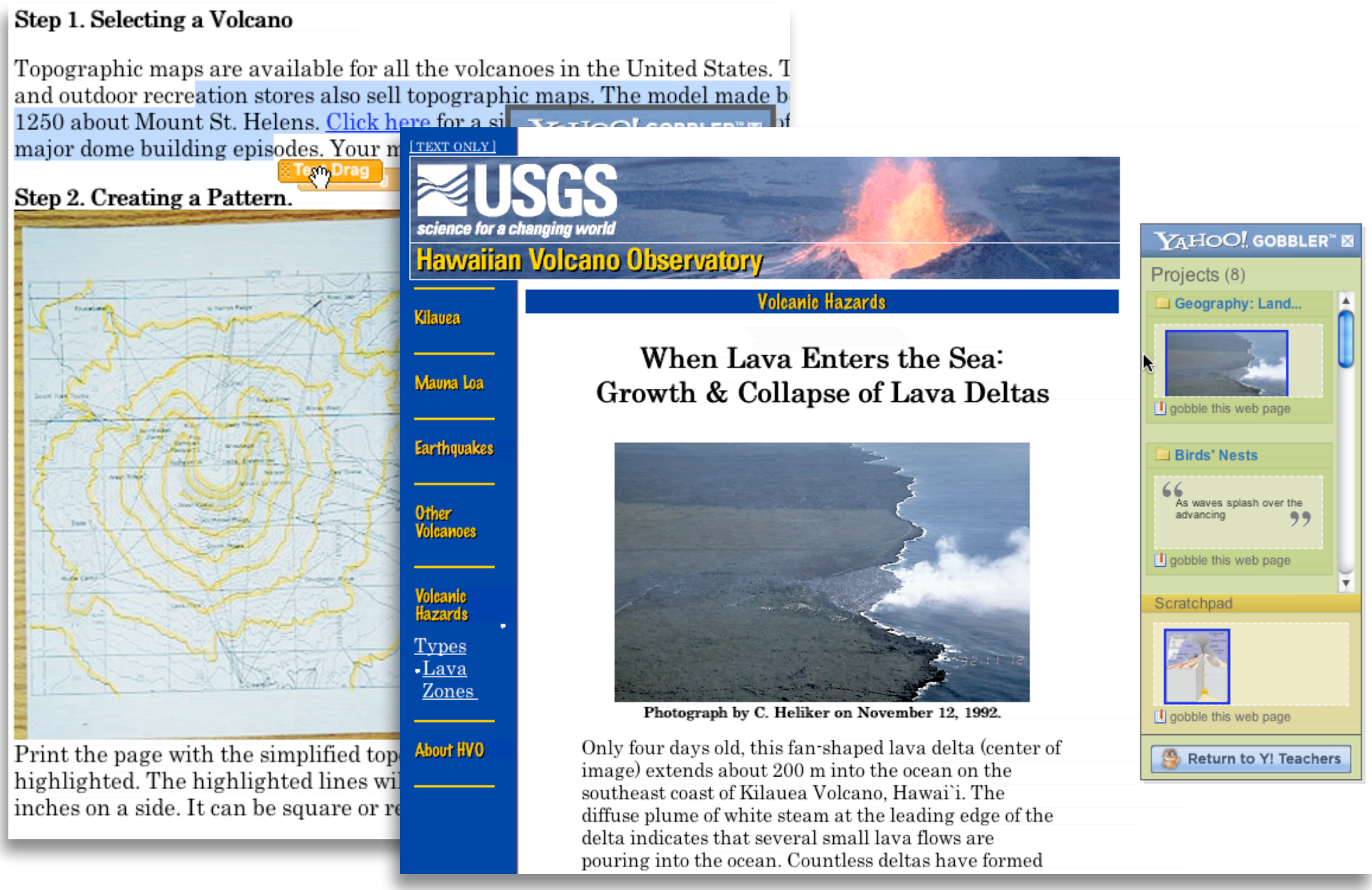
Shown on picture hover only



Divot is small (8x8)

Anti-Pattern. **Tiny Target.**

Issue: small text drag target



Activation targets and important commands need to be **large enough**, **visually distinct** *and in* **proximity** *to operation.*

Use contextual tools *to support proximity.*

Use "Call to Action" style buttons *for most important operations.*

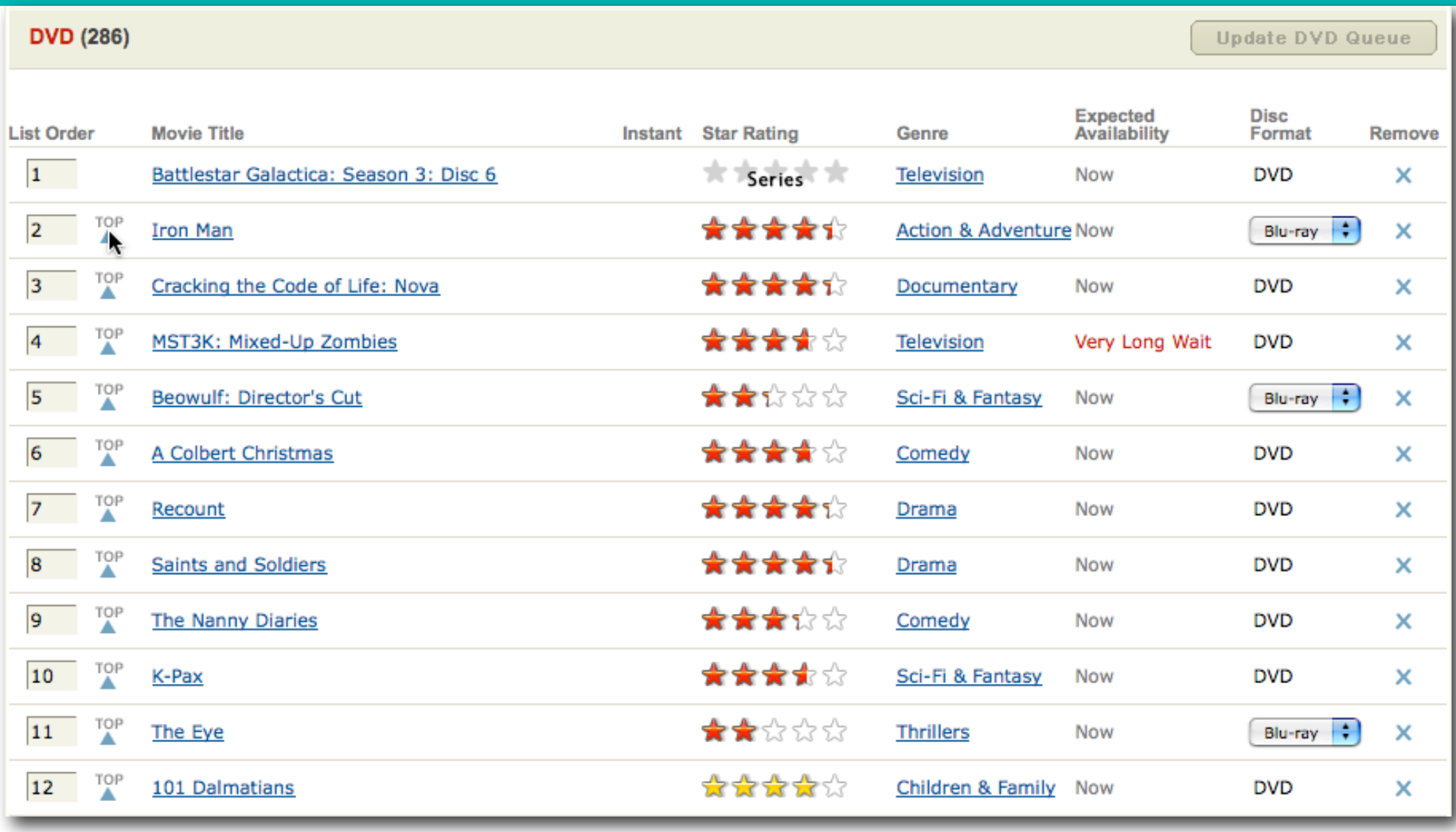
If titles will expand/collapse, at least **use hyperlink** *underline when hover happens to provide a bigger target.*

Never use 8x8 *for targeting*

Exercise 1

It's a Drag

It's a Drag. Netflix Queue



DVD (286) — Update DVD Queue

List Order	Movie Title	Instant	Star Rating	Genre	Expected Availability	Disc Format	Remove
1	Battlestar Galactica: Season 3: Disc 6		Series	Television	Now	DVD	✕
2 TOP	Iron Man		4½	Action & Adventure	Now	Blu-ray	✕
3 TOP	Cracking the Code of Life: Nova		4½	Documentary	Now	DVD	✕
4 TOP	MST3K: Mixed-Up Zombies		3½	Television	Very Long Wait	DVD	✕
5 TOP	Beowulf: Director's Cut		2½	Sci-Fi & Fantasy	Now	Blu-ray	✕
6 TOP	A Colbert Christmas		4	Comedy	Now	DVD	✕
7 TOP	Recount		4½	Drama	Now	DVD	✕
8 TOP	Saints and Soldiers		4½	Drama	Now	DVD	✕
9 TOP	The Nanny Diaries		3½	Comedy	Now	DVD	✕
10 TOP	K-Pax		3½	Sci-Fi & Fantasy	Now	DVD	✕
11 TOP	The Eye		2	Thrillers	Now	Blu-ray	✕
12 TOP	101 Dalmatians		4	Children & Family	Now	DVD	✕

Exercise

Write down list of interesting moments

Critique current drag and drop interaction

Propose visual & interaction ideas to resolve:

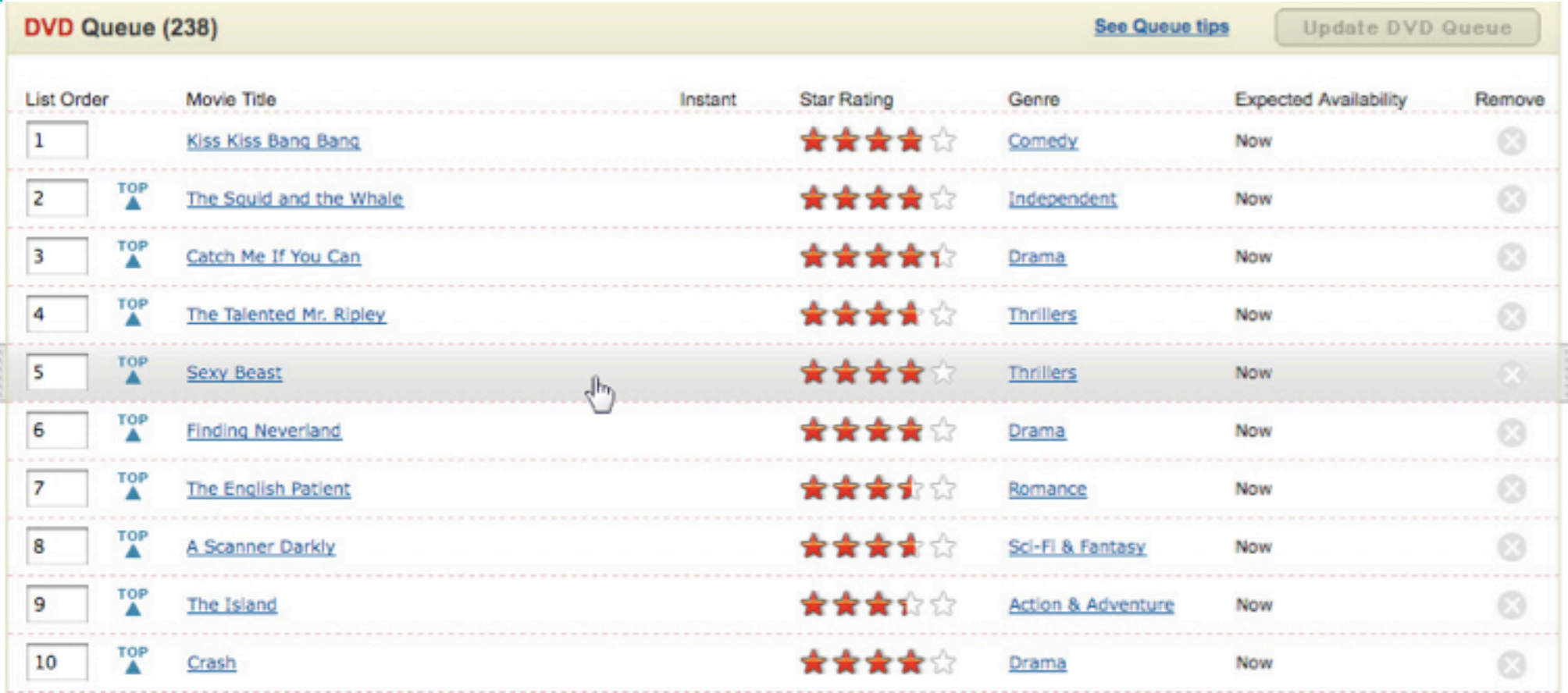
discoverability

ease of use

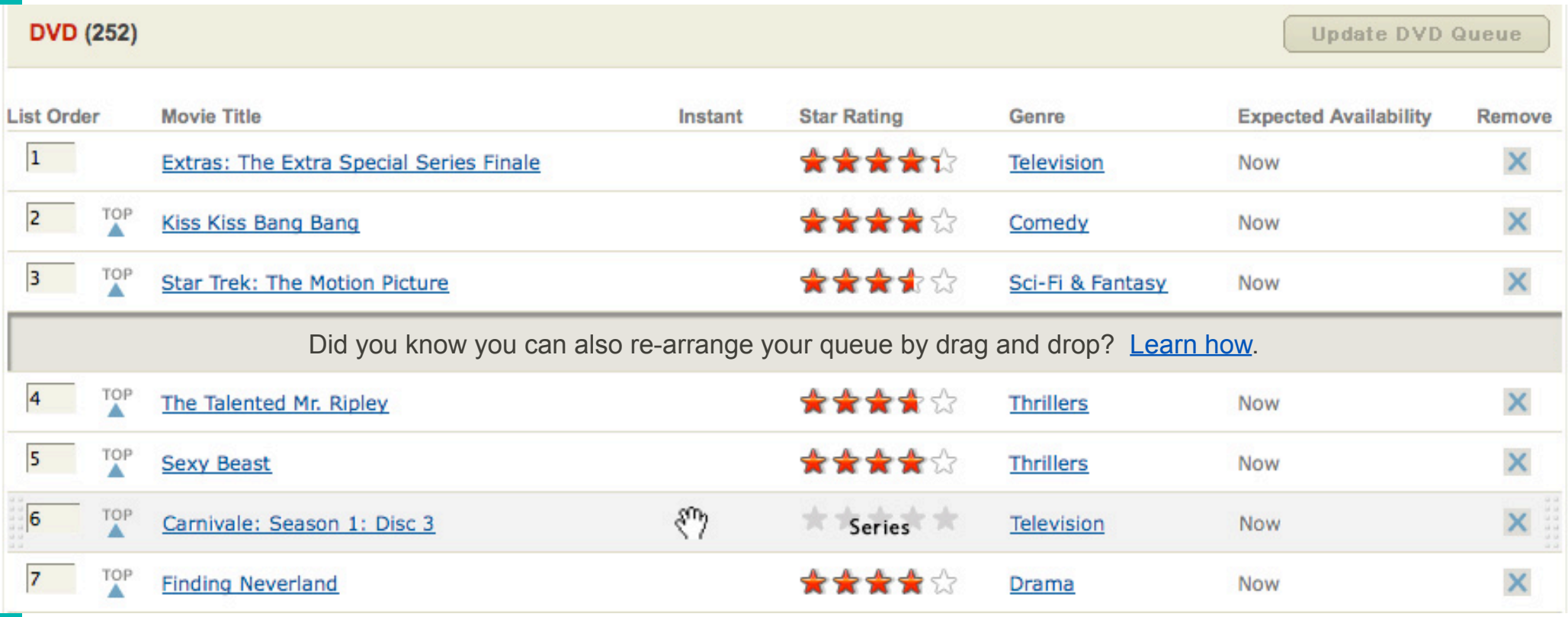
sketches of interaction or use interesting moments grid

http://designingwebinterfaces.com/resources/interestingmomentsgrid.xls

Drag handles, highlighting, animation



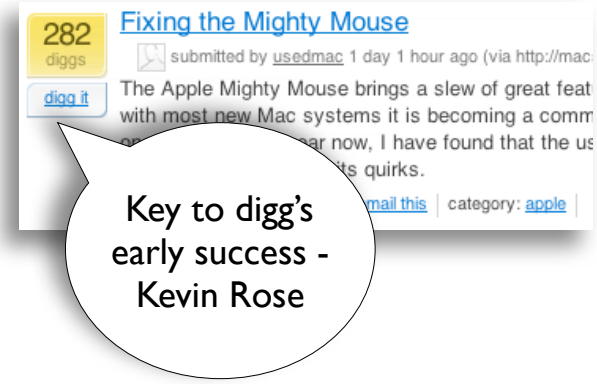
Provide a message in the "hole" that gets left



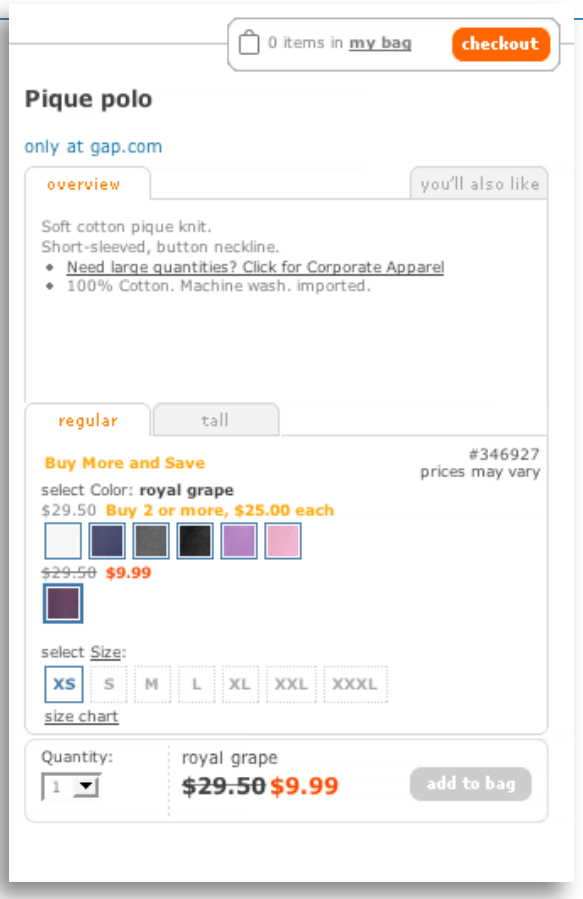
Keep It Lightweight

Keep It Lightweight.

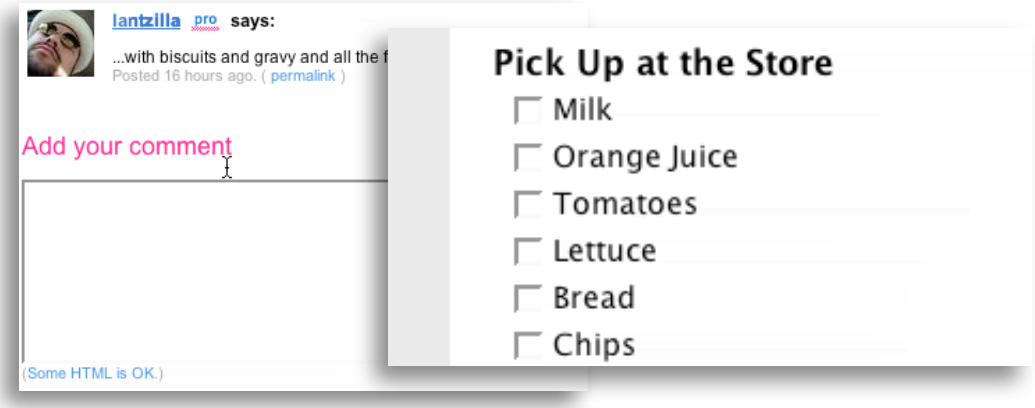
digg. **in page action**



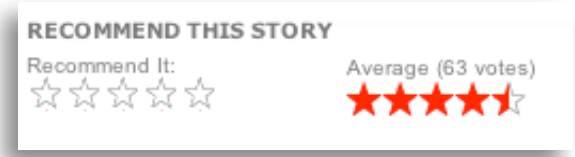
the gap. **remembered collections**

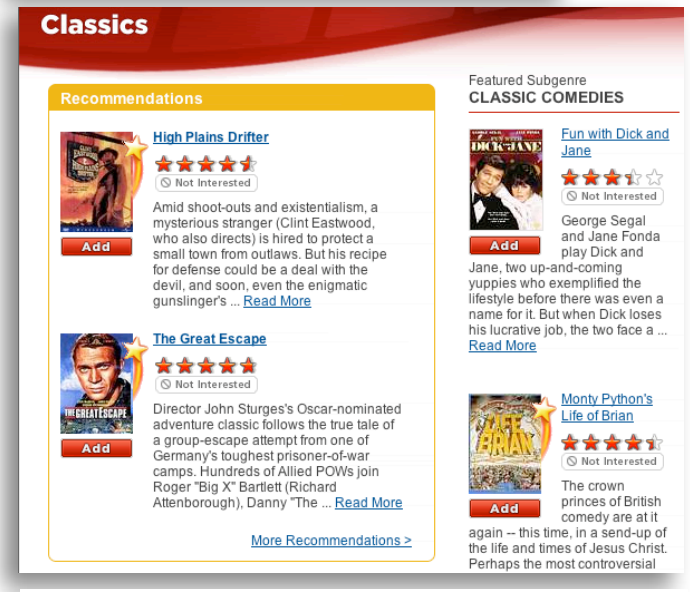


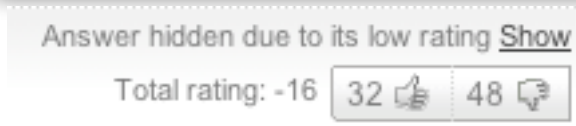
flickr. **contextual tools**



y! news, netflix. **rating an object**







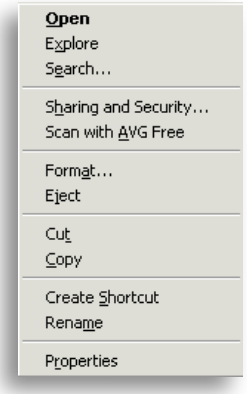
y! movies, y! answers. **rating an object**

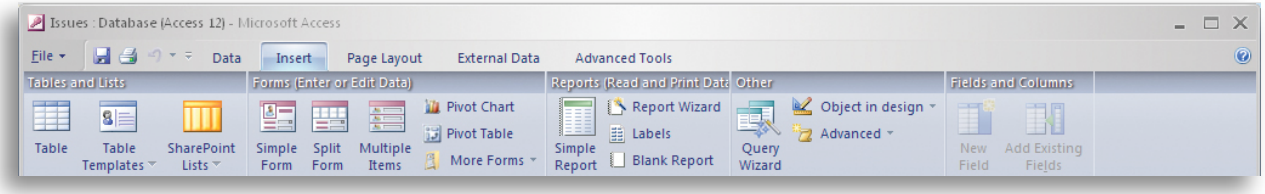
Keep It Lightweight. **Contextual Tools.**

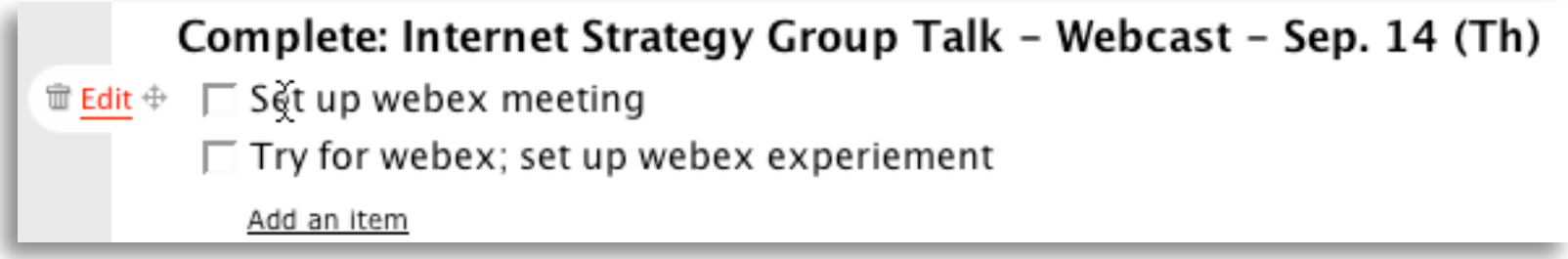
Same as context menus

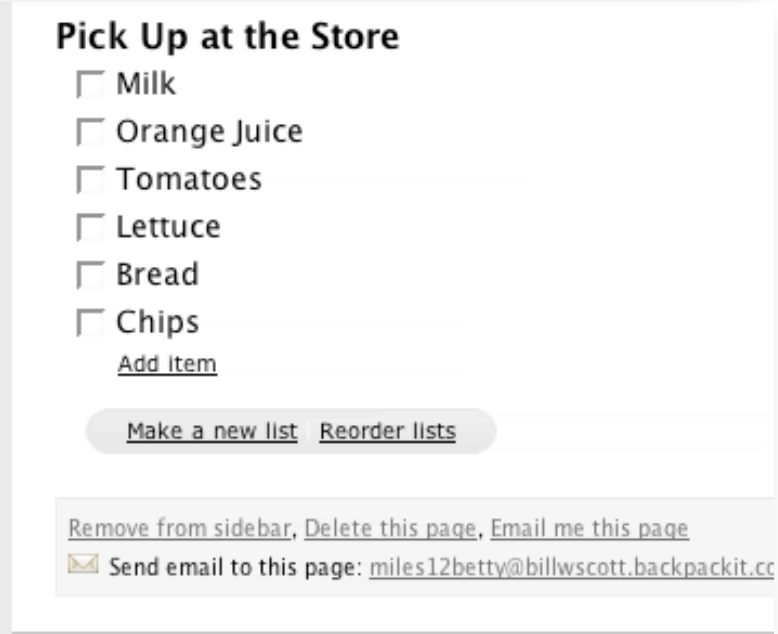
Only good for single objects

Can actually slow you down









summary

When you can only update small pieces of the interface instead of doing things in a group.

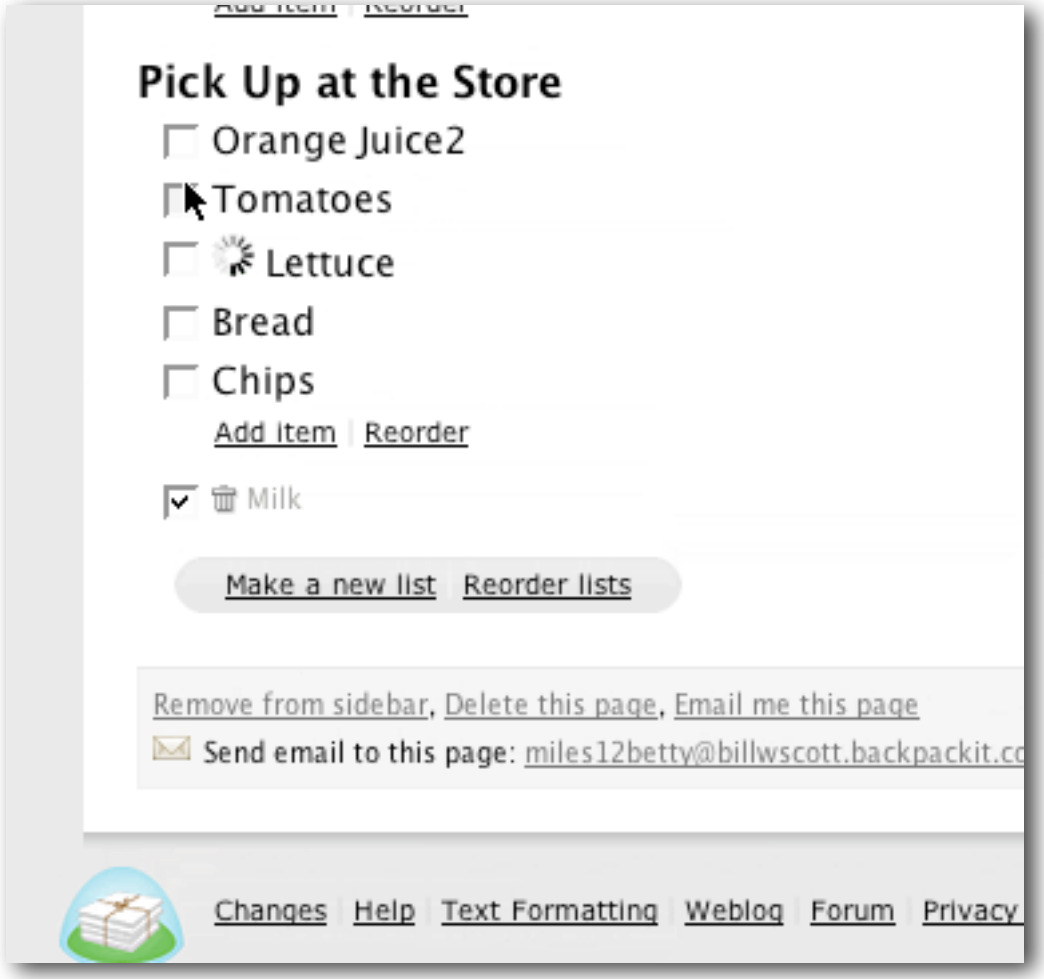
examples

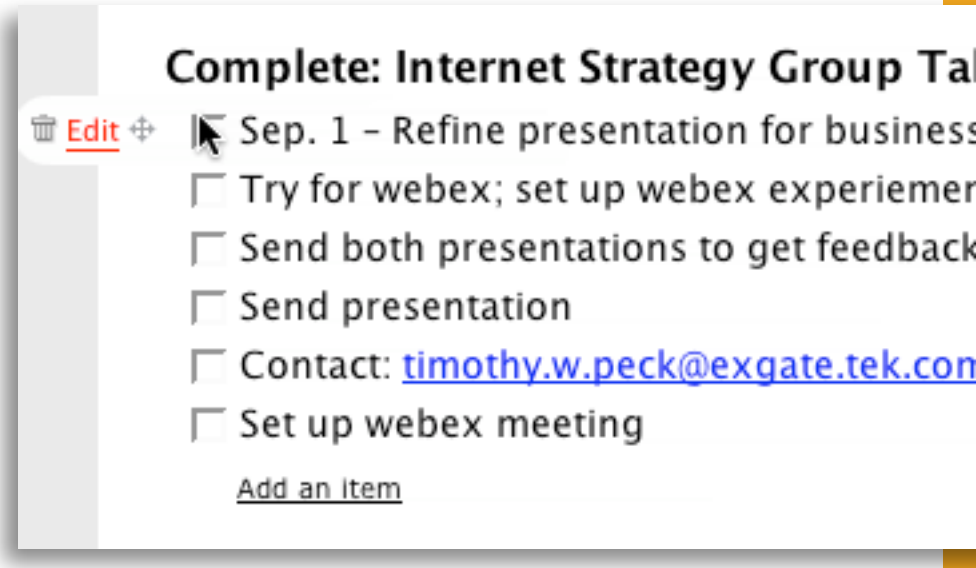
backpackit

Anti-Pattern. **One at a Time.**

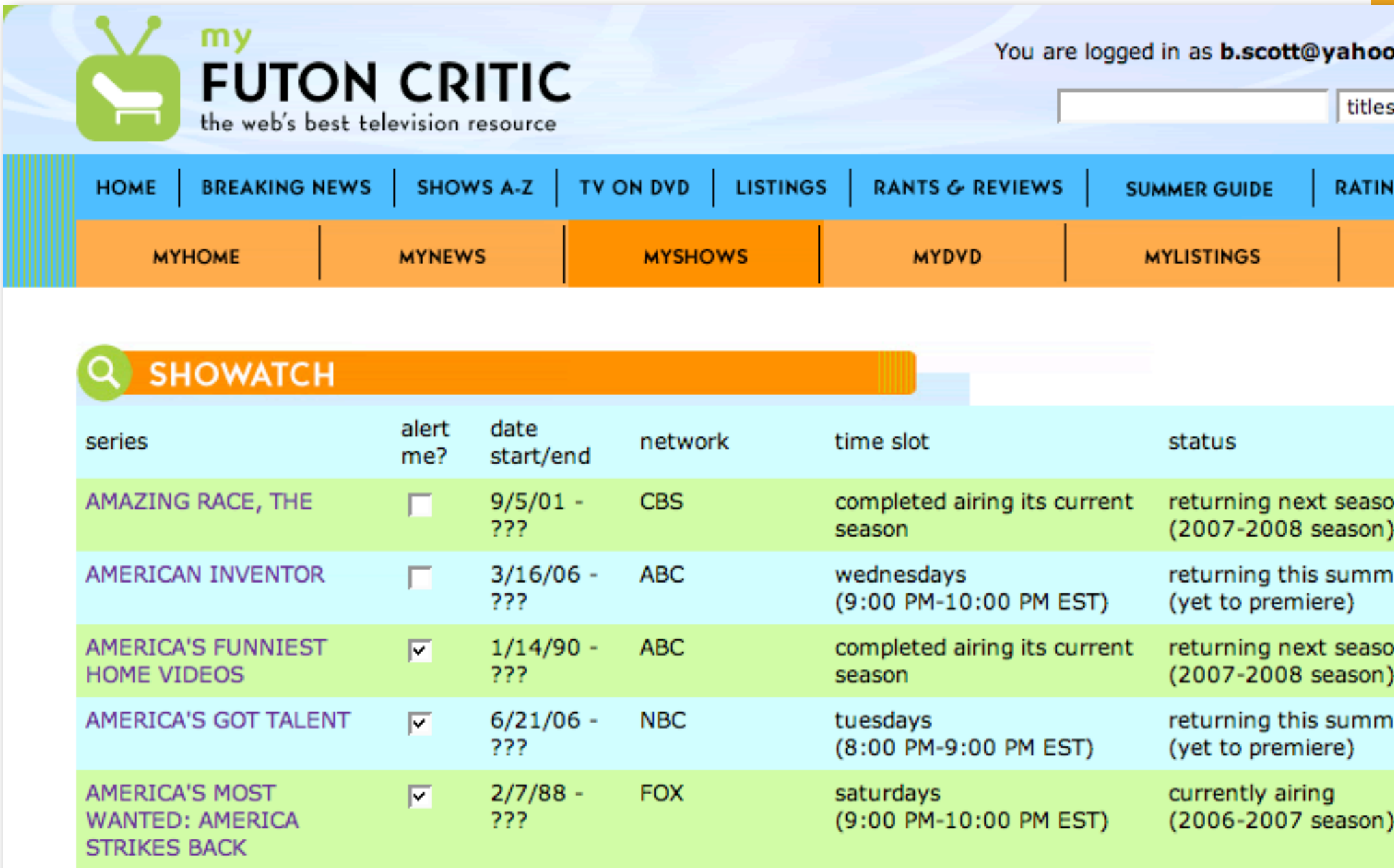
Key is what is the workflow? One at a time or mutiple operations allowed.

These kind of interfaces (in context tools) always present a problem for doing operations on multiple items.





Takes one at a time check box to the extreme



series	alert me?	date start/end	network	time slot	status
AMAZING RACE, THE	☐	9/5/01 - ???	CBS	completed airing its current season	returning next seaso (2007-2008 season)
AMERICAN INVENTOR	☐	3/16/06 - ???	ABC	wednesdays (9:00 PM-10:00 PM EST)	returning this summ (yet to premiere)
AMERICA'S FUNNIEST HOME VIDEOS	☑	1/14/90 - ???	ABC	completed airing its current season	returning next seaso (2007-2008 season)
AMERICA'S GOT TALENT	☑	6/21/06 - ???	NBC	tuesdays (8:00 PM-9:00 PM EST)	returning this summ (yet to premiere)
AMERICA'S MOST WANTED: AMERICA STRIKES BACK	☑	2/7/88 - ???	FOX	saturdays (9:00 PM-10:00 PM EST)	currently airing (2006-2007 season)

Think about *what happens when the* **data/information scales**

It affects space issues but also affects interaction density.

Think about doing multiple operations at once

Balance with immediacy

Watch out for contextual tools, in-page actions

These give immediacy but also will trap you into not handling multiple items at once.

Don't forget about the lowly checkbox

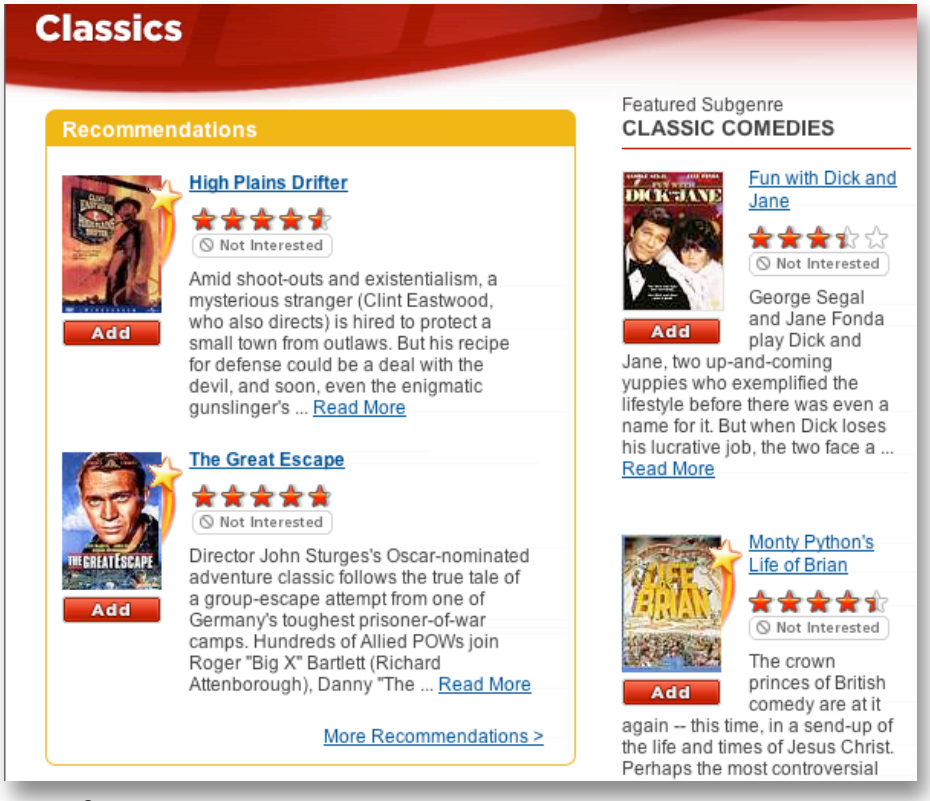
Not as sexy, but very serviceable.

Remove the "pain points"

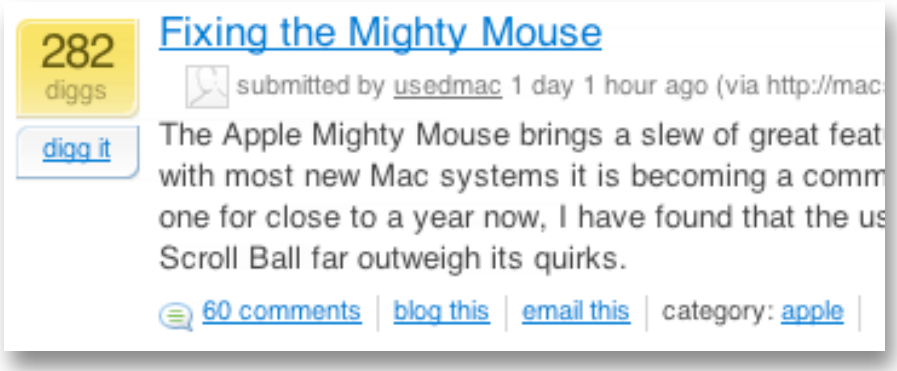
Shorten the path

Keep actions immediate and light

Use hover, blur, focus; avoid heavy events



netflix. **ratings**



digg. **vote**

click-weight

seek time

decision time

second guessing

wait time

interaction steps

cost/benefit tradeoff

summary

Revealing information or actions on mouse hover has become popular.

Sometimes using a hover popup makes the experience worse.

Hover & Cover occurs when the hover popup

- *hides important contextual information*
- *gets in the way of other actions*
- *impedes navigation.*

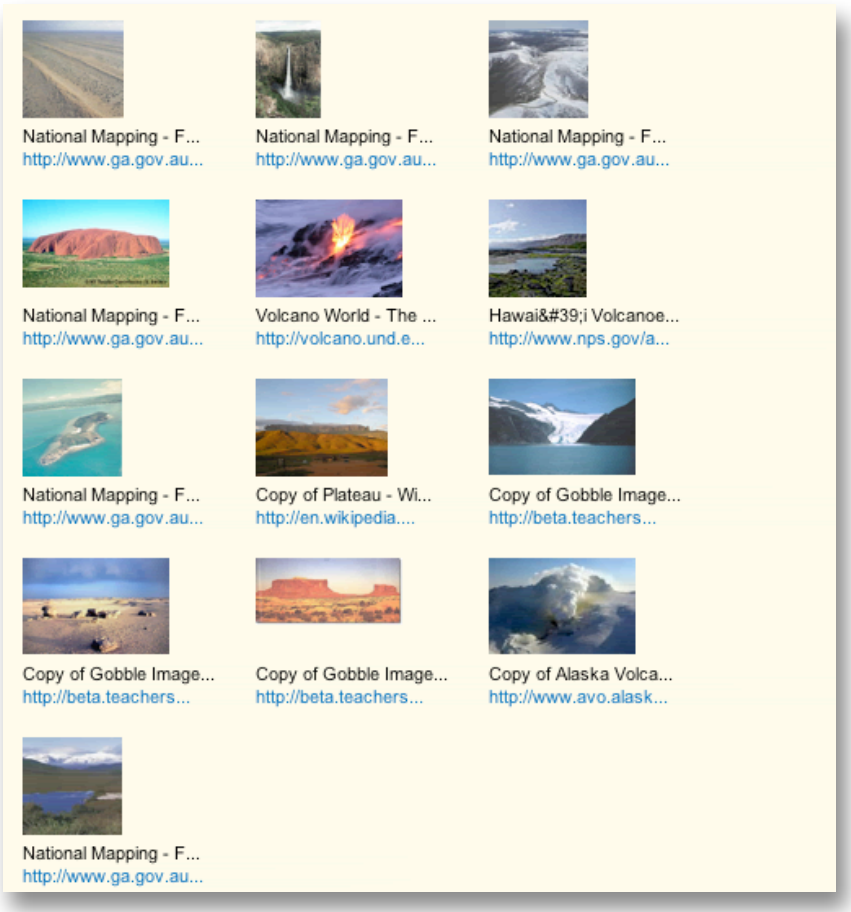
Anti-Pattern. **Hover & Cover.**

Original hover was extremely annoying as it

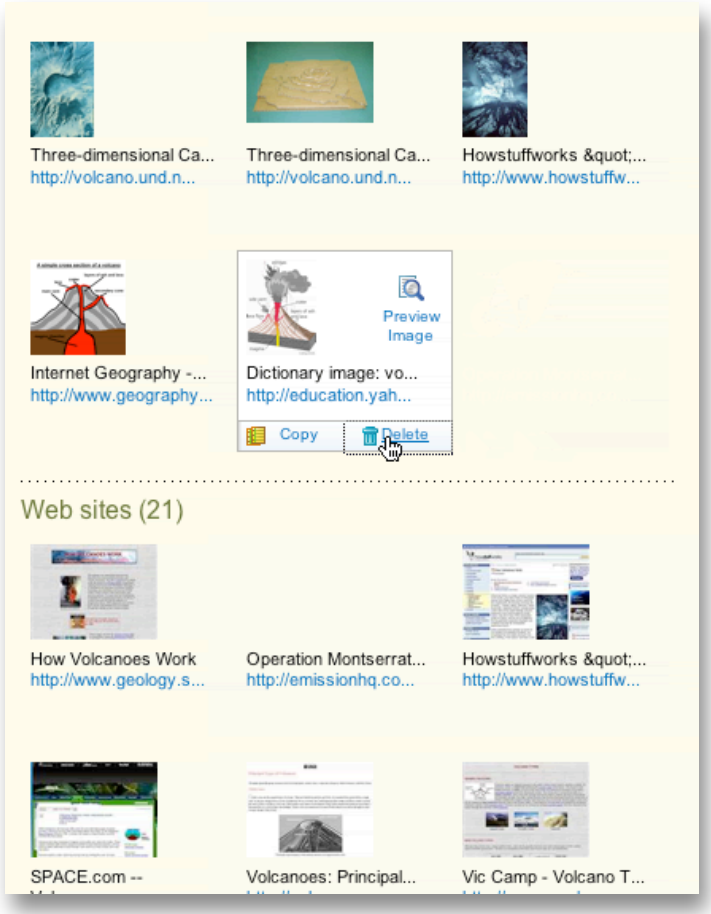
Covered the item to the right (natural flow is left to right)

Partially covers text edit area (bug: sticks open)

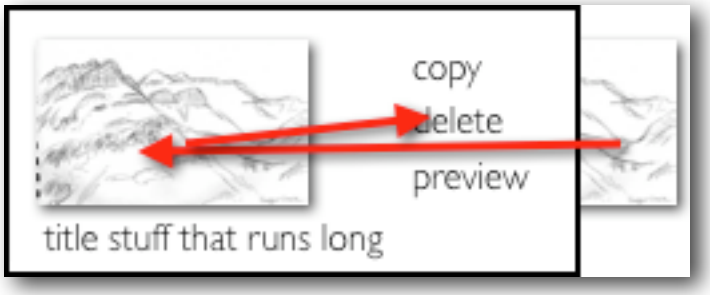
Anti-Pattern. **Hover & Cover.**

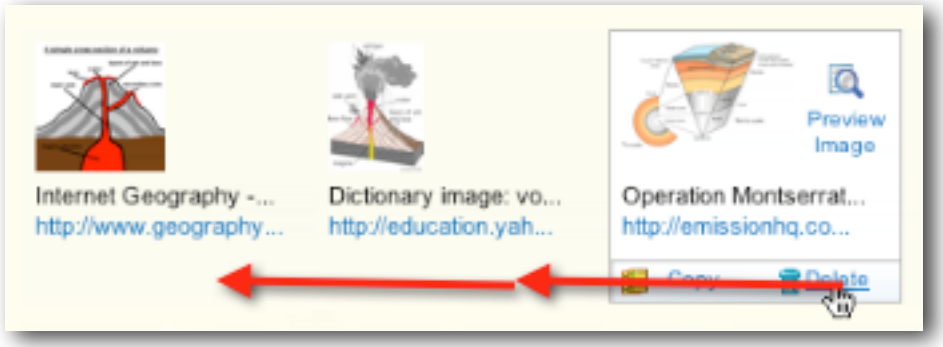


y! teachers. anti-pattern. **hover & cover**



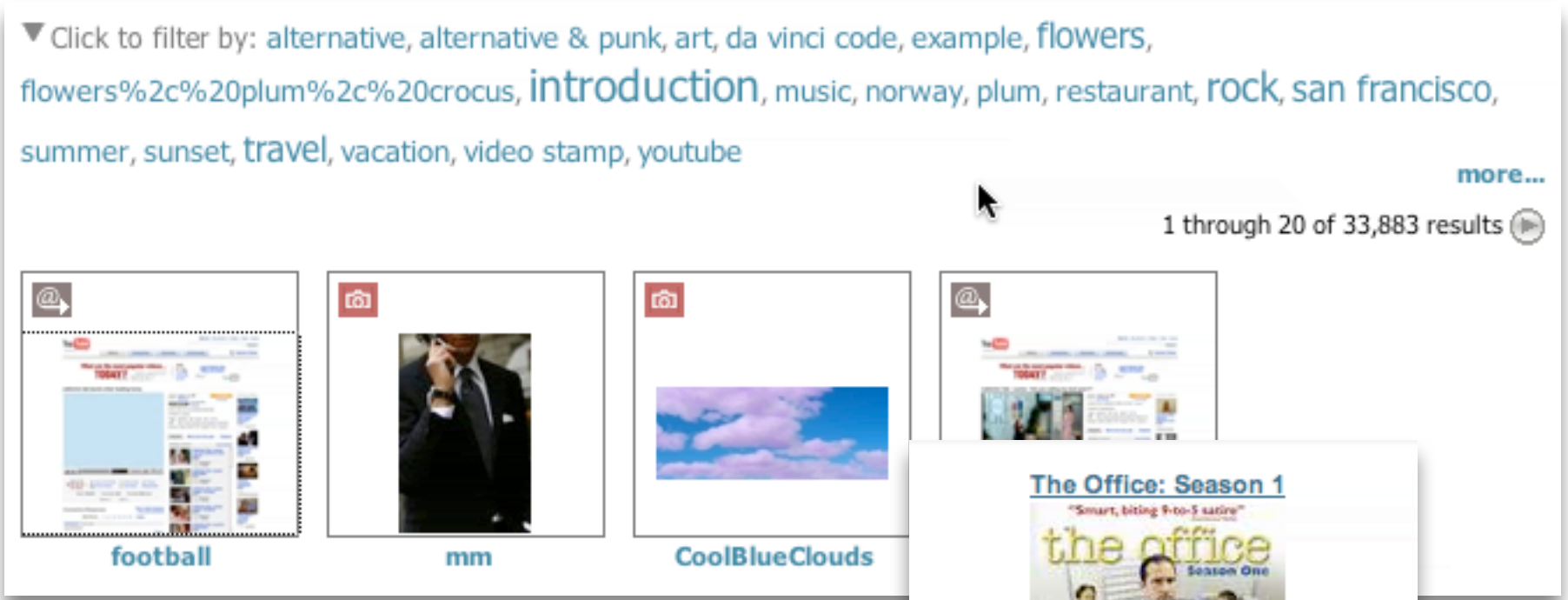
y! teachers. anti-pattern. **hover & cover. resolved**





Anti-Pattern. **Hover & Cover.**

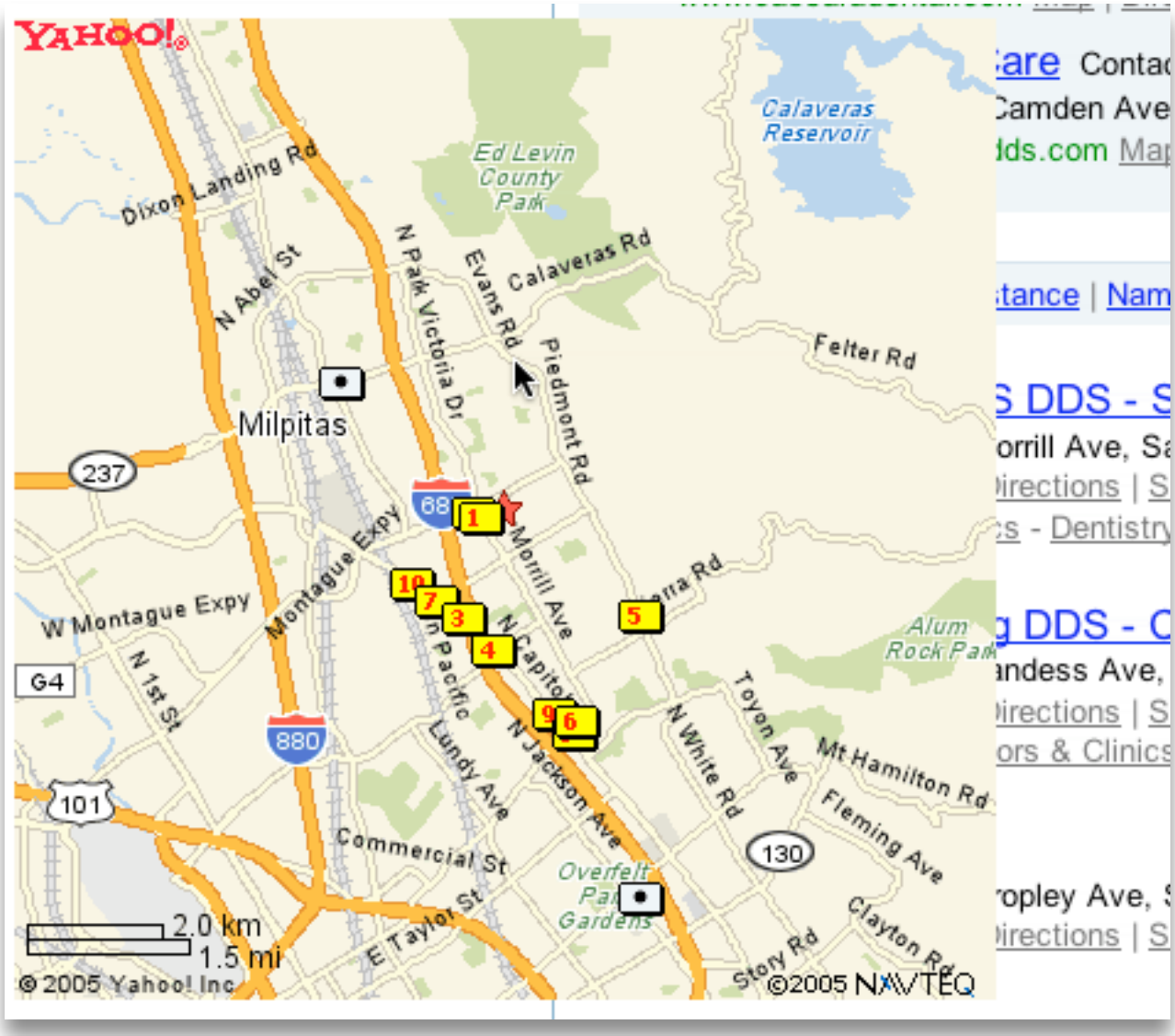
plum.com. Drop down menu on hover gets in the way. Accidentally opens.



netflix. issues.

Yahoo! Local originally had this hover beast.

Thankfully it no longer functions this way :-)



Use click for tools that will cover context

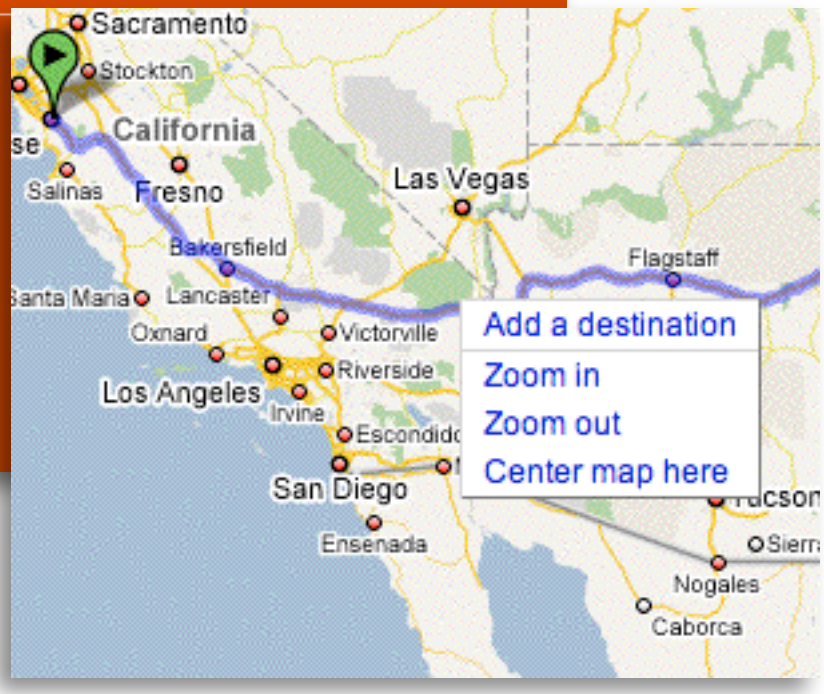
songza listen. now.
the music search engine & internet jukebox

Songza lets you listen to any song or band. Search for it:

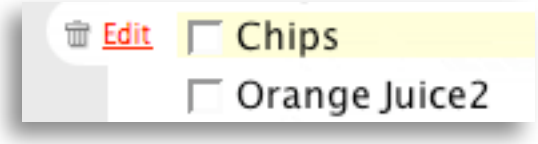
sam cooke | Search

search results:

- Sam Cooke (chain gang)
- Sam Cooke - Touch The Hem Of His Garment
- Sam Cooke - A Change Is Gonna Come
- Sam Cooke tribute Bryan Adams and Smokie Robinson
- Cooke Sam - A Change Is Gonna Come
- Sam Cooke - You Send Me
- sam cooke you send me
- Sam Cooke - Wonderful World
- Sam Cooke - A Change Is Gonna Come



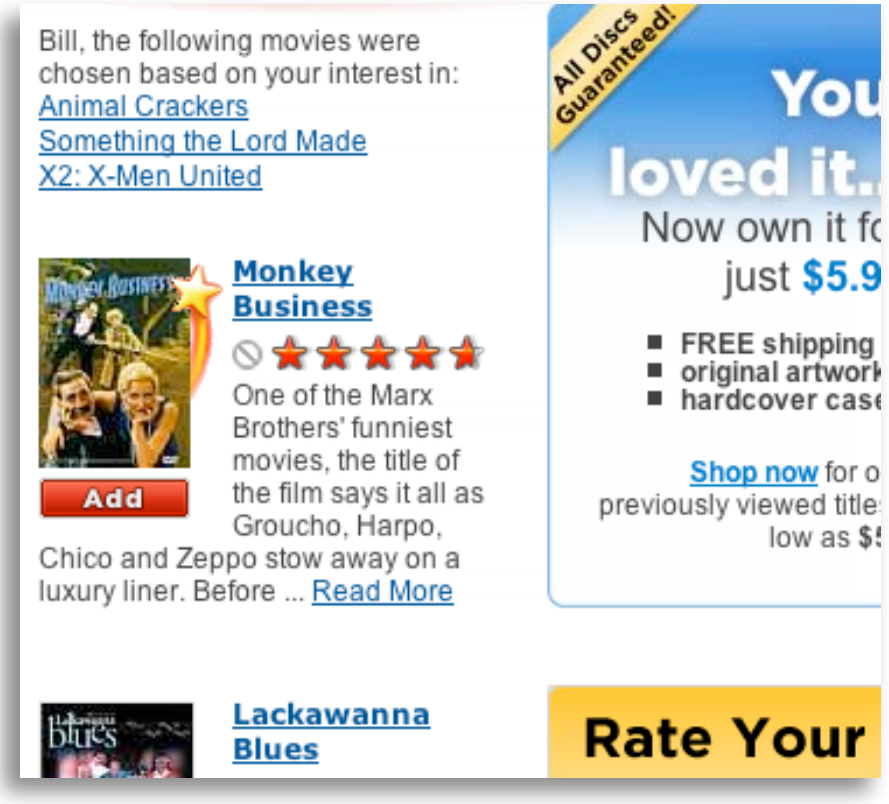
Reserve same space *for both hovered and non-hovered state*



For hover details,
allow a slight delay before activation

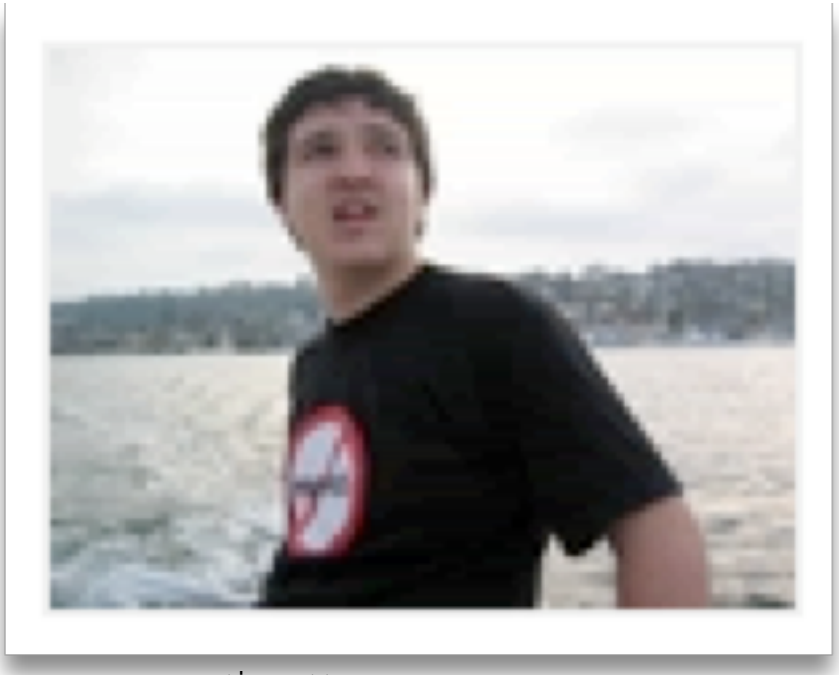
For hover details
don't cover important context.

For in-context tools,
show immediately *and* ***hide immediately***



Ambiguity between hover & click (clicking arrow does 2 things)

Anti-Pattern. **Mystery Meat.**

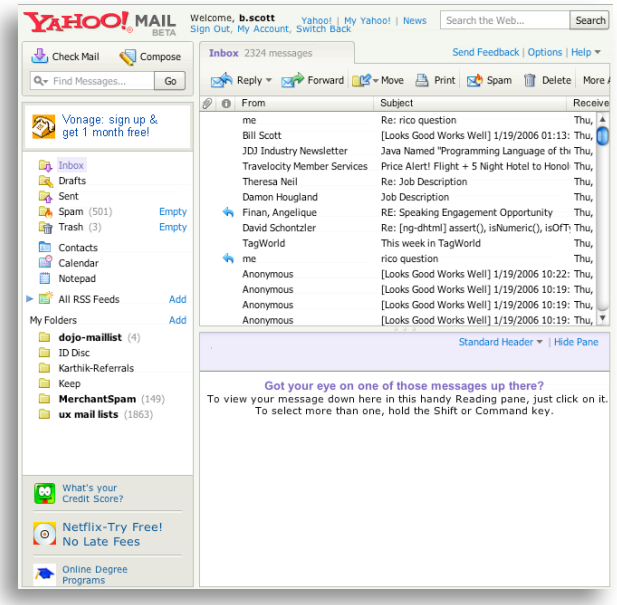


zooomr. anti-pattern. **mystery meat**

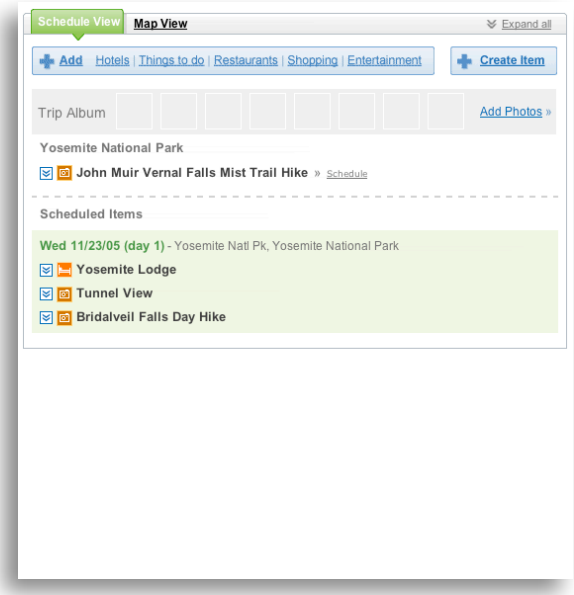
Stay on the Page

Stay on the Page.

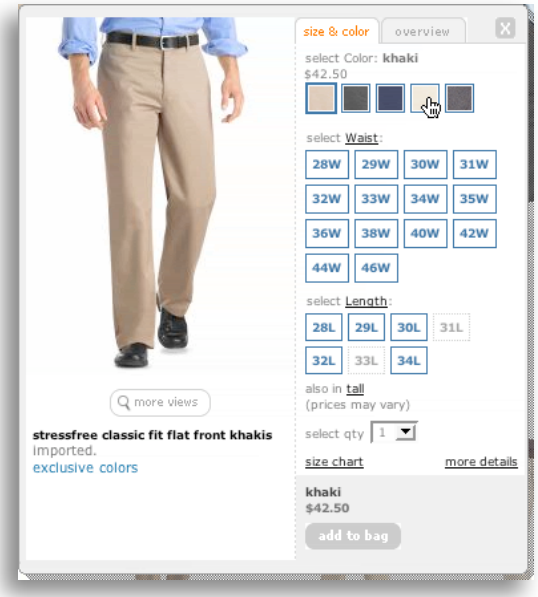
on-demand scrolling.



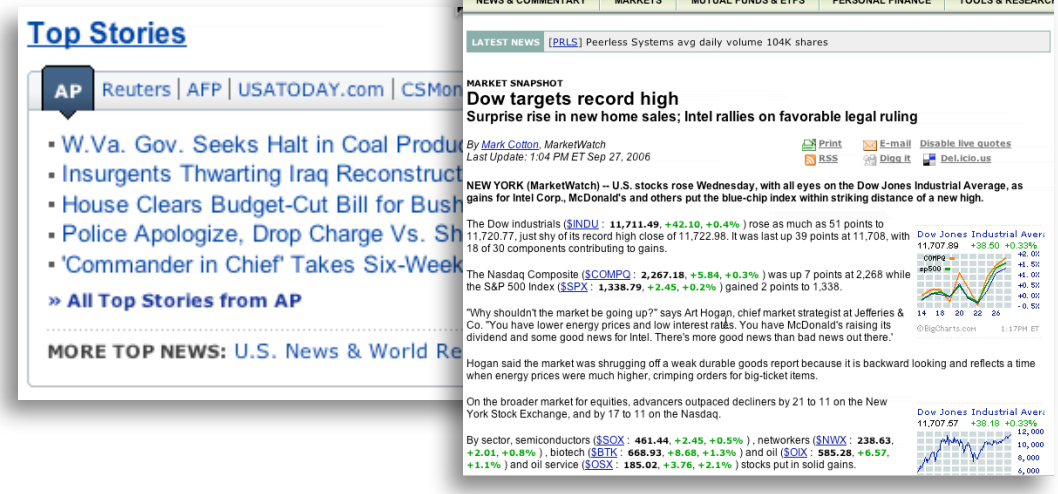
in-context expand.



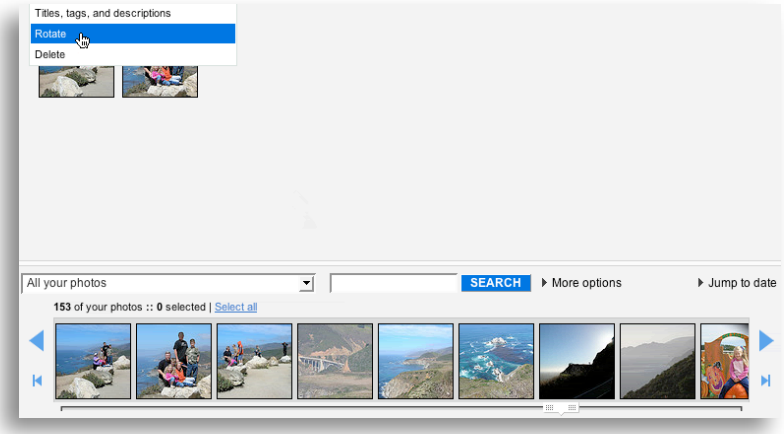
inline assistant.



hover details.

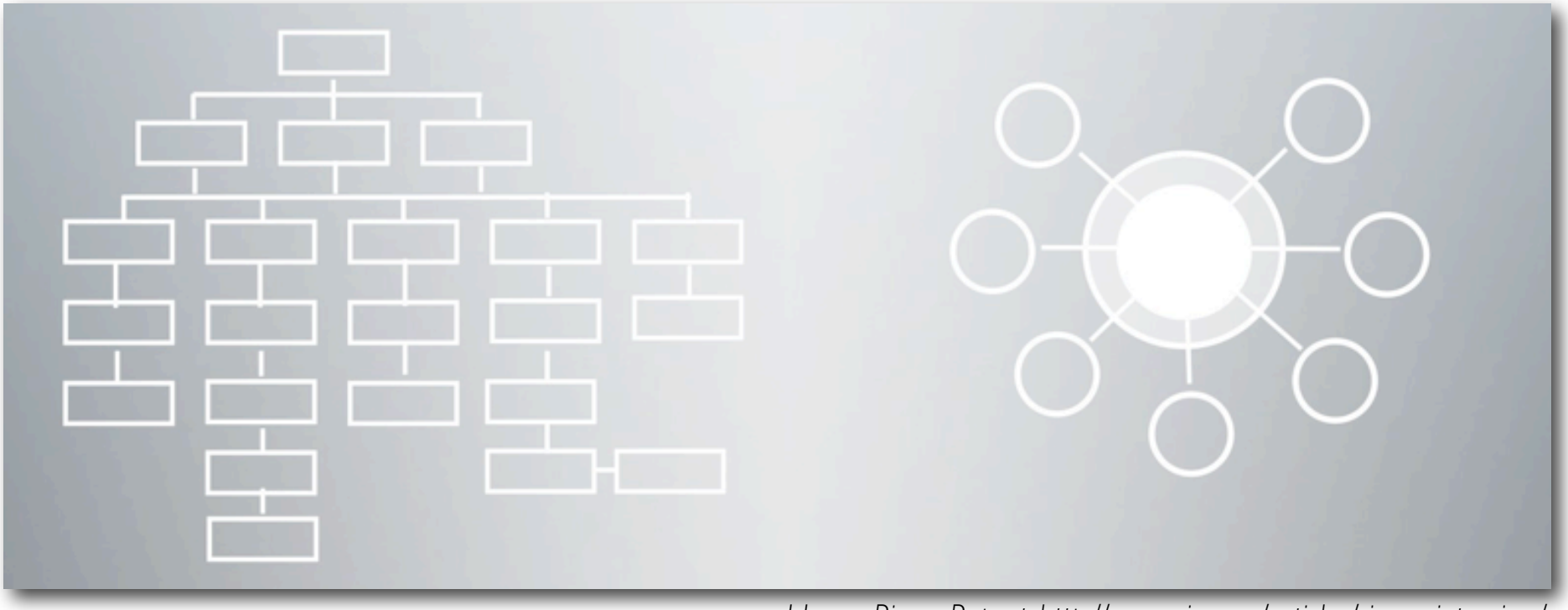


lightweight popup + lightbox



Hub & Spoke Model

Shift to "Stay in the Page"



Hagen-Rivers Report. http://www.uie.com/articles/rivers_interview/

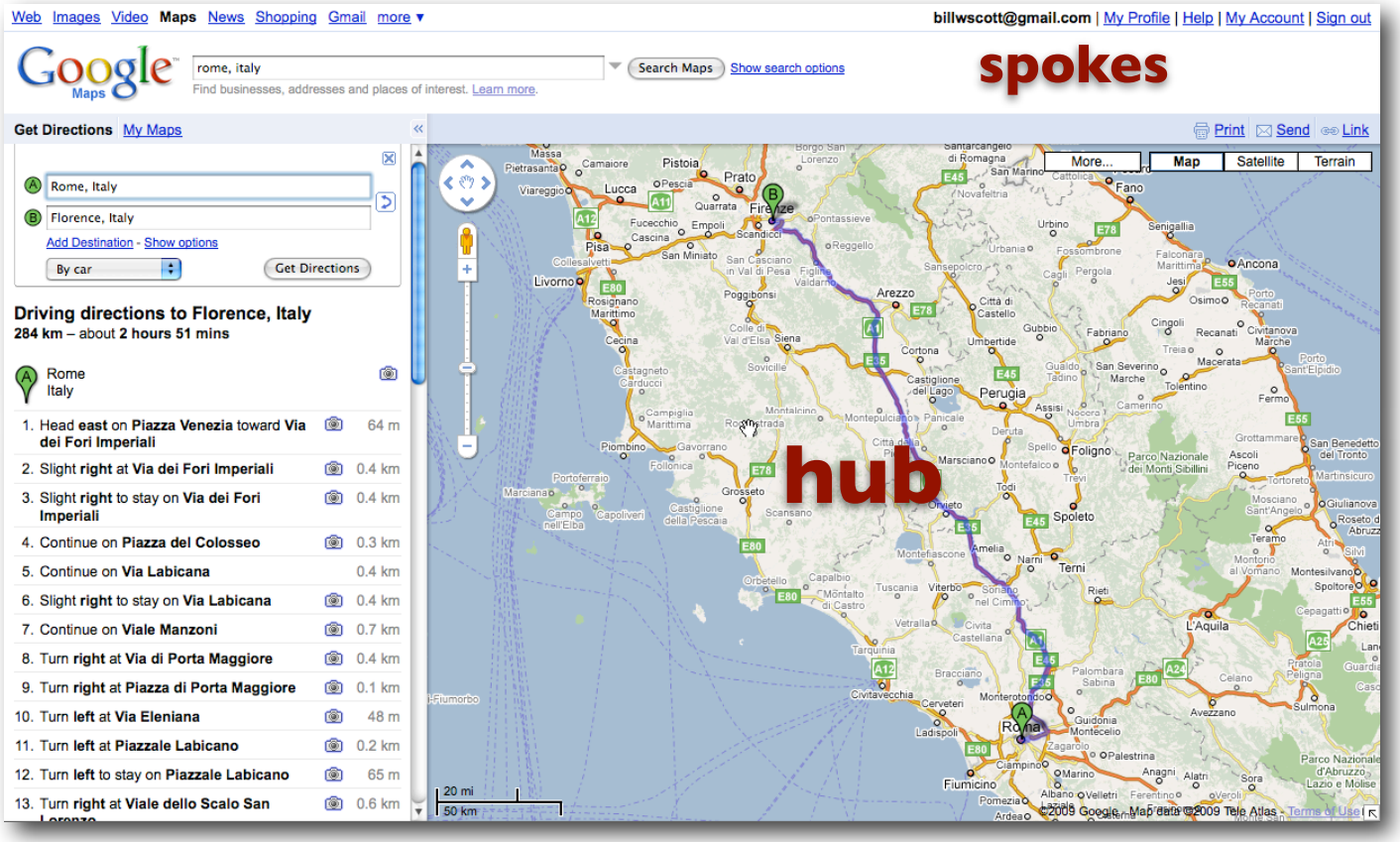
shift away from paging paradigm

eliminate unneccessary navigation

map screen flow directly to user tasks

one-screen-per-goal philosophy

Hub & Spoke Model



emphasizes visual communication

de-emphasizes navigation and extraneous tasks

stay on the page experience

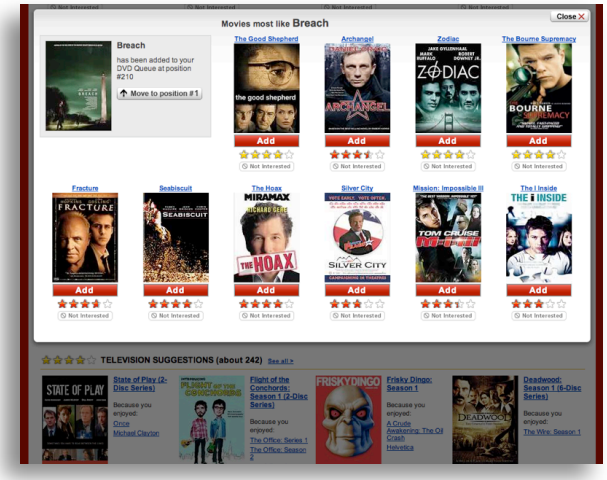
Stay on the Page. **Overlay.**

overlays

dialog overlay

detail overlay

input overlay

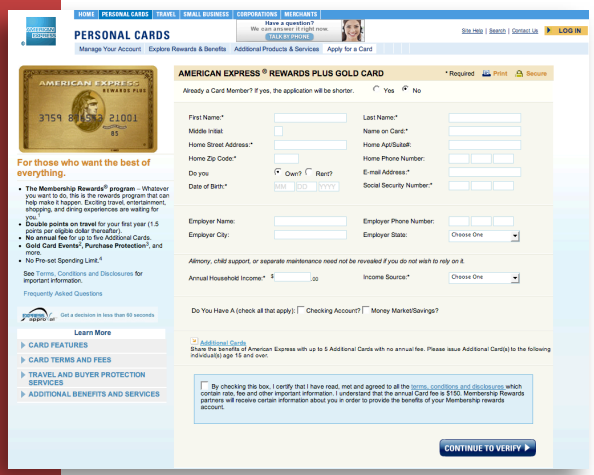


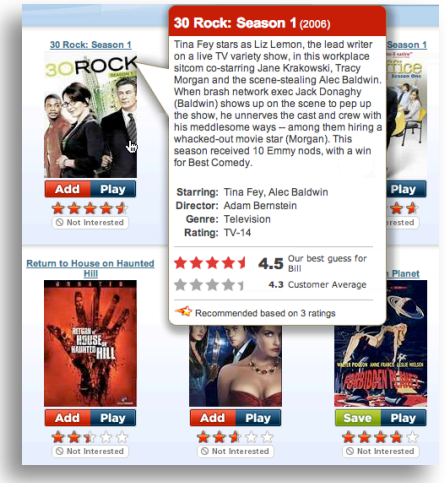
considerations

lightbox effect

modality

activation





inlays

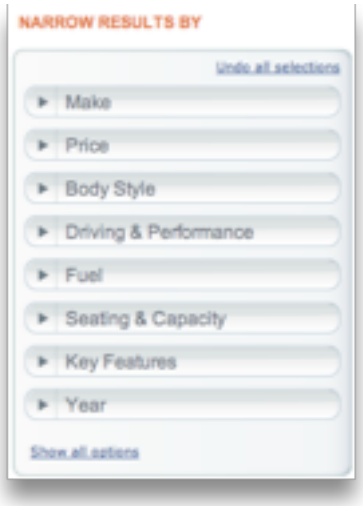
in-context configuration

in-context insight

parallel content

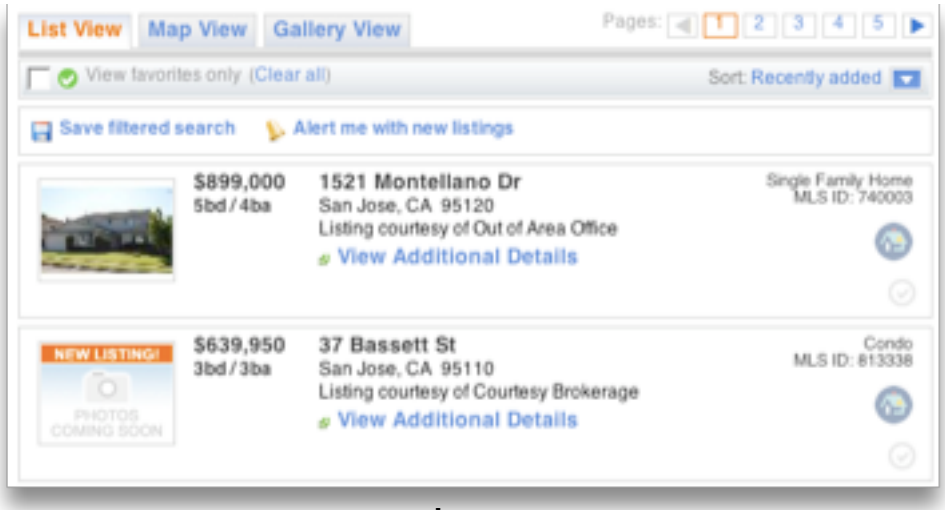
inlay vs. overlay

my y!. **in-context configuration**



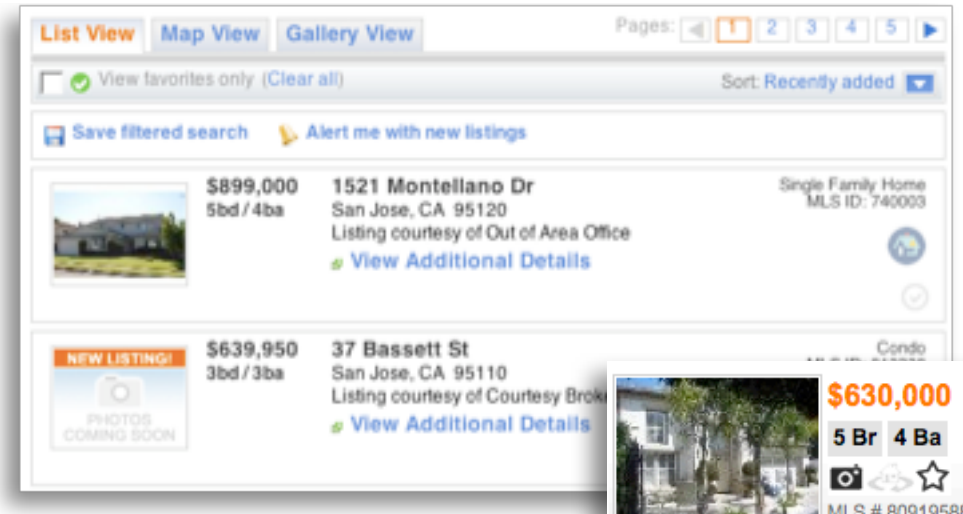
y! autos. **accordion**

bbc. **in-context configuration**

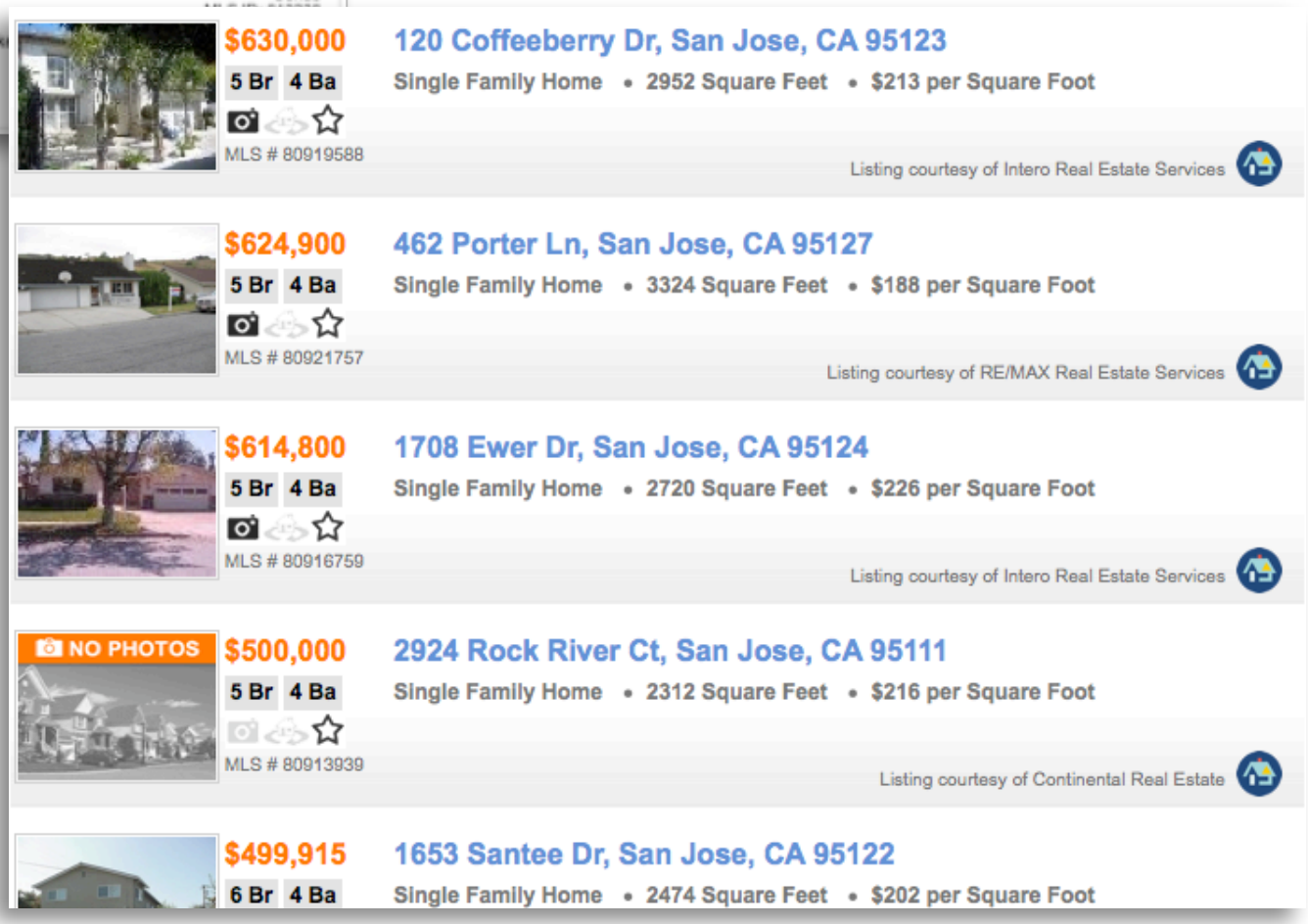


roost. **in-context insight**

Stay on the Page. **Inlay.**



roost. **inlay + overlay**



roost. **all inlays**

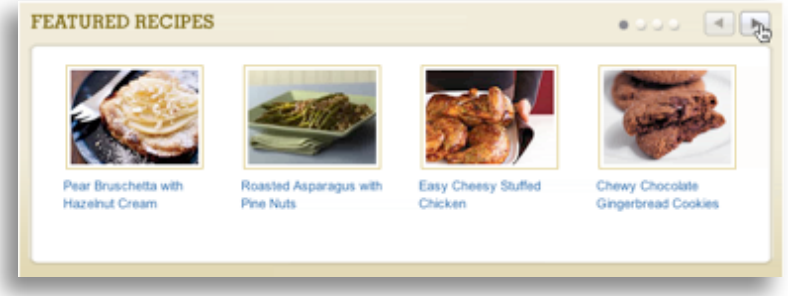
mlslistings. **pagination**

Rethink paging

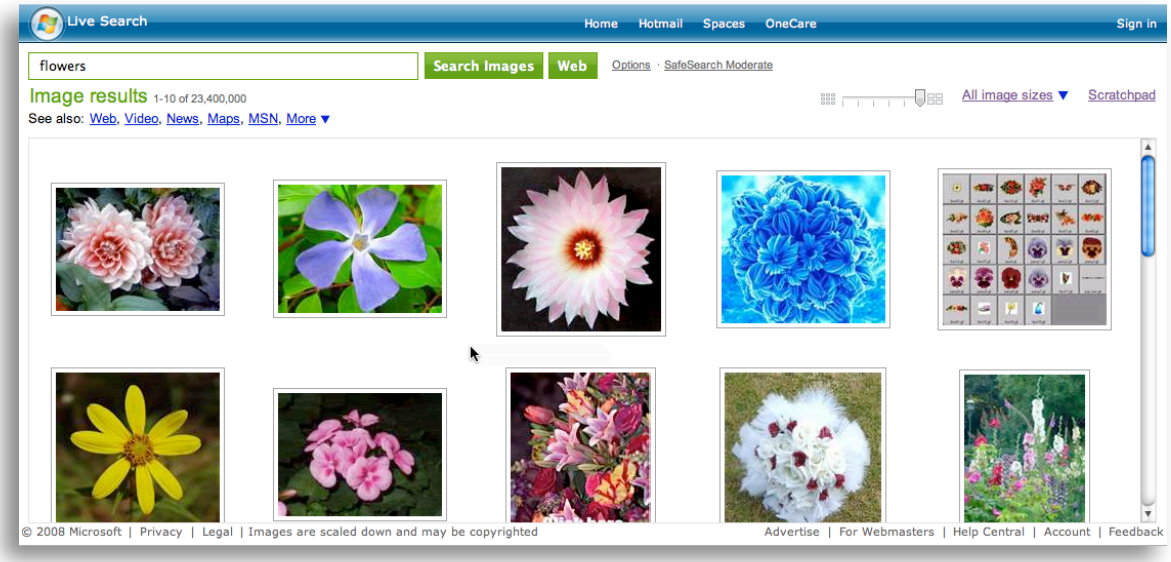
use scrolling for "owned" data

watch out for dual scroll bar issue

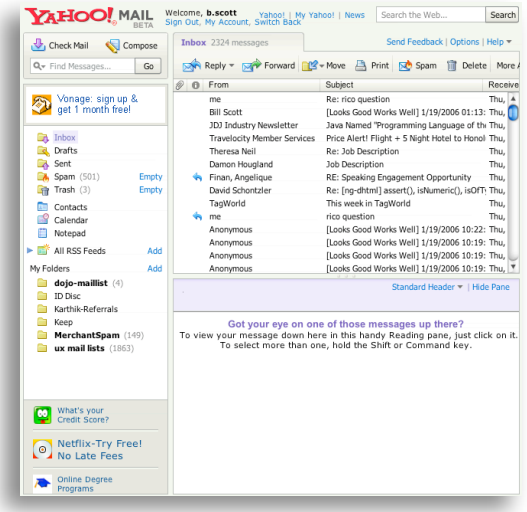
hybrid of paging & scrolling



y! health. **carousel**



microsoft live. **paged scrolling**



y! mail. **on-demand scrolling**

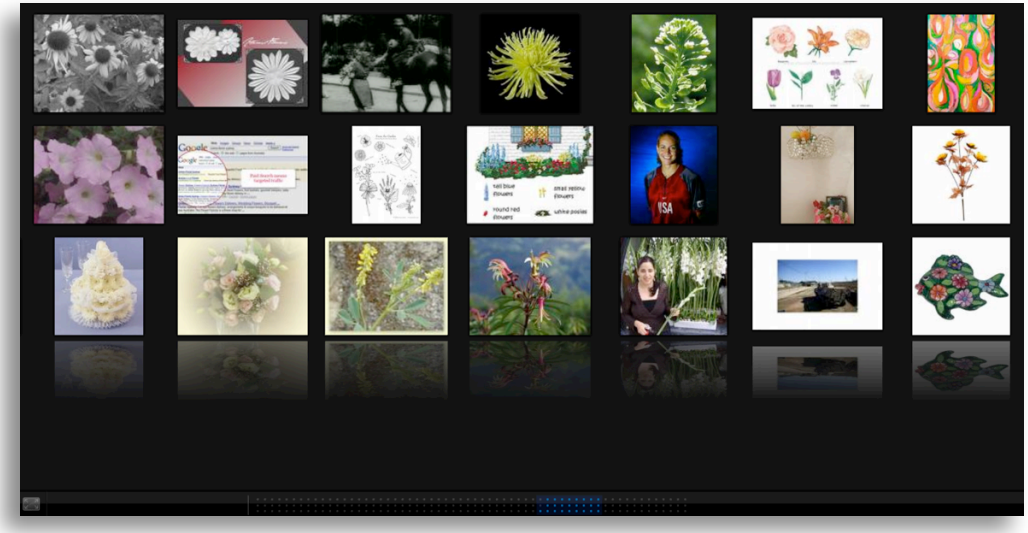
endless. **seamless paging**

Rethink paging

in-place paging

zoomable user interface (zui)

hard rock cafe. **zui**

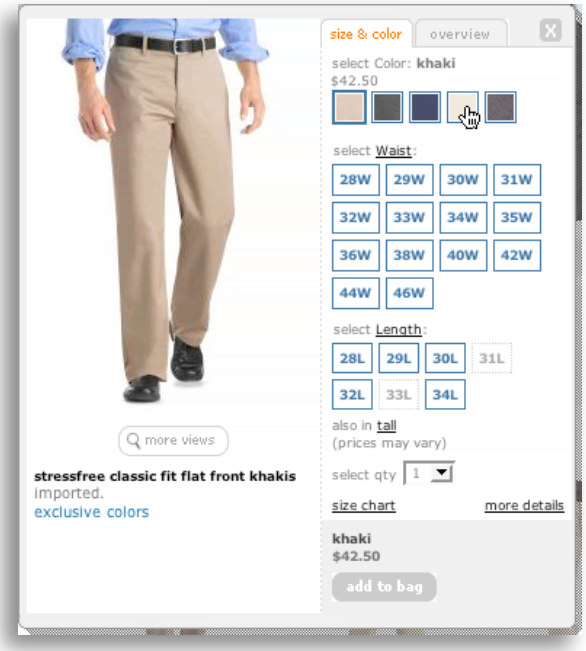


cool iris (piclens). **zui**

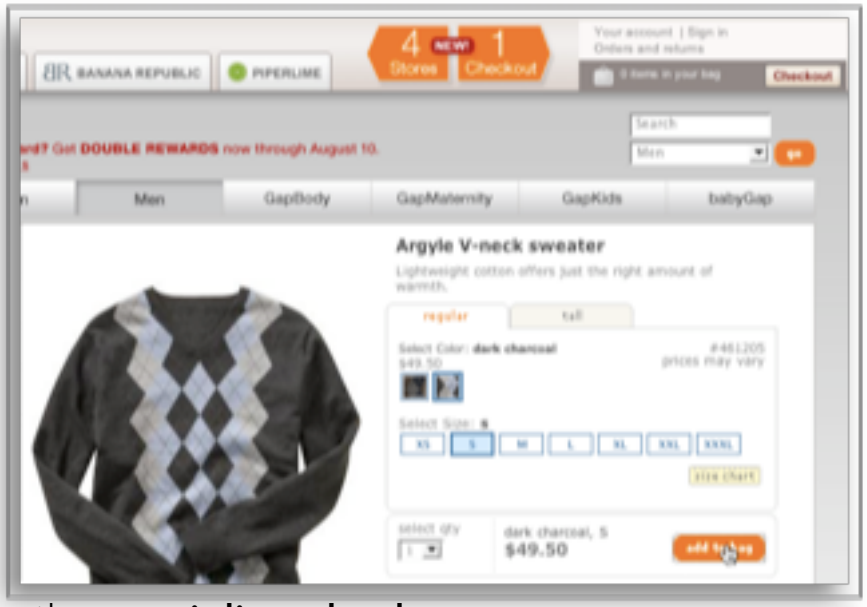
rethink process flows

the user's mental model vs page model

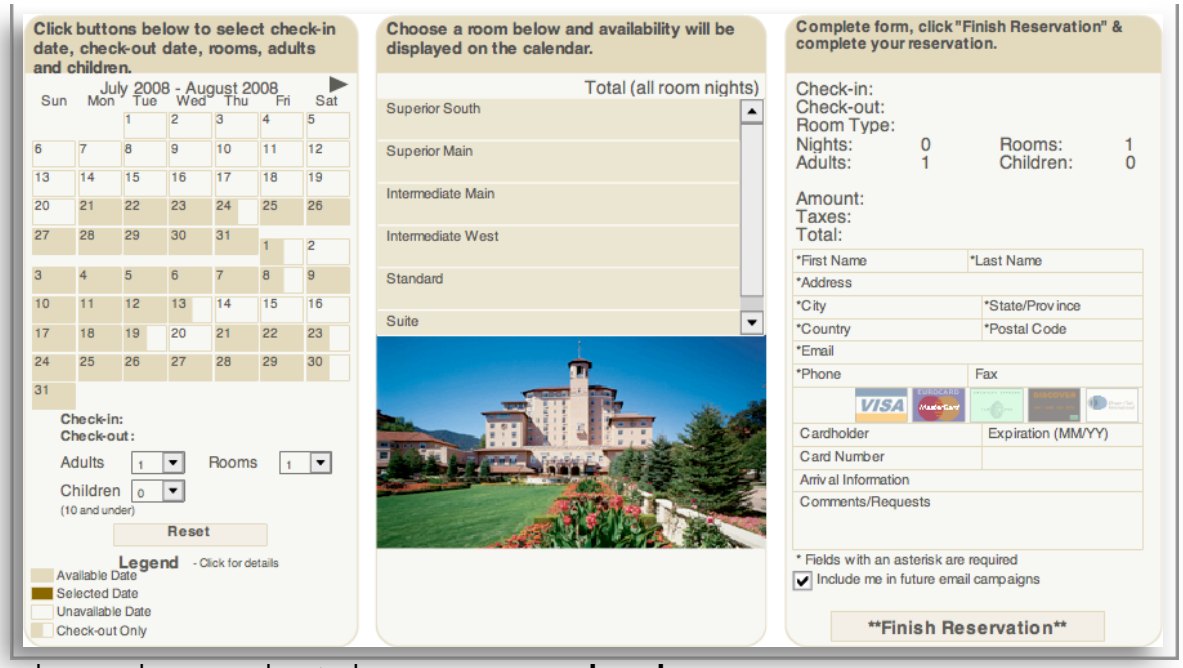
every page jump is a mental speed bump



the gap. **inline assistant**



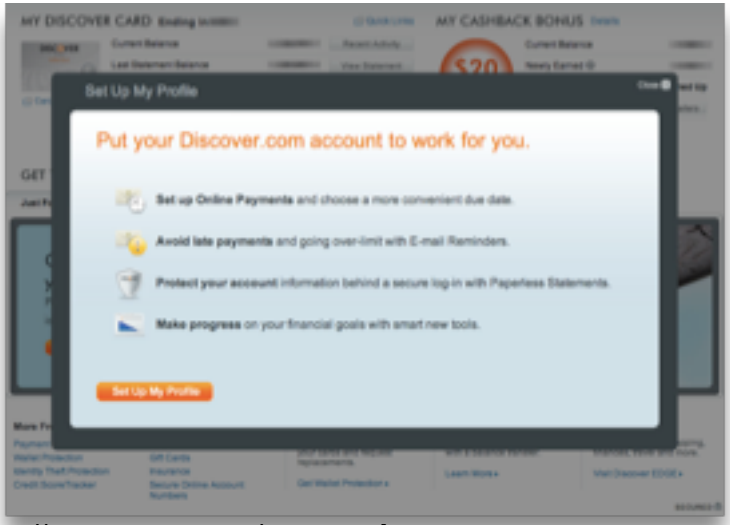
the gap. **inline checkout**



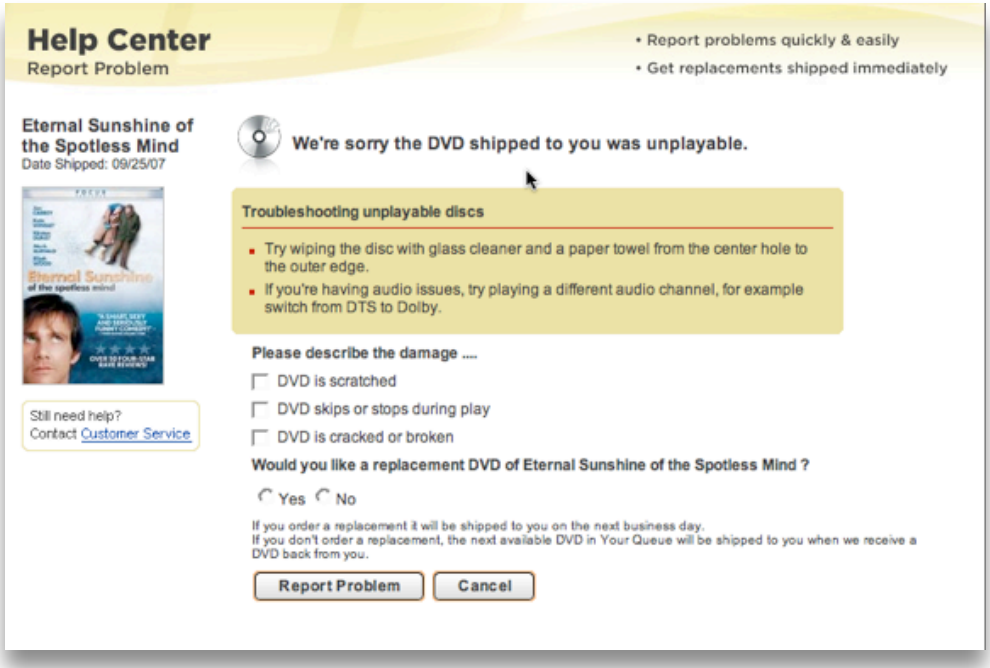
broadmoor hotel. **one page checkout**

step by step?

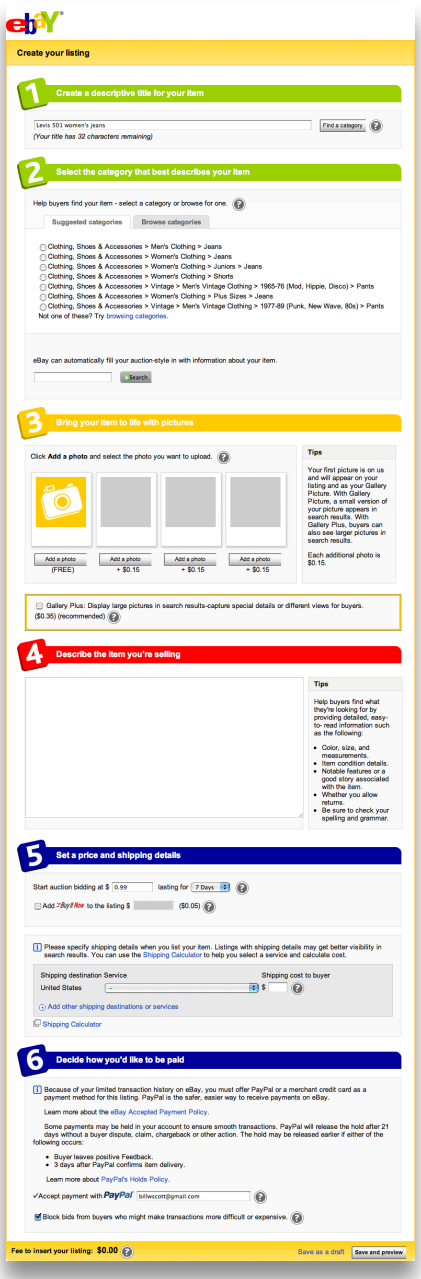
yes, sometimes works best



discover card. **step by step**

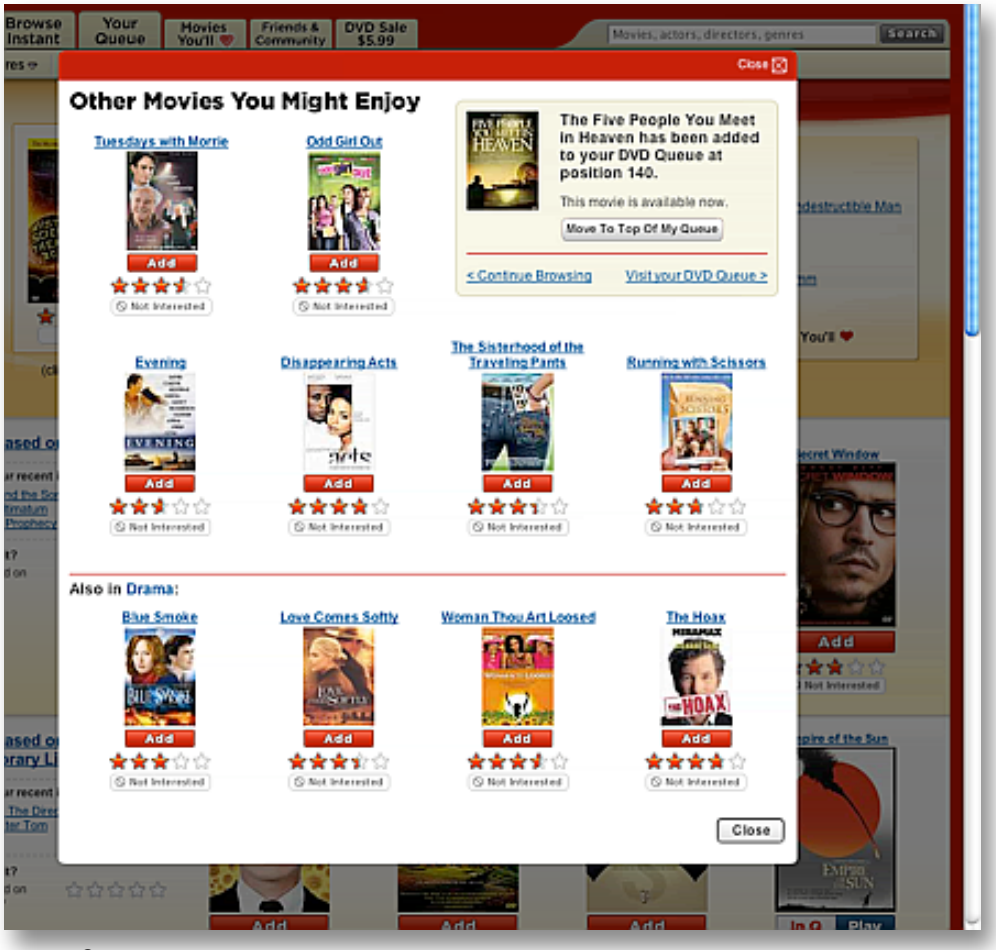


netflix. **step by step**

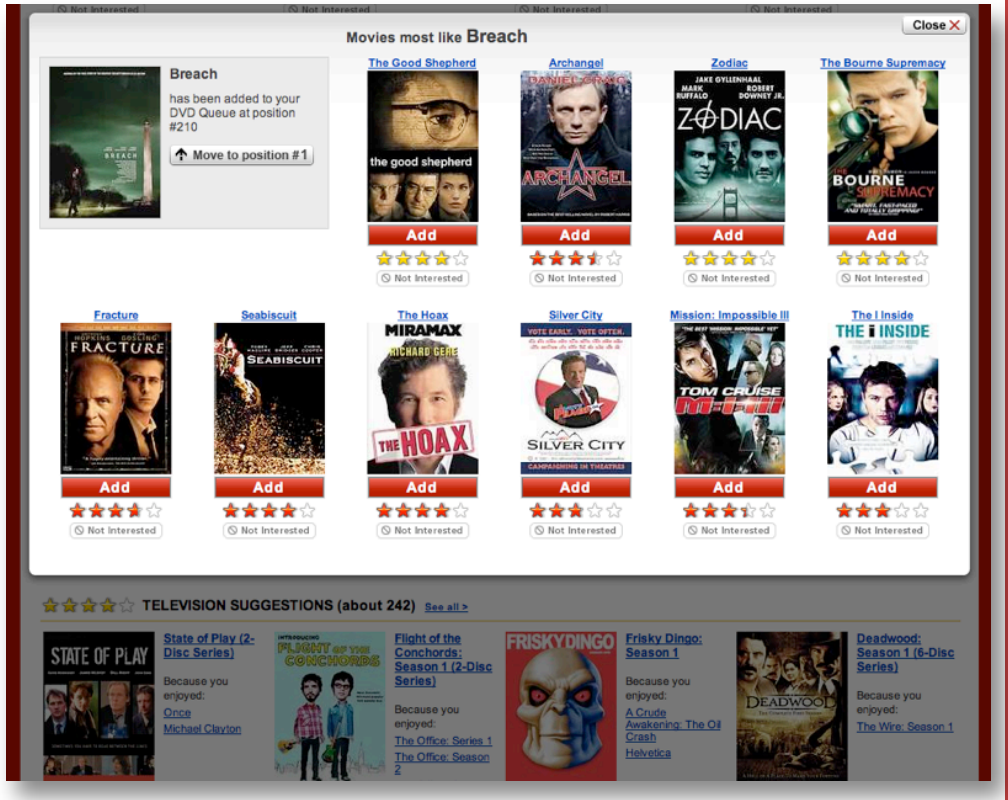


ebay. **single page flow**

Anti-Pattern. **Stalker.**



netflix. **stalker overlay**



netflix. **simpler overlay**

summary

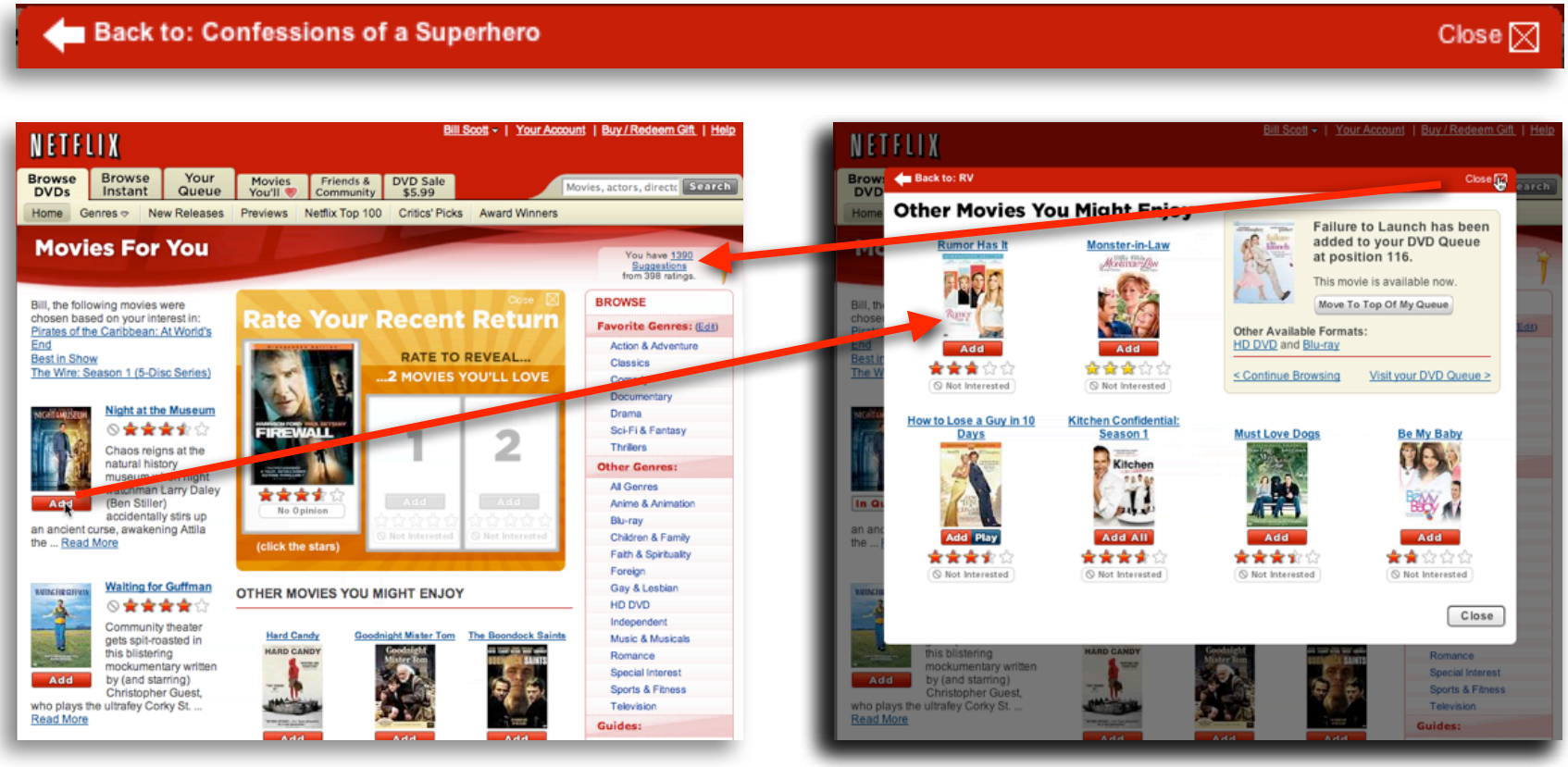
Requiring the user to go down a level or two, perform an operation, come back to the top and then have to go back down again. Name comes from hopping up and down through the site.

credit

Jared Spool

Netflix. Older version of add to queue

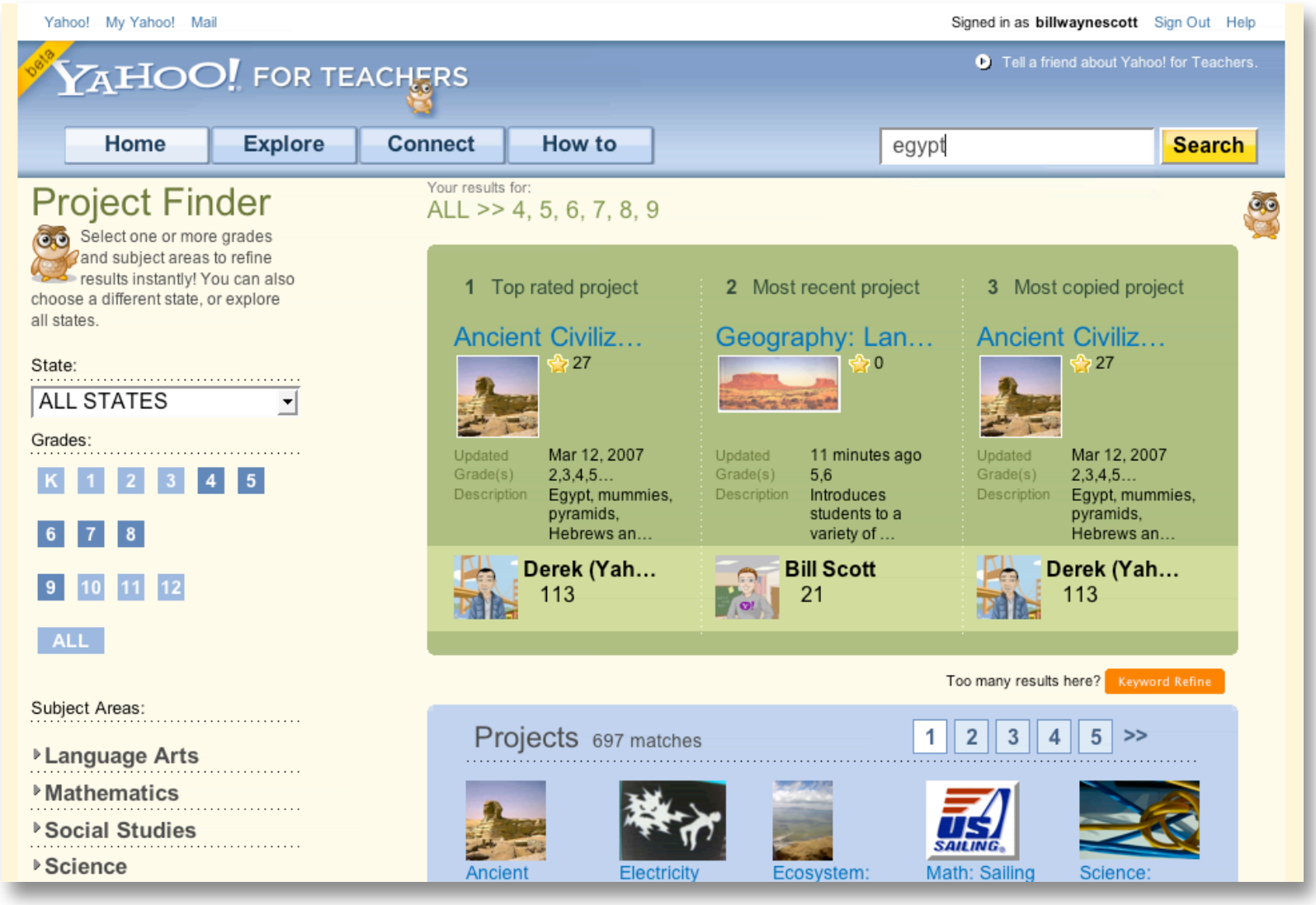
Netflix. Newer version of add to queue



Solution

Encapsulate alternate click stream in an overlay

Y! Teachers



No obvious close for overlay

Back Button goes to wrong place

Draw flow arrows *between pages to catch the zig-zag bouncing from page to page (see Meandering Way).*

To avoid pogo effect:

- **Use in-context tools** *to bring actions into the current page*
- **Use hover details** *to reveal information in context*
- **Use overlays** *for encapsulating an alternate navigation path to allow temporary exploration without losing the original context of navigation*
- **Use in page actions** *like inline editing, etc. to provide functionality inline.*
- **Use in-context expand***s to reveal information on the page.*

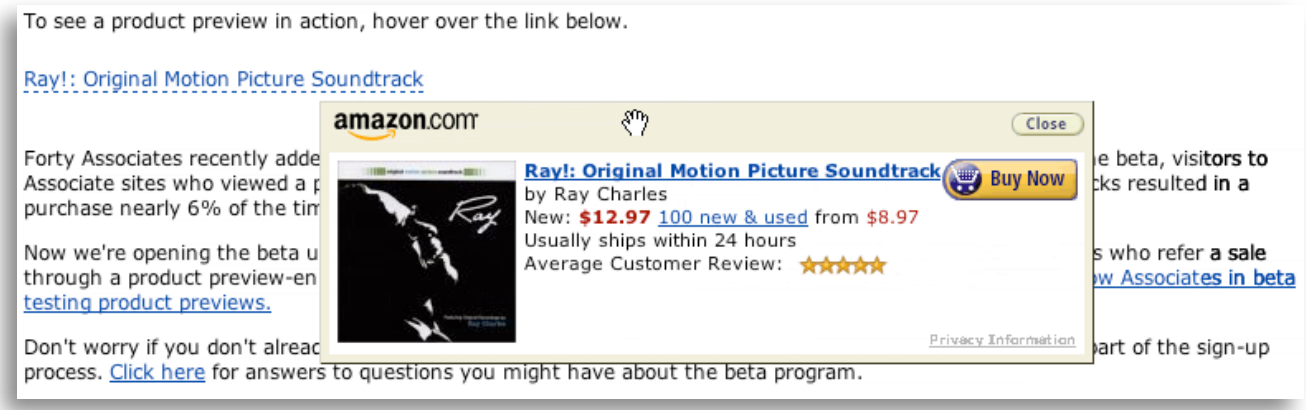
Watch out for overlays

Can make users resort to back button anyway

Stay on the Page. **Anti-Patterns.**

anti-pattern. y! photos. **idiot boxes**

anti-pattern. borders. **hover & cover**

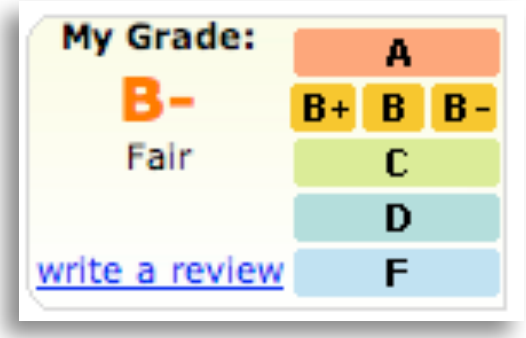


anti-pattern. amazon. **mouse trap**

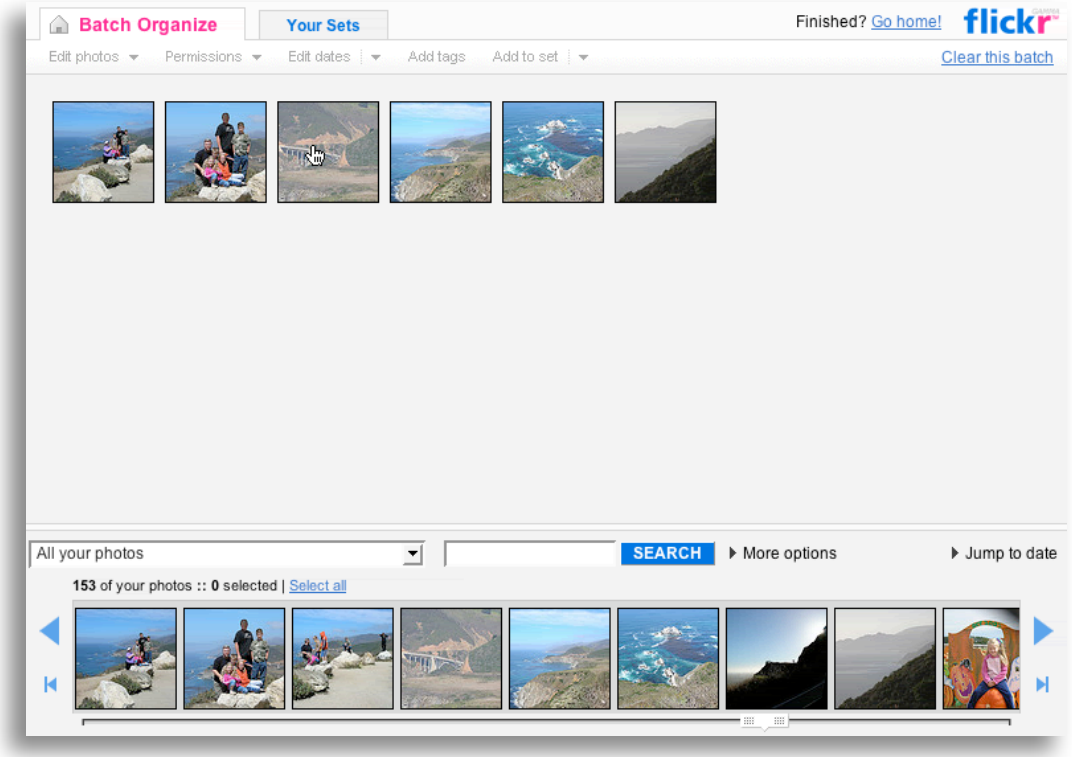
Provide an Invitation

Provide an Invitation.

hover invitation.

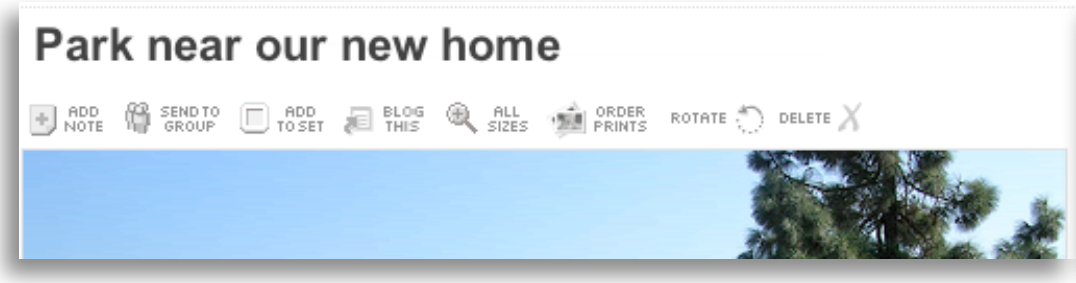


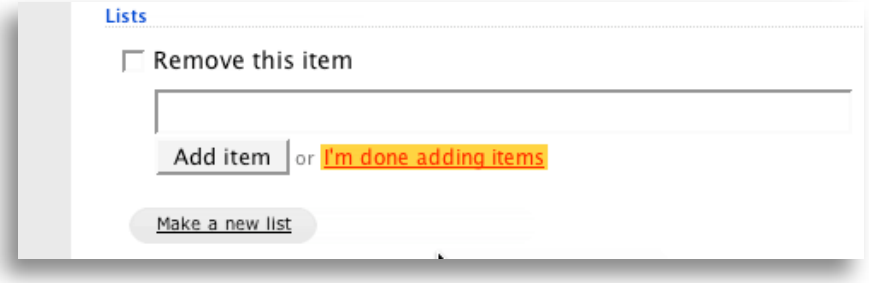
drop invitation.



tour invitation.

tooltip invitation + hover invitation + cursor invitation.

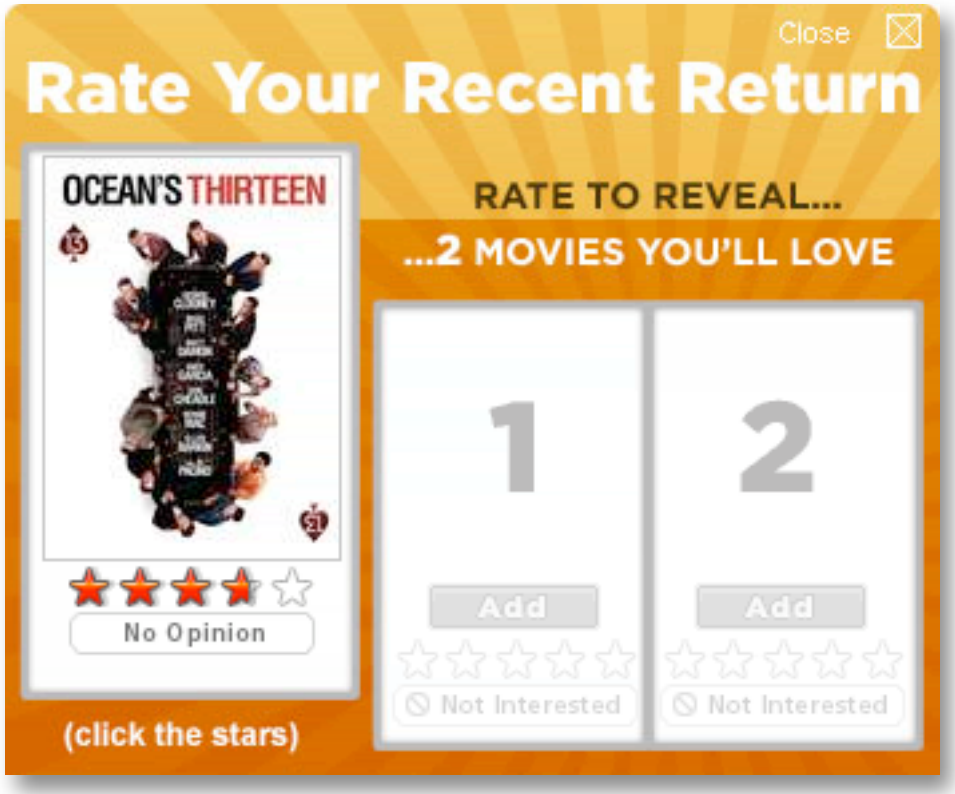




unfinished look

dog-ear
blank slots
blank slate

yahoo login! **dog-ear invite**



netflix. **rate invitiation (blank slots)**

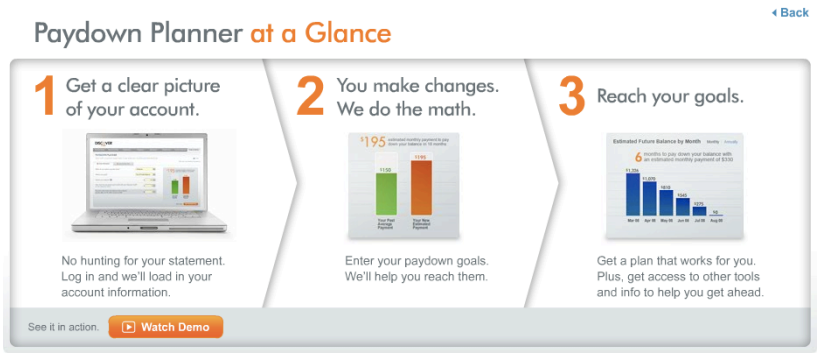
backpackit. **blank slate invitation**

call to action

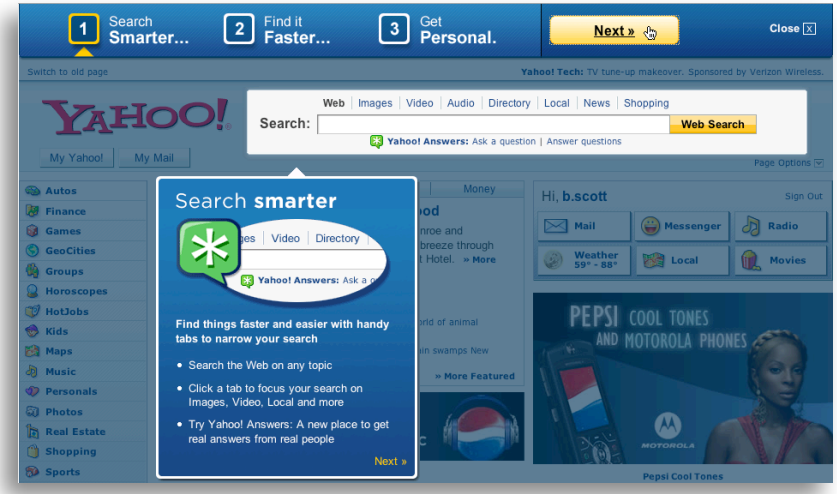
1-2-3 messaging

spotlighting or lightbox

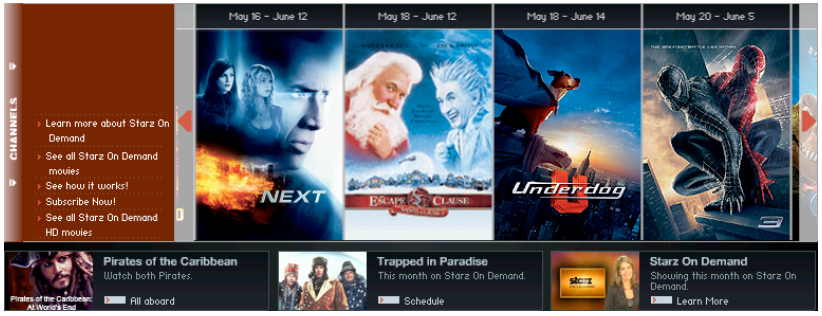
provide a peek



discover! **1-2-3 call to action**



yahoo! **tour invitation**

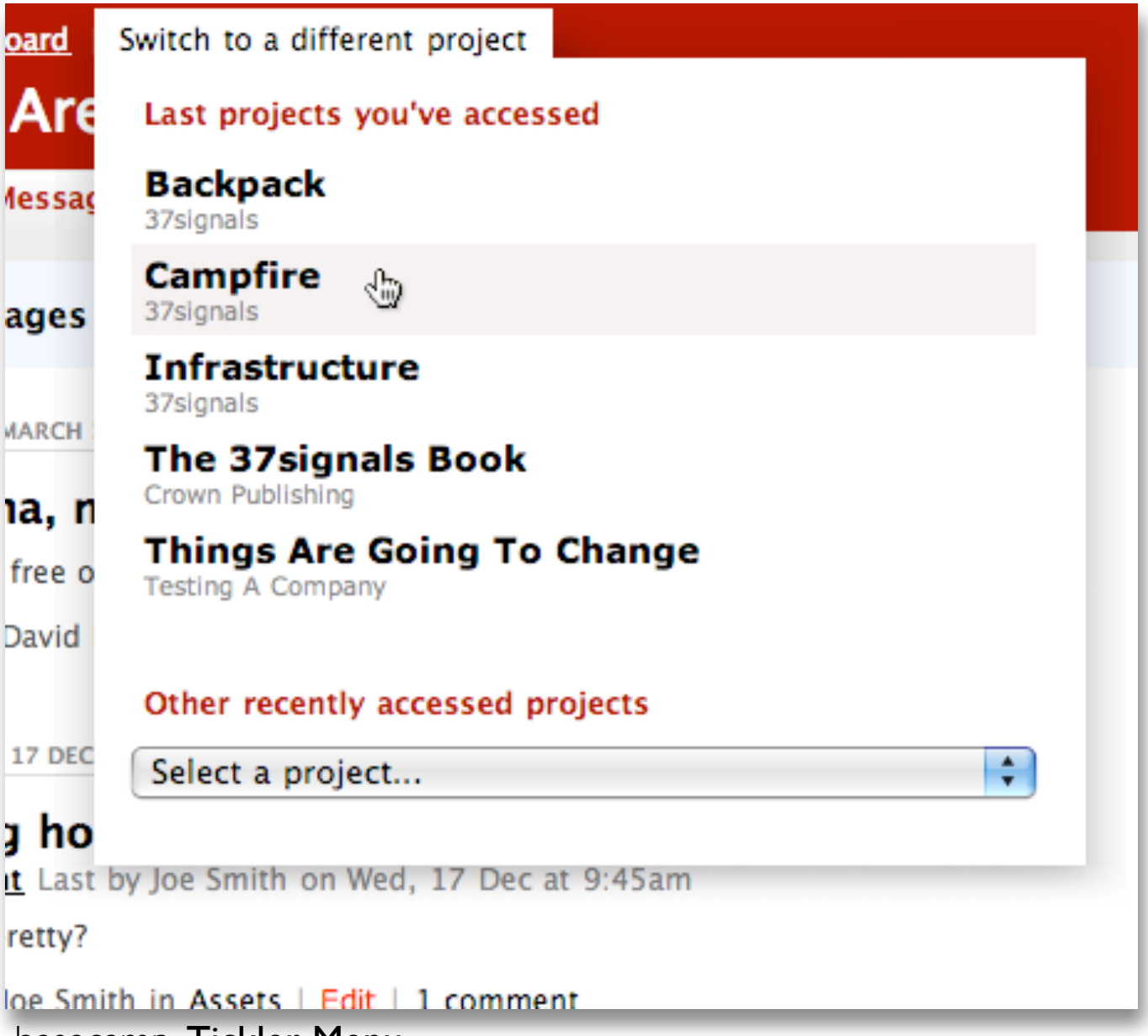


starz play! **sneak peek in carousel**

Provide an Invitation. **Navigation Invitation.**

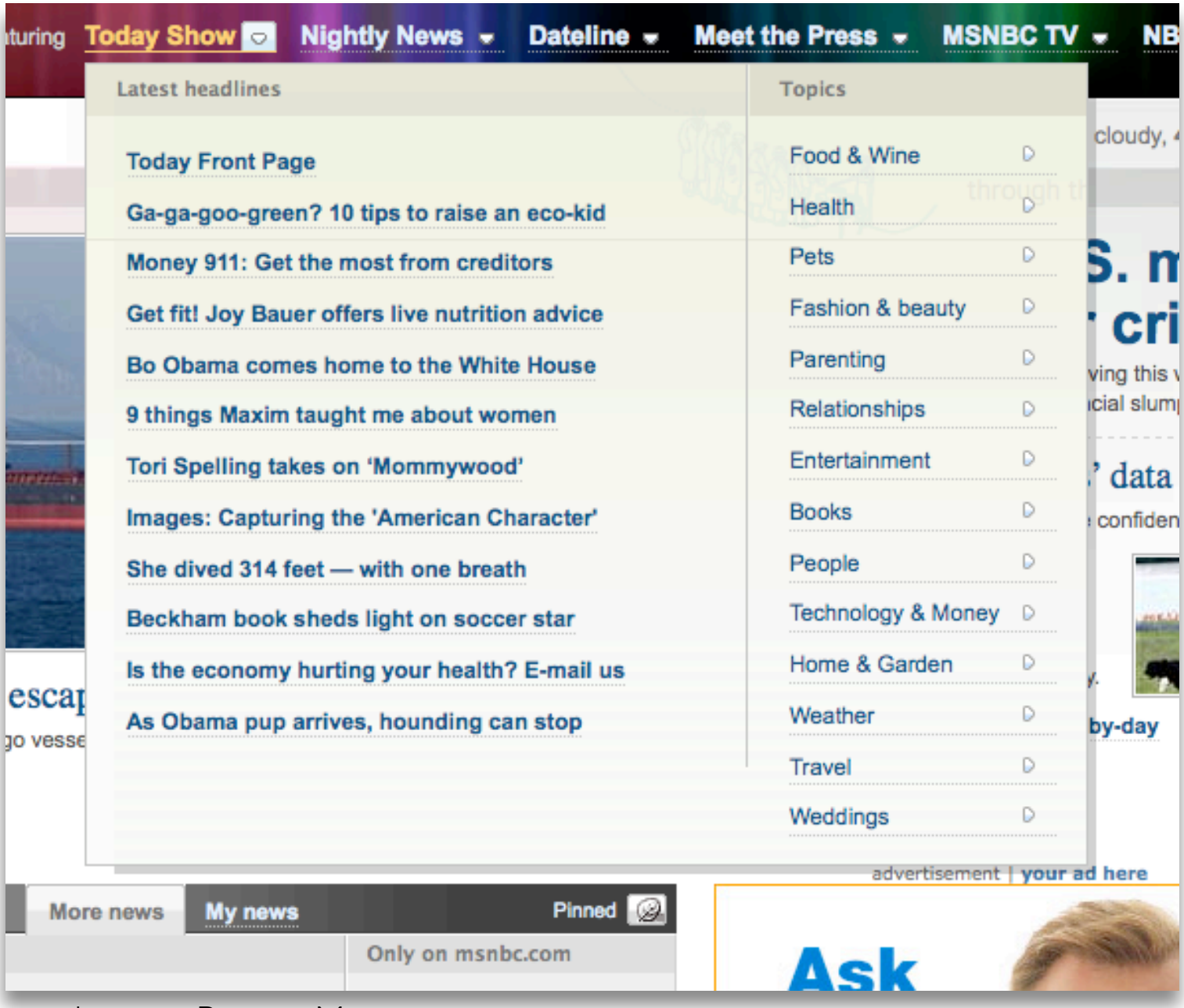
talkeetnaviaggi.it

Provide an Invitation. **Tickler Menu.**



basecamp. **Tickler Menu.**

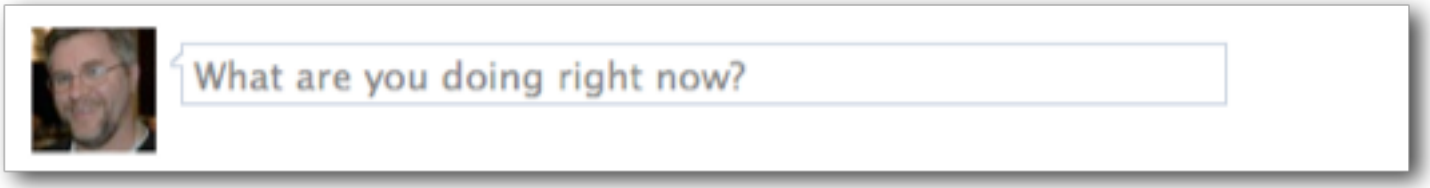
Provide an Invitation. **Page as Menu.**



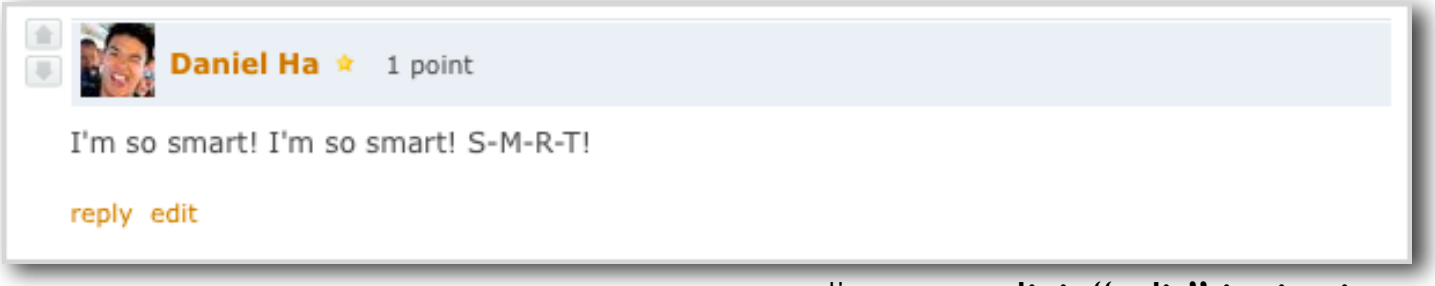
msnbc.com. Page as Menu.

discoverability

invitations

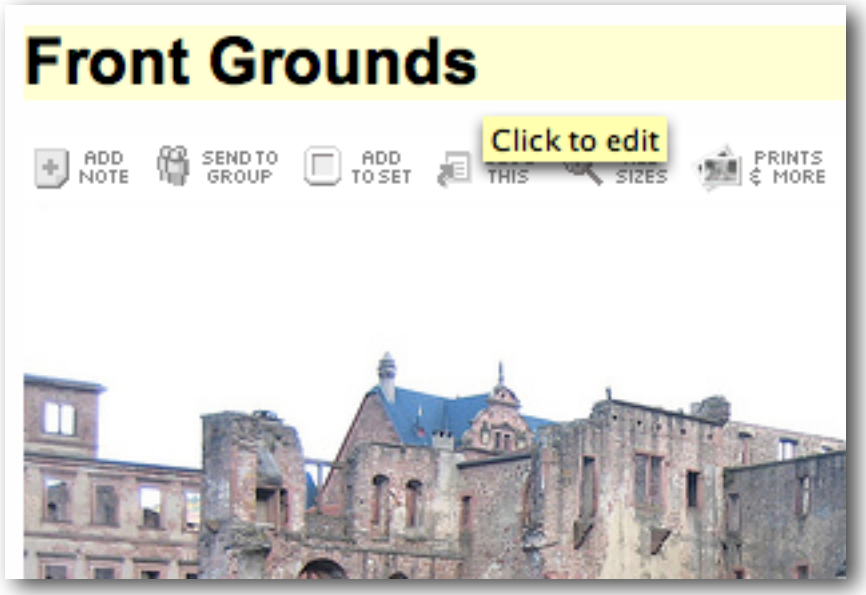


facebook. **prompt-based invitation**



disqus. **explicit "edit" invitation**

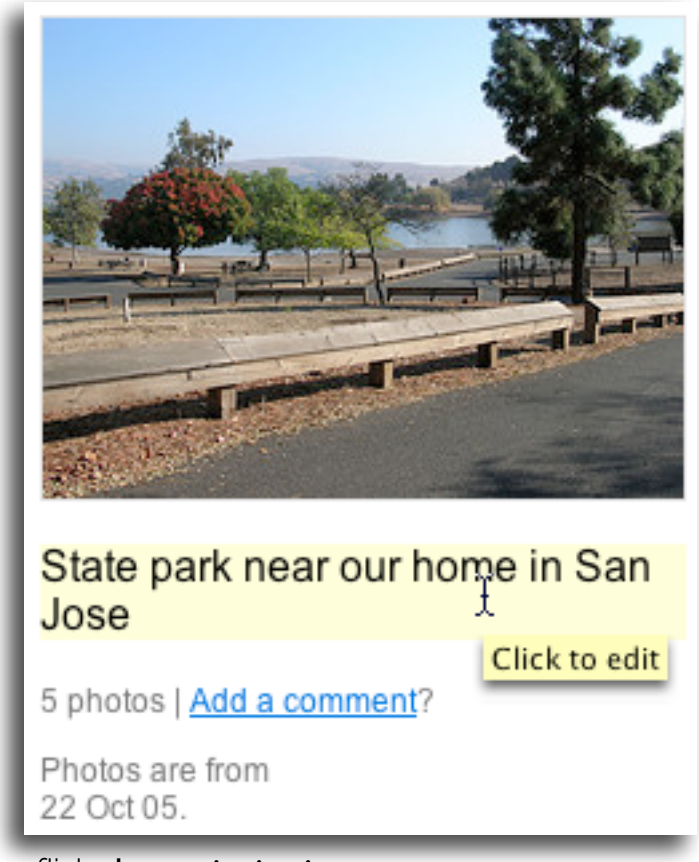
Y!photo. **implicit**



flickr. **on hover**

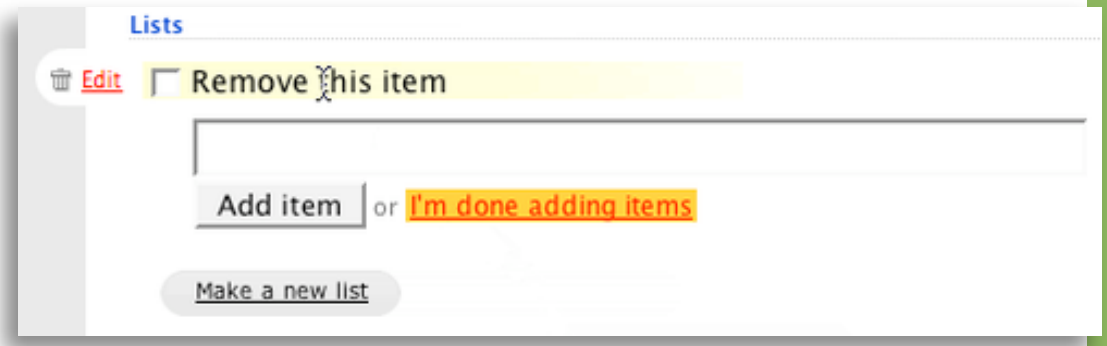
Discoverability

No easy answer
Use the hover to reveal interaction
Use the familiar to teach the new
Can't flag all interactions

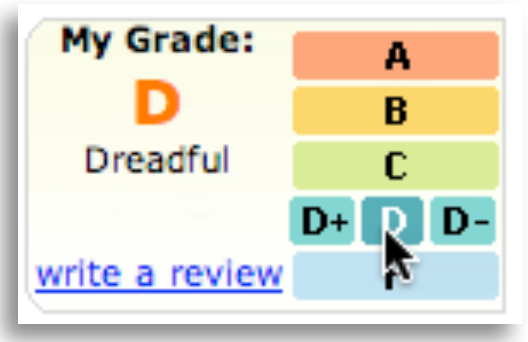


flickr. **hover invitation**

backpackit (fake). **being too explicit**



backpackit. **tooltip invitation + hover invitation + cursor invitation**

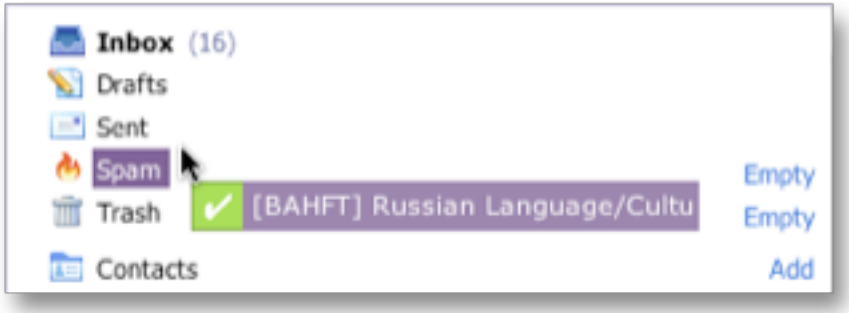


y! movies. **hover invitation**

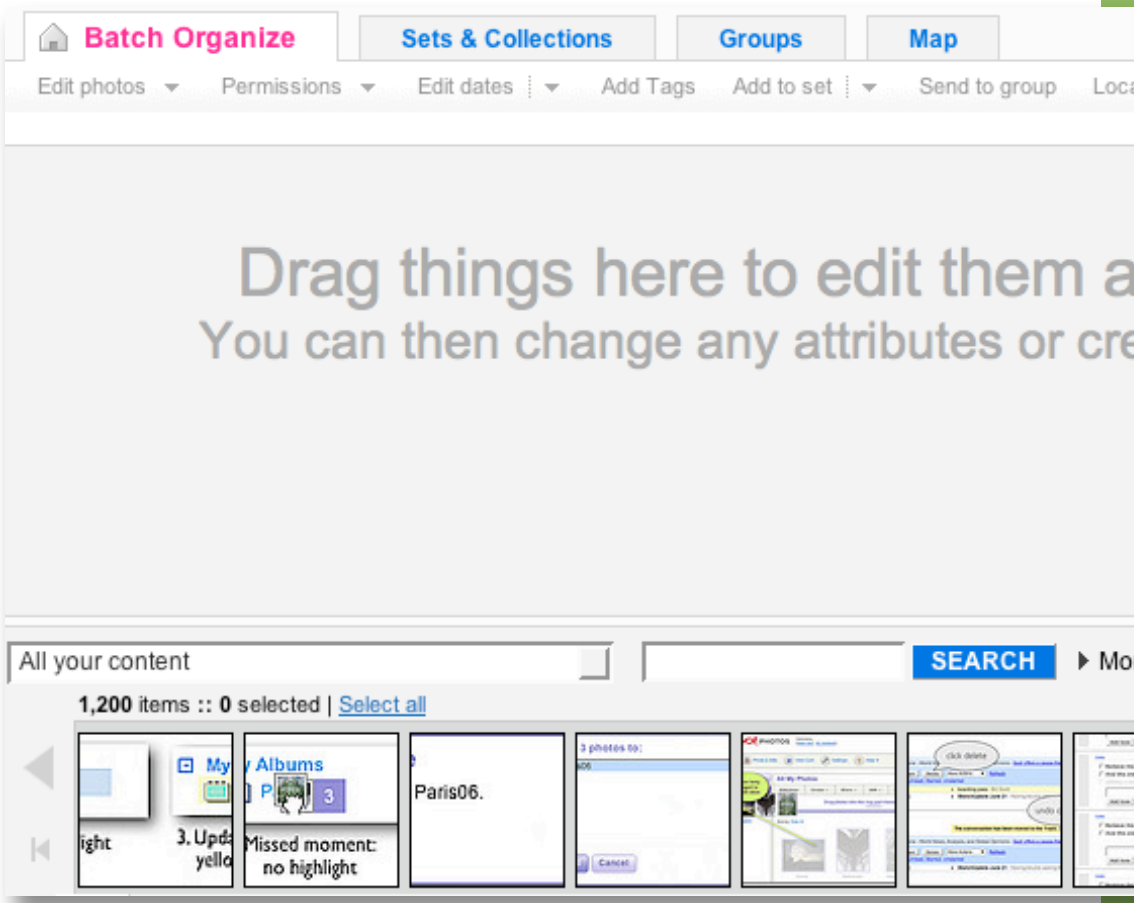
drag and drop

use the interesting moments

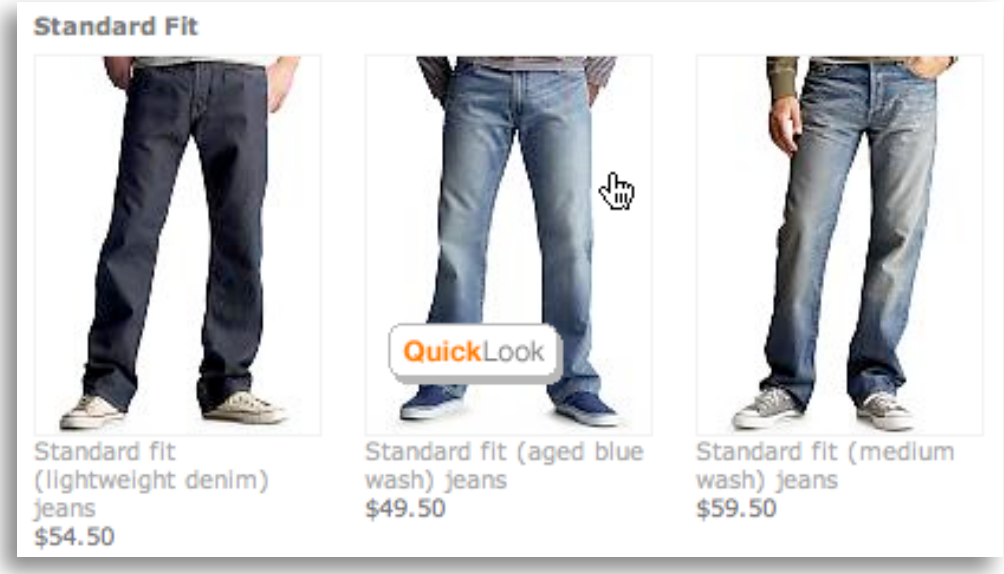
before, during and after



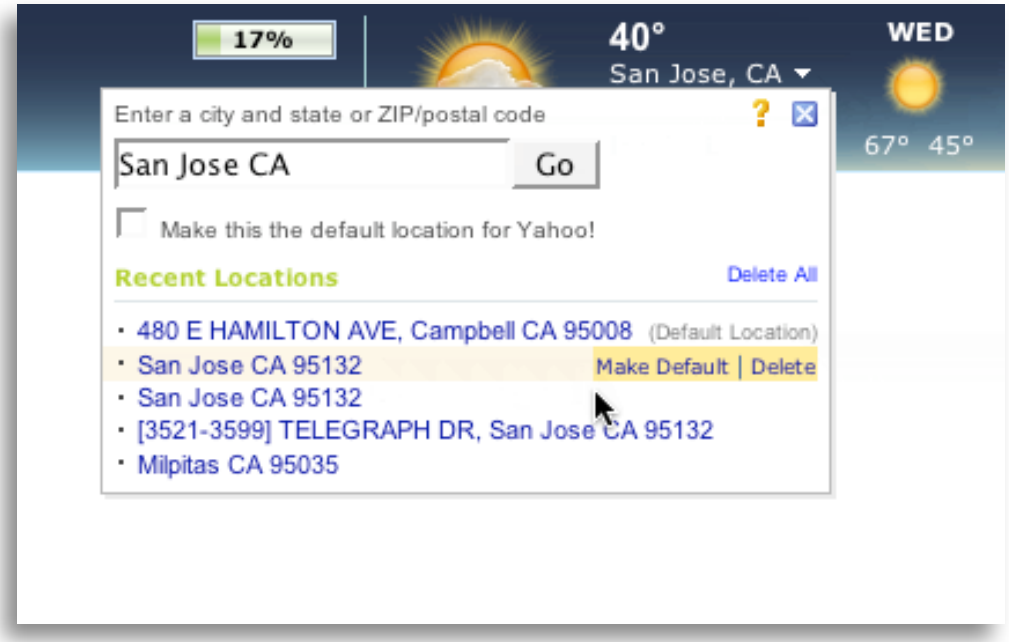
flickr. **drop here invitation (interactive)**



flickr. **drop here invitation (static)**



the gap. **button**



y! mail. **embedded buttons**

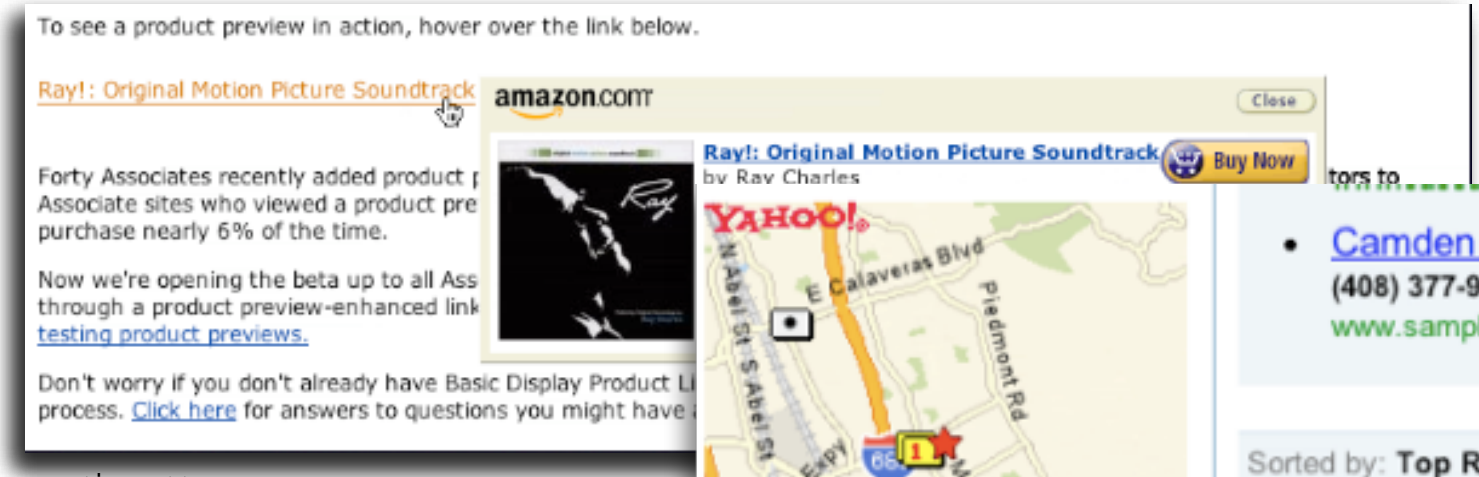
bridge the new with the old

hyperlinks as actions
reveal with hovers
drop down clues

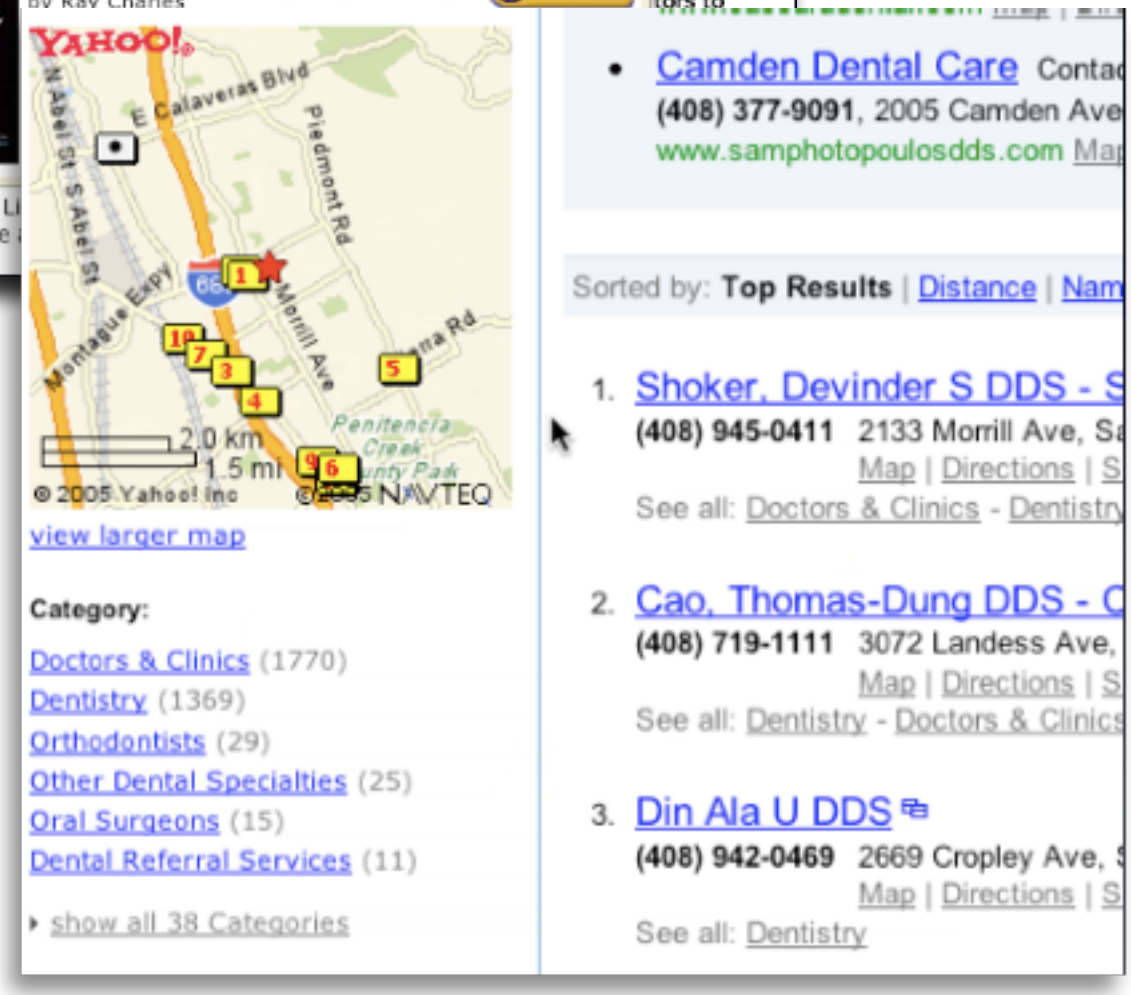
backpackit. **revealed hyperlinks/icons**

flickr. **drop down affordance**

Anti-Pattern. **Mouse Trap.**



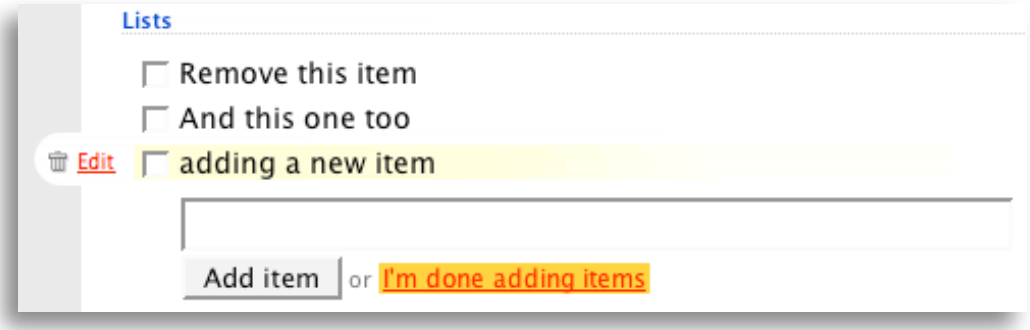
anti-pattern. amazon. **mouse trap**



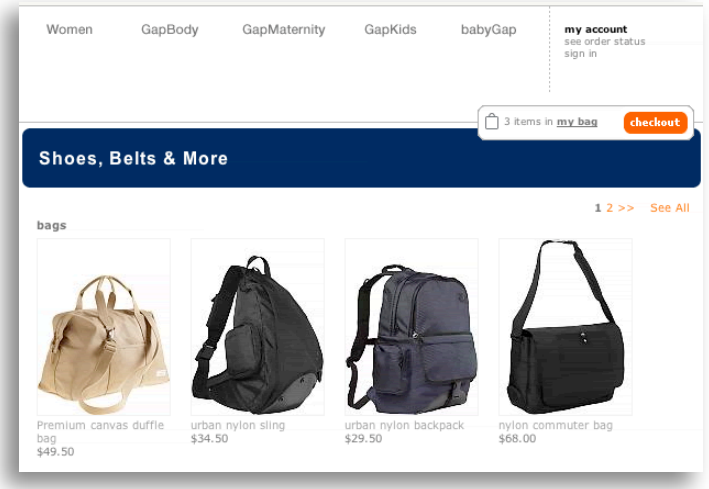
anti-pattern. y! maps. **mouse trap**

Use Transitions

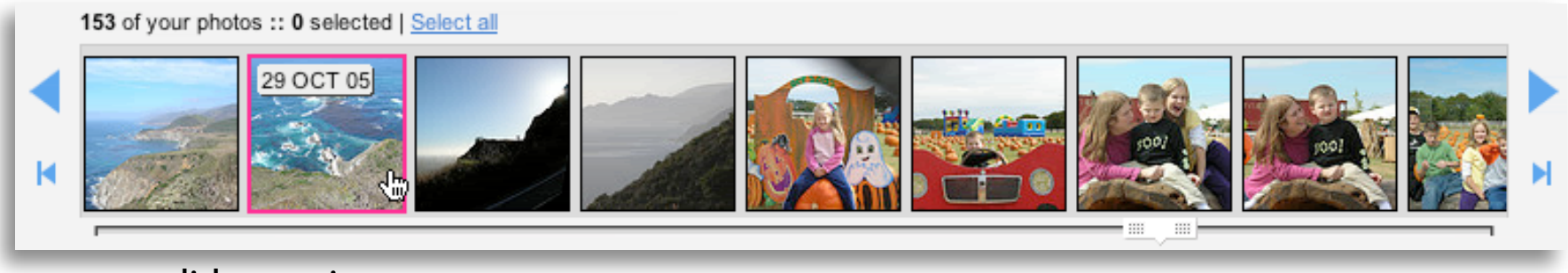
Use Transitions.



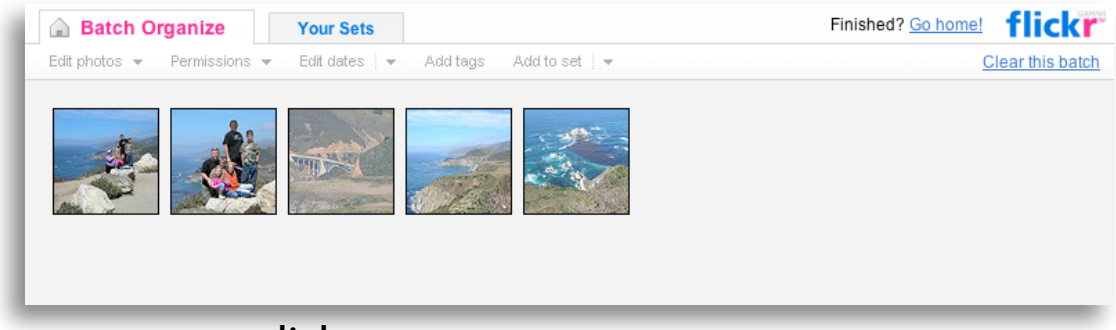
pattern. fade transition + self-healing transition.



pattern. zoom box.

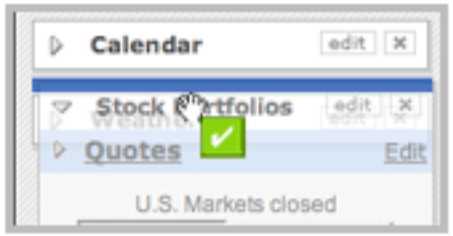


pattern. slide + animate.

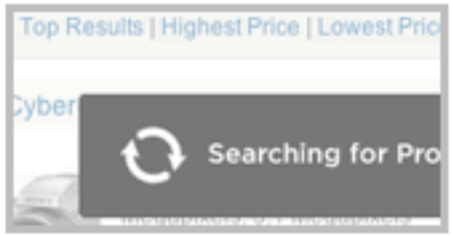


pattern. spotlight.

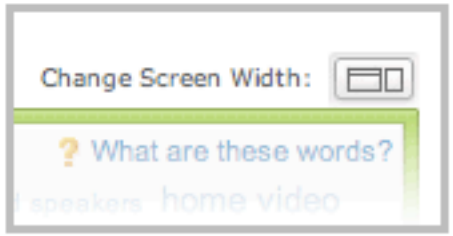
Use Transitions.



[Animate Transition]
Designer needs to communicate that an object is changing its spatial relationship within the page.

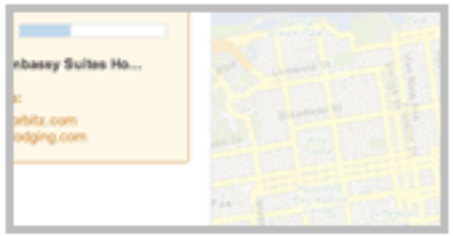


[Brighten Transition]
Designer wants to make a previously dimmed object a point of focus by making the object bright again.



[Collapse Transition]
The designer needs to communicate that an object is no longer of primary importance, yet wants to keep it available in a smaller form.

[Cross Fade Transition]
Designer wants to communicate that a new view of an object is replacing the previous view of the object.

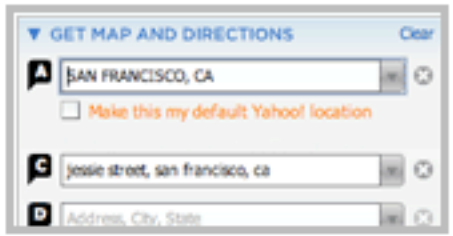


[Dim Transition]
Designer needs to communicate that an object is of secondary importance.

[Expand Transition]
Designer needs to show the detail of an object in its context or reveal a previously collapsed object.

[Fade In Transition]

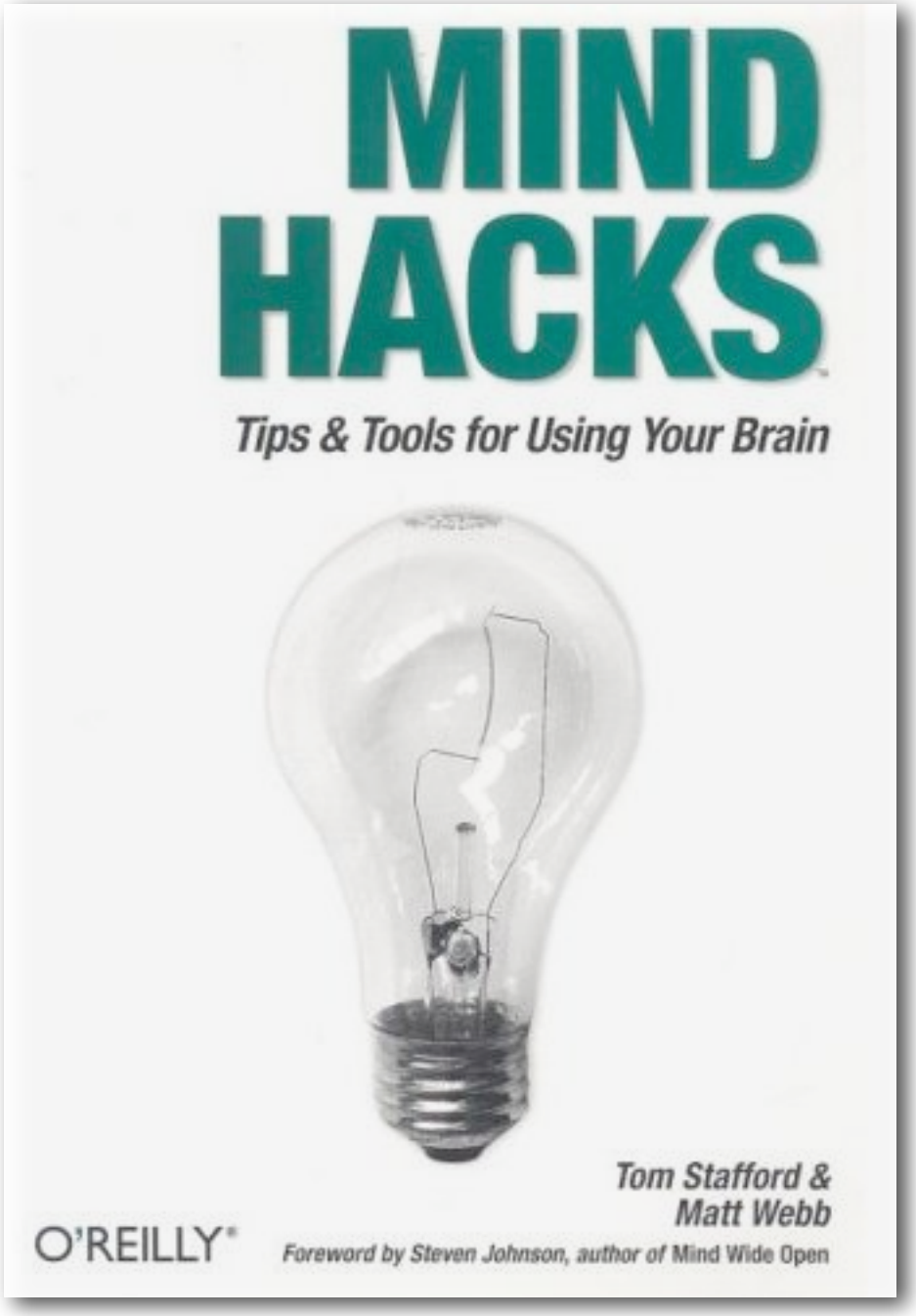
[Fade Out Transition]



[Self Healing Transition]

Speak to the brain

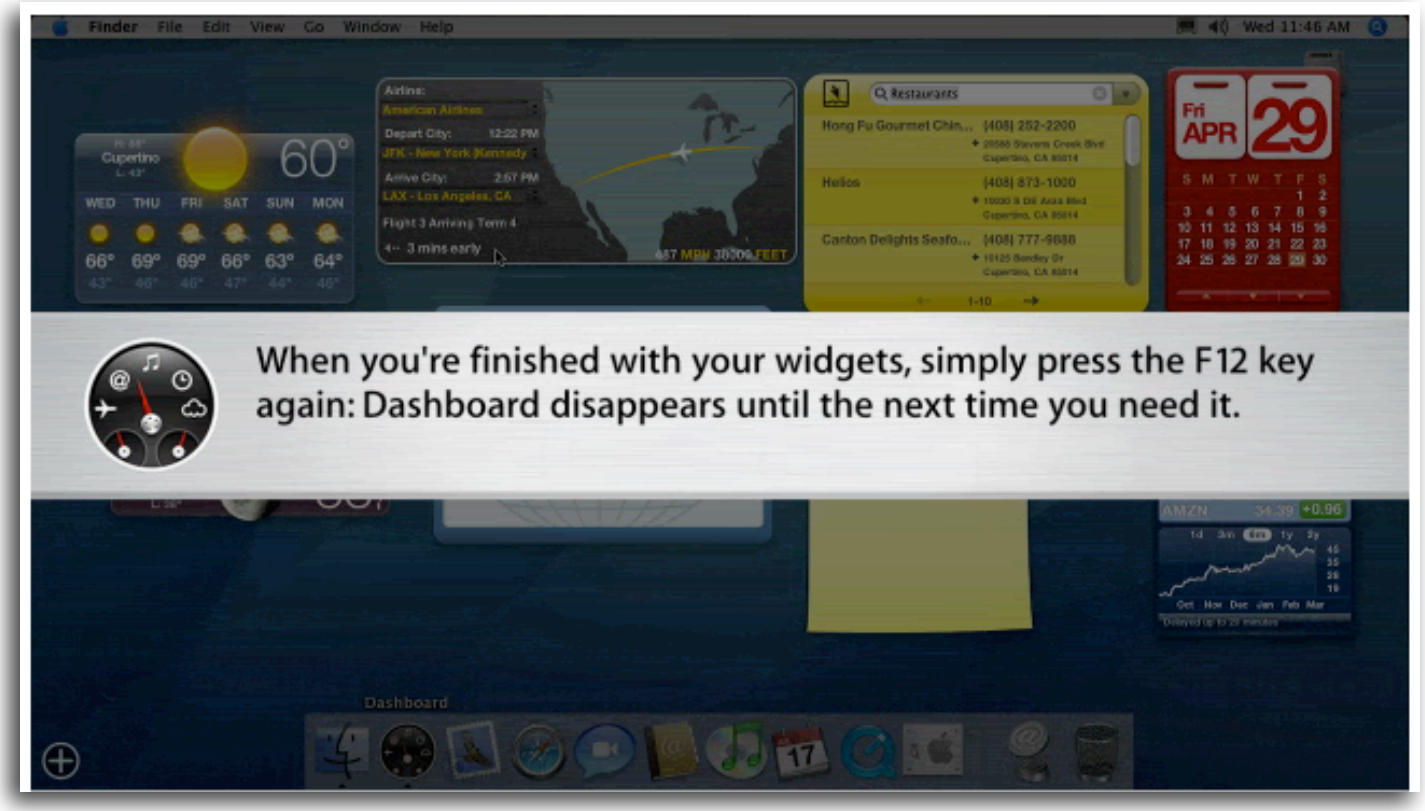
Understanding attention processing



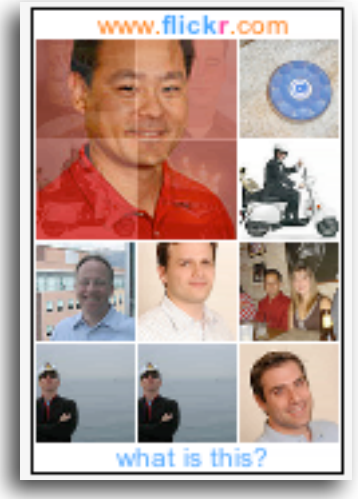
Speak to the brain

Understanding attention processing

Sending the wrong message



mac **widgets**

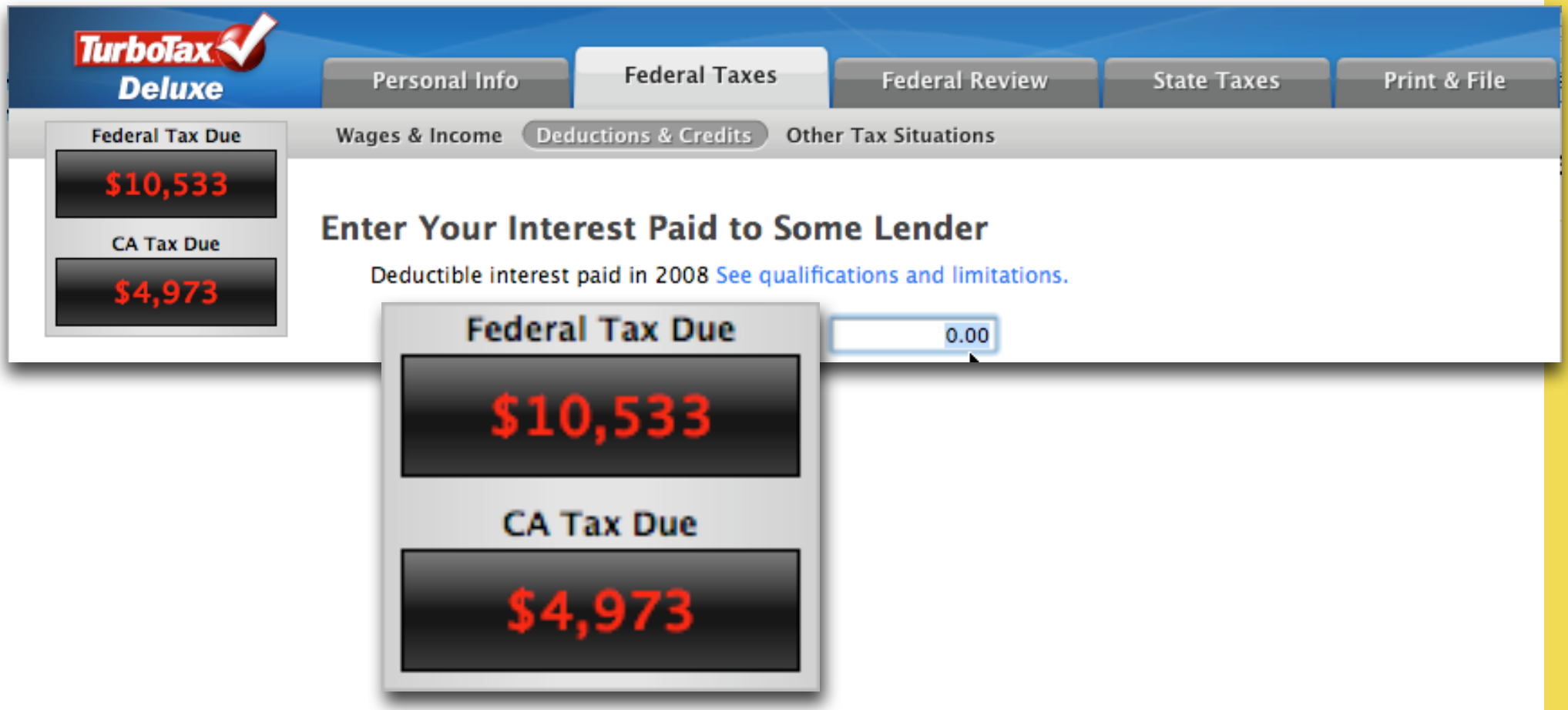


flickr **zeitgeist**

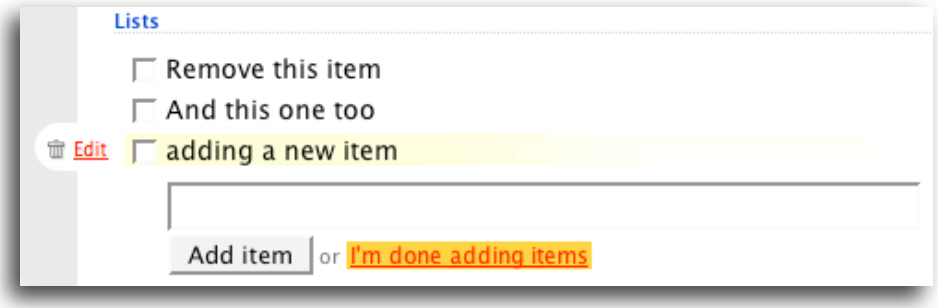
Speak to the brain

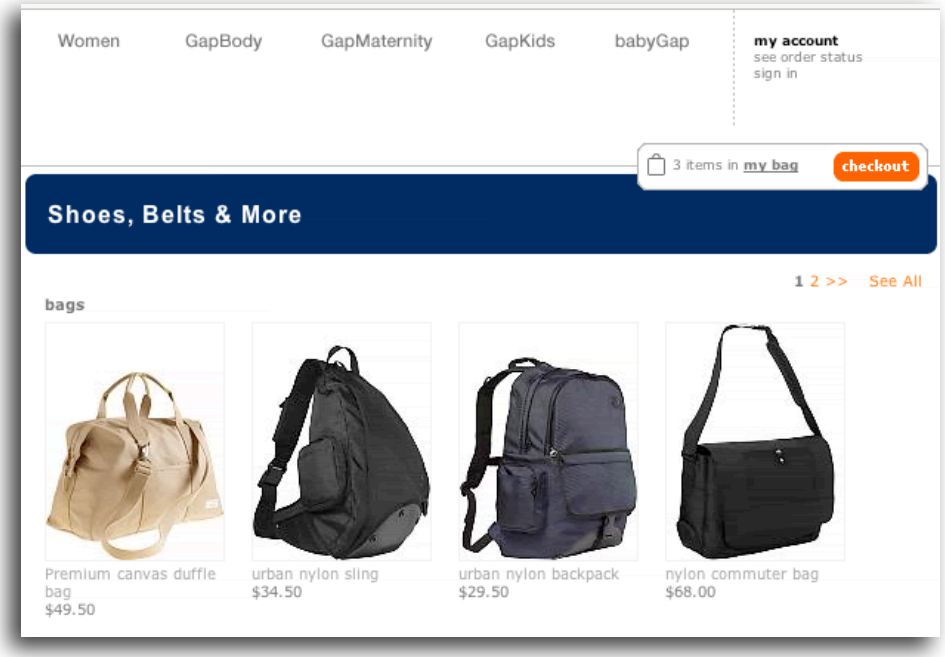
Understanding attention processing

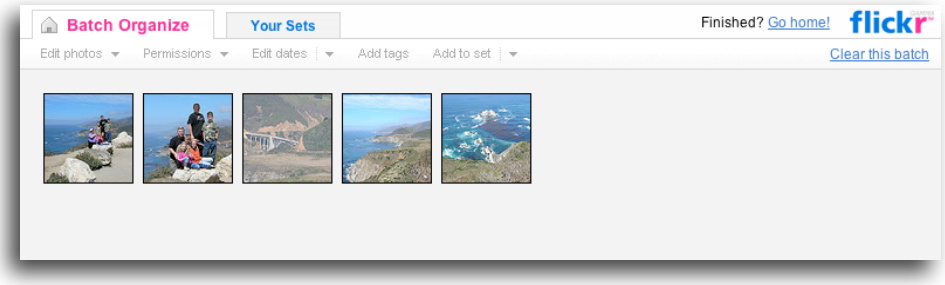
Sending the wrong message



Use Transitions.

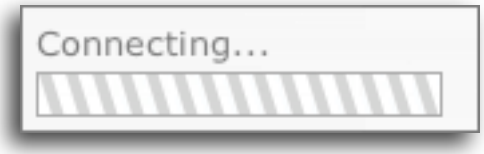




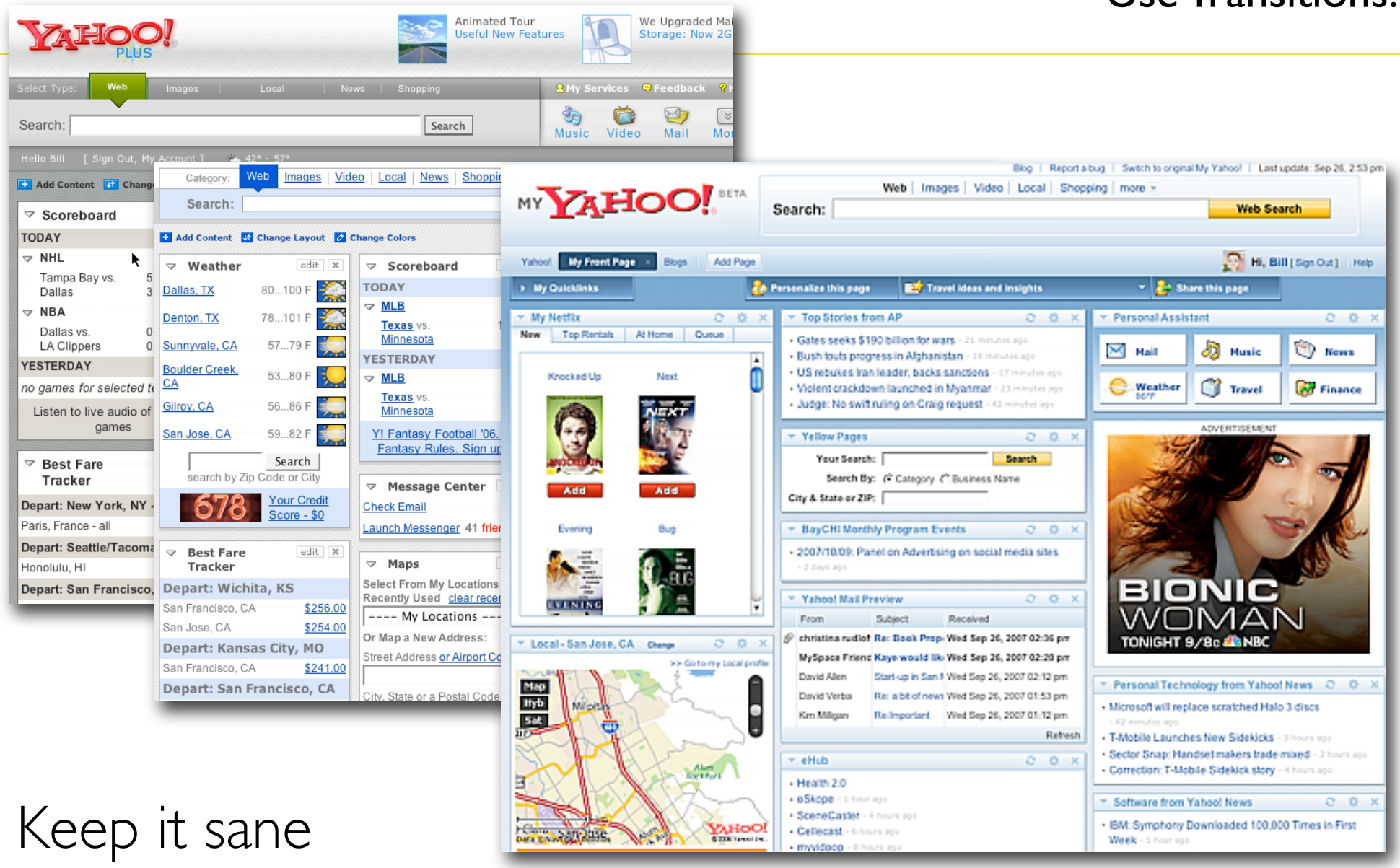


you can...

speed up time
slow down interaction
show state change
show relationships between objects
focus attention



Use Transitions.



Keep it sane

"Cut it in-half" rule of thumb

Use "contrast knob" approach

summary

Animation effects that become the central focus instead of being part of reinforcing a message.

patterns

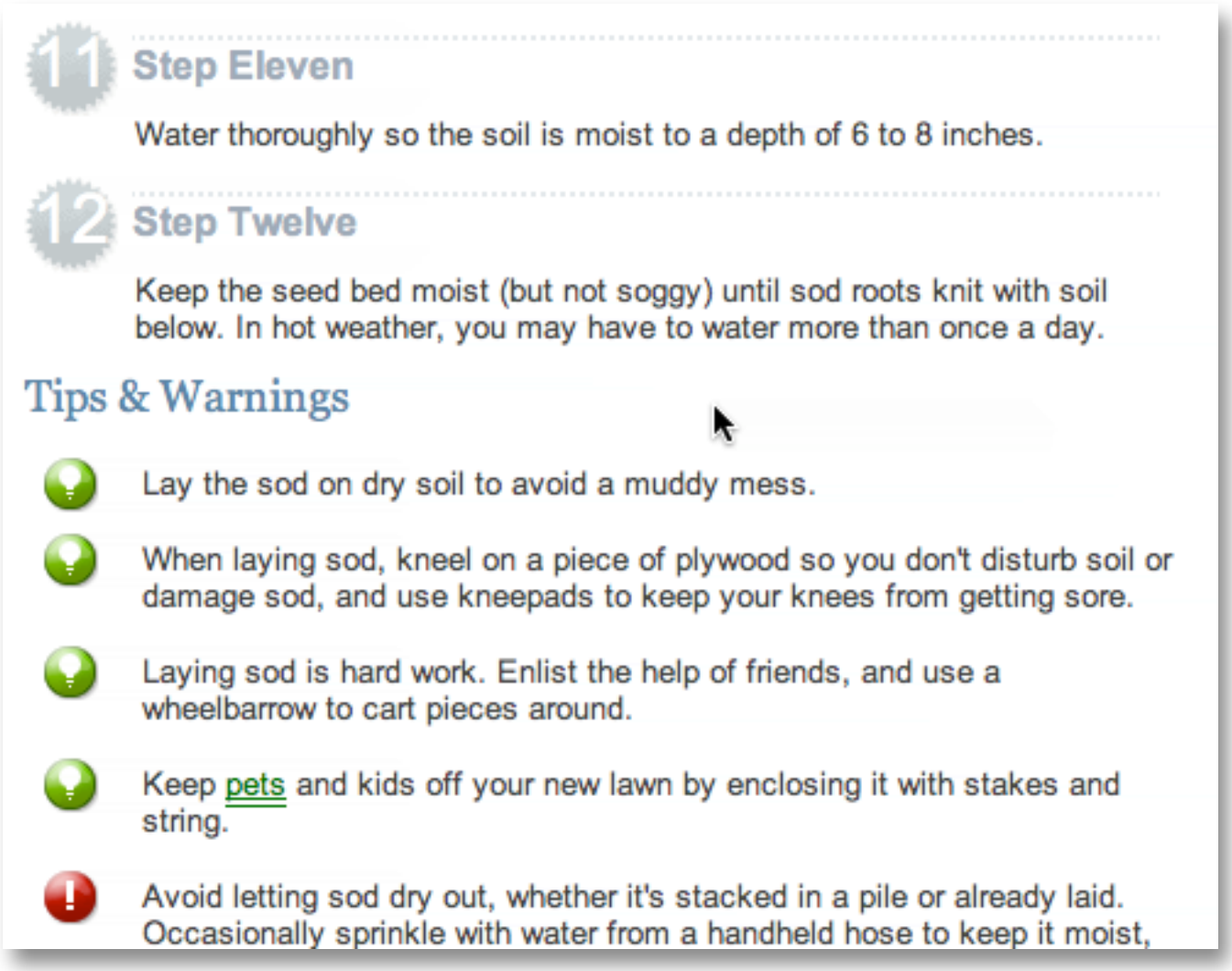
animation gone wild

stalker

needless fanfare

Anti-Pattern. **Animation Gone Wild.**

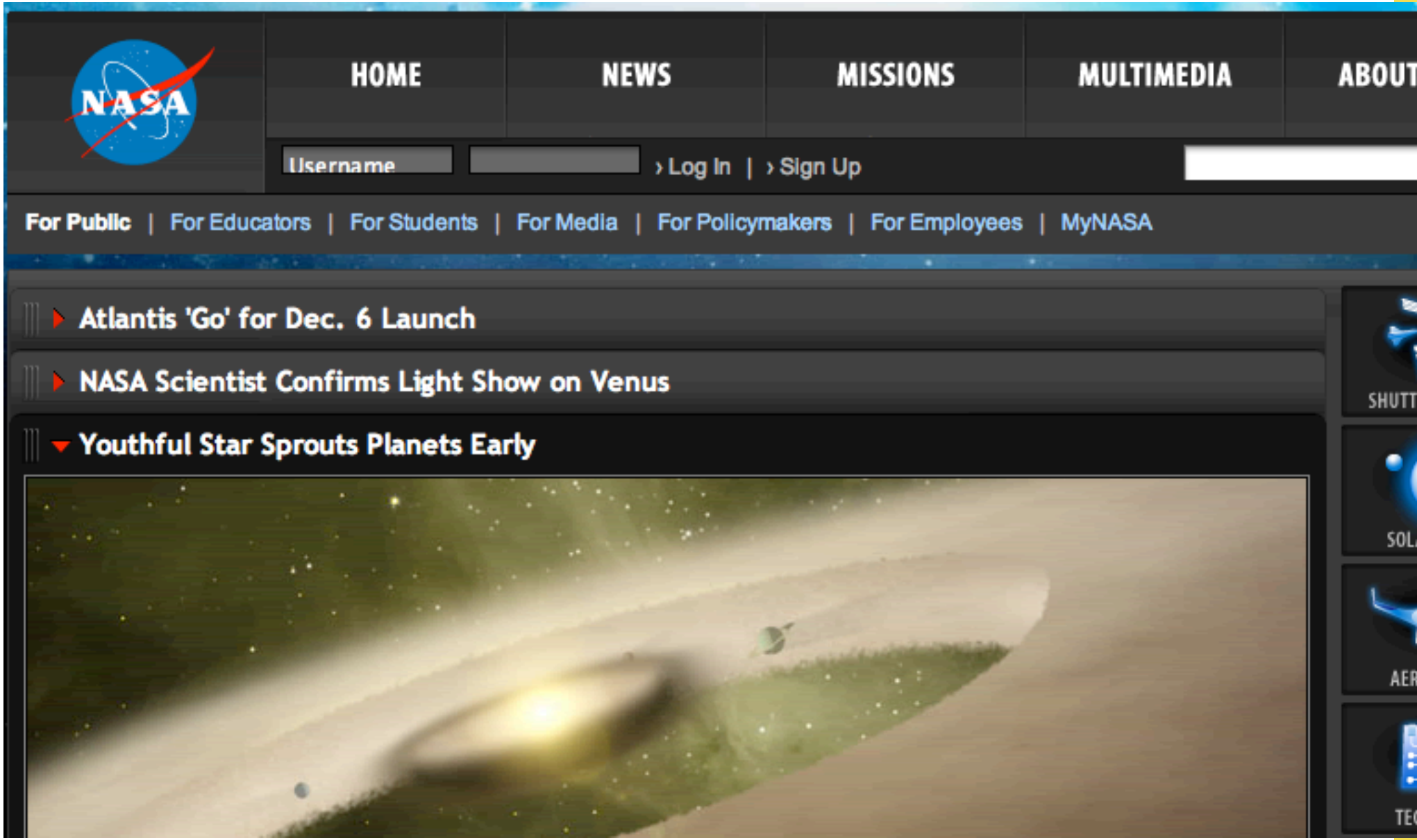
Why the extra little slide in?



Anti-Pattern. **Animation Gone Wild.**

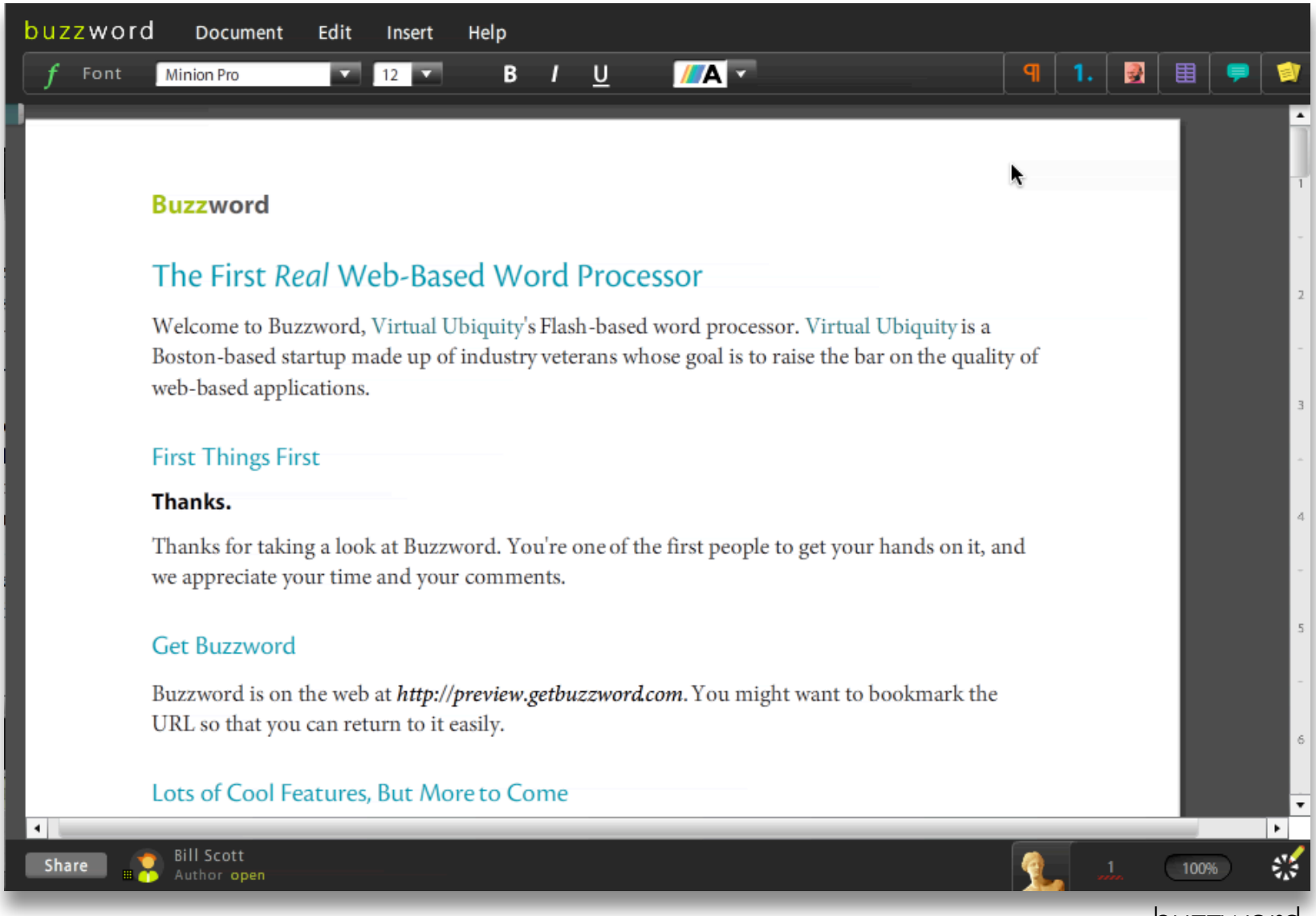
animated menus... so 90's

nasa.gov



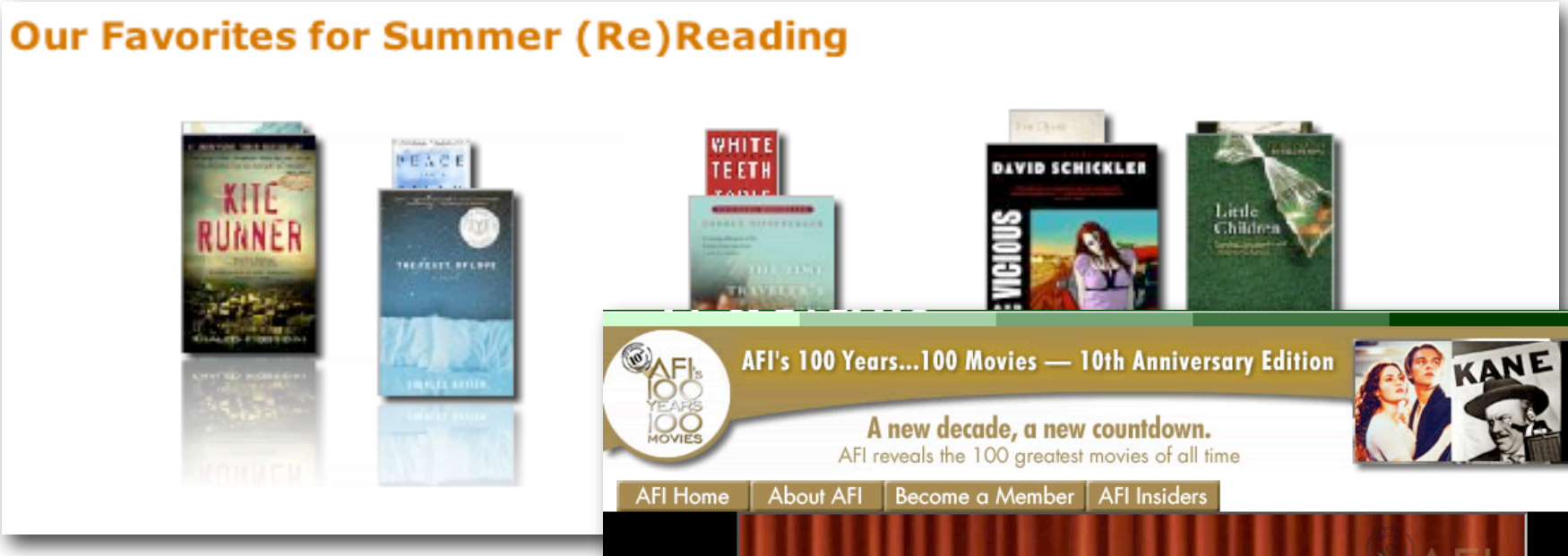
Anti-Pattern. **Animation Gone Wild.**

too many things animating on hover



buzzword

anti-pattern. amazon. **animation gone wild**

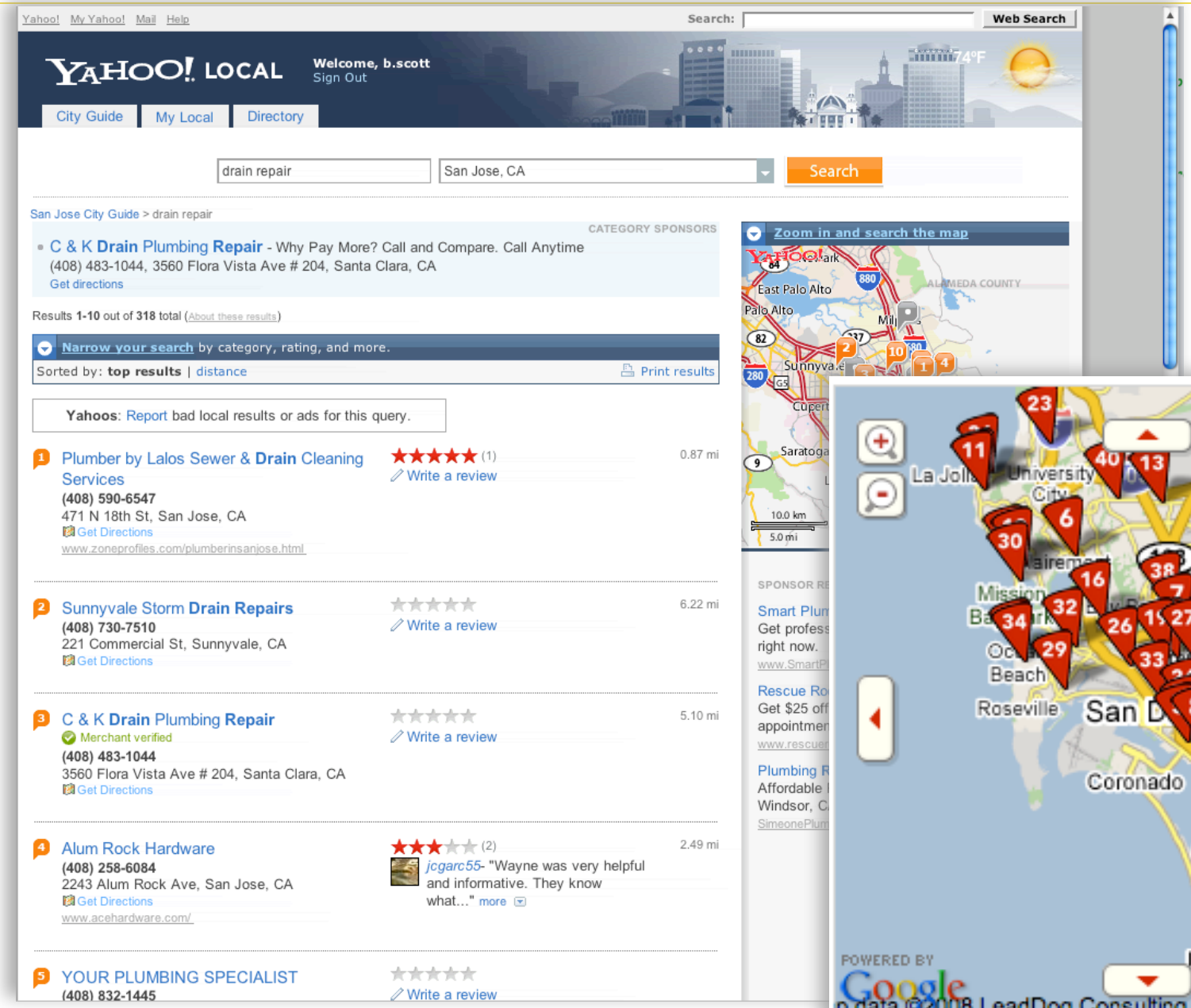


anti-pattern. afi. **animation gone wild**

Anti-Pattern. **Needless Fanfare.**

borders

Anti-Pattern. **Stalker.**



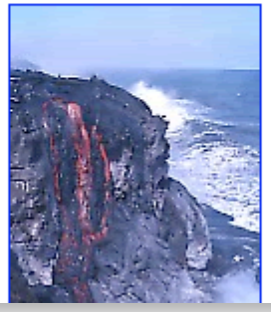
yahoo! local

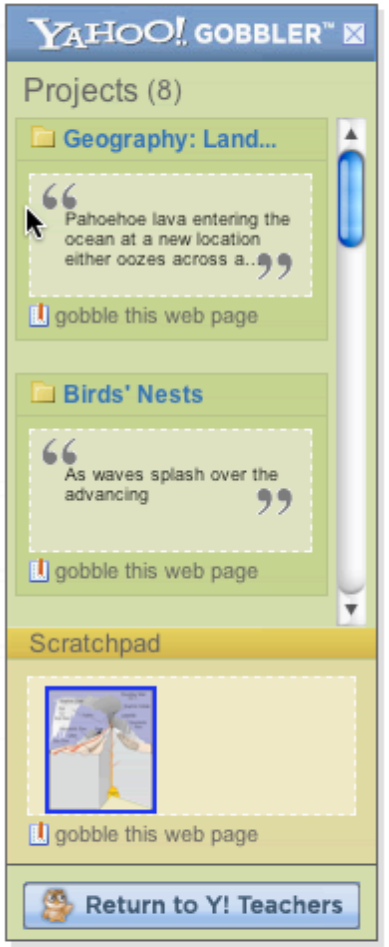
yelp

Typical growth of a lava delta at Kilauea Volcano

1. Pahoehoe lava first enters ocean quietly

Pahoehoe lava entering the ocean at a new location either oozes across a cobble or black sand beach or spills over a sea cliff, typically 1 to 5 m tall. As waves splash over the advancing lava, the surface of the molten stream cools quickly and shatters into small, glassy fragments. Because the seawater does not become trapped or confined within the lava, explosions rarely occur. For this reason, the first few hours of a new ocean entry are the safest time to view up close lava entering the sea.





y! teachers gobbler. instantly there

Transitions should mean something. *They communicate.*

Understand the hierarchy of transition *communication*

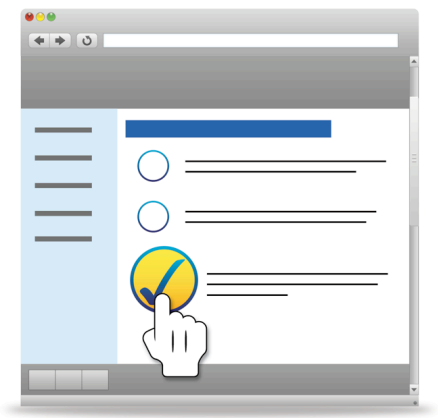
Rapid movement

Rapid color change

Slow movement

Slow color change

If you are refactoring a wild interface, simply **turn off all animations** *and start by communicating fully without it, then* **add it back in one at a time**.

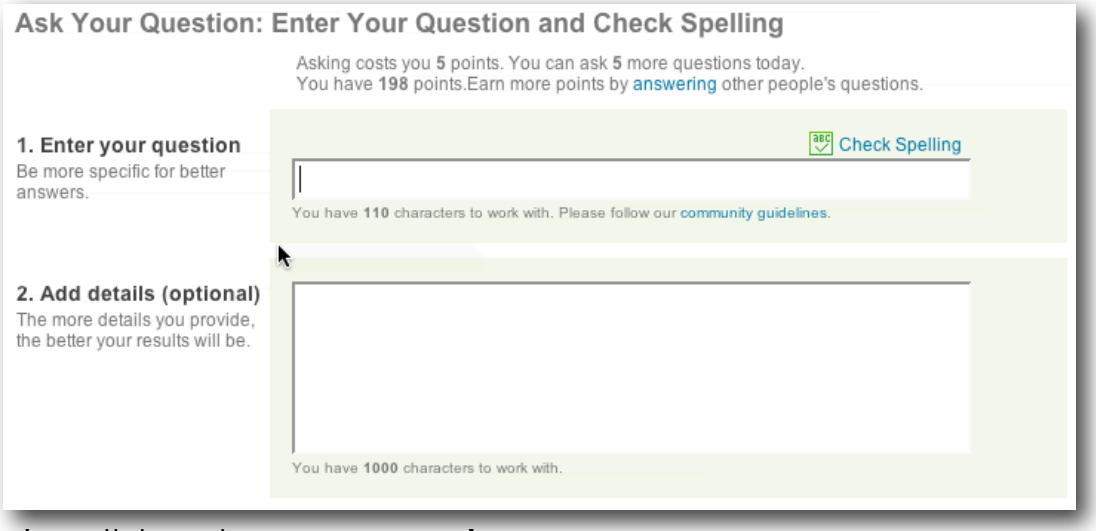


React Immediately

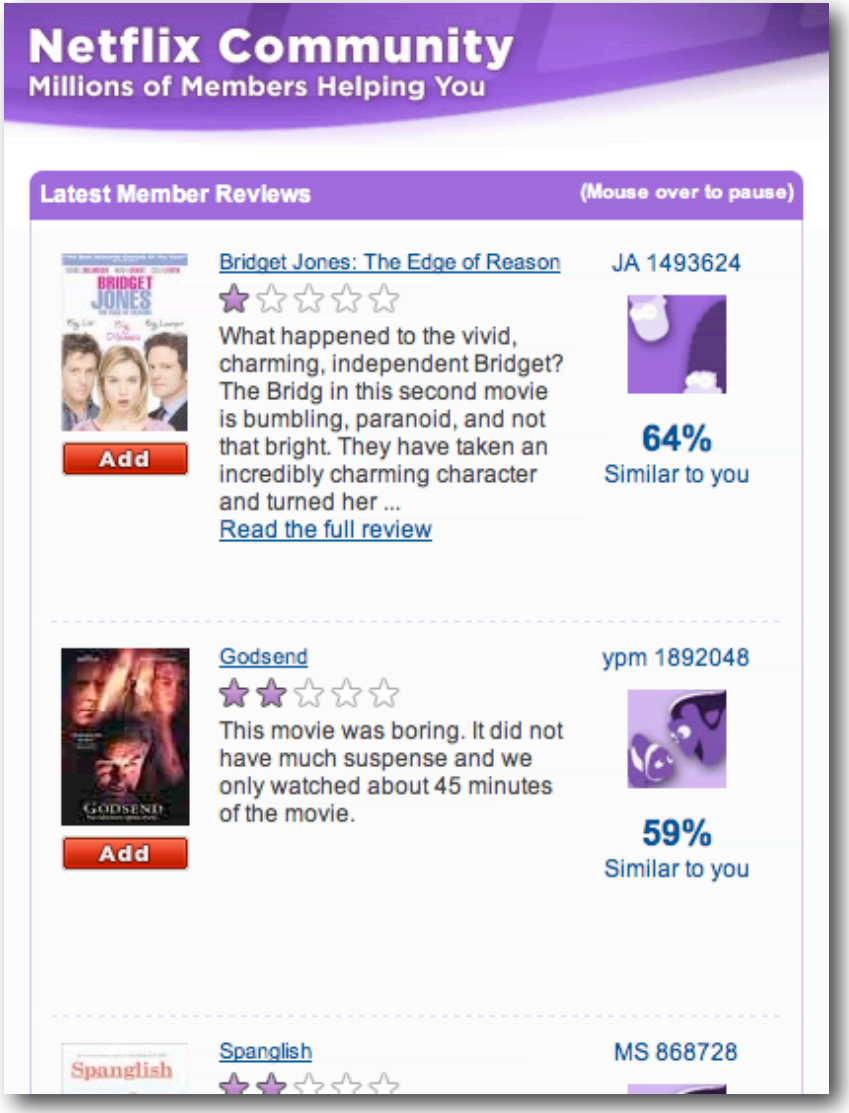
React Immediately.

React Immediately.

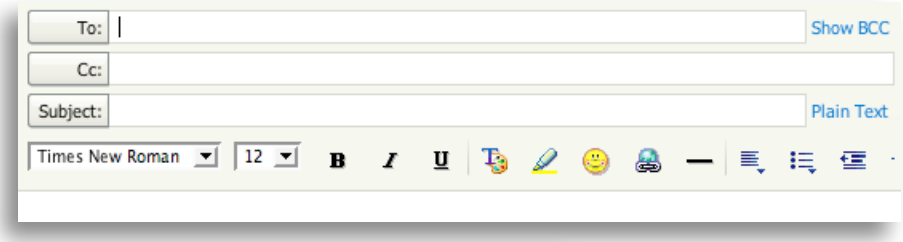
y! answers. **live suggest**

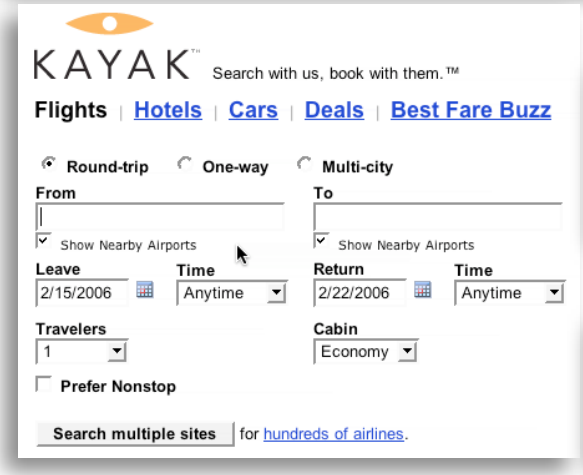


netflix. **periodic refresh**

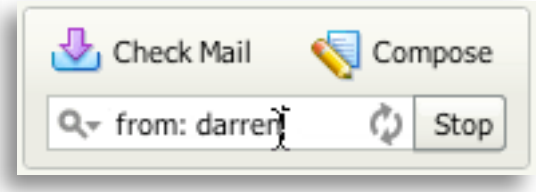


y! mail, kayak. **auto complete**

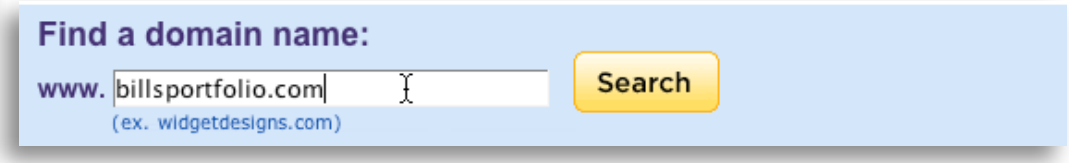




y!mail. **busy indicator**

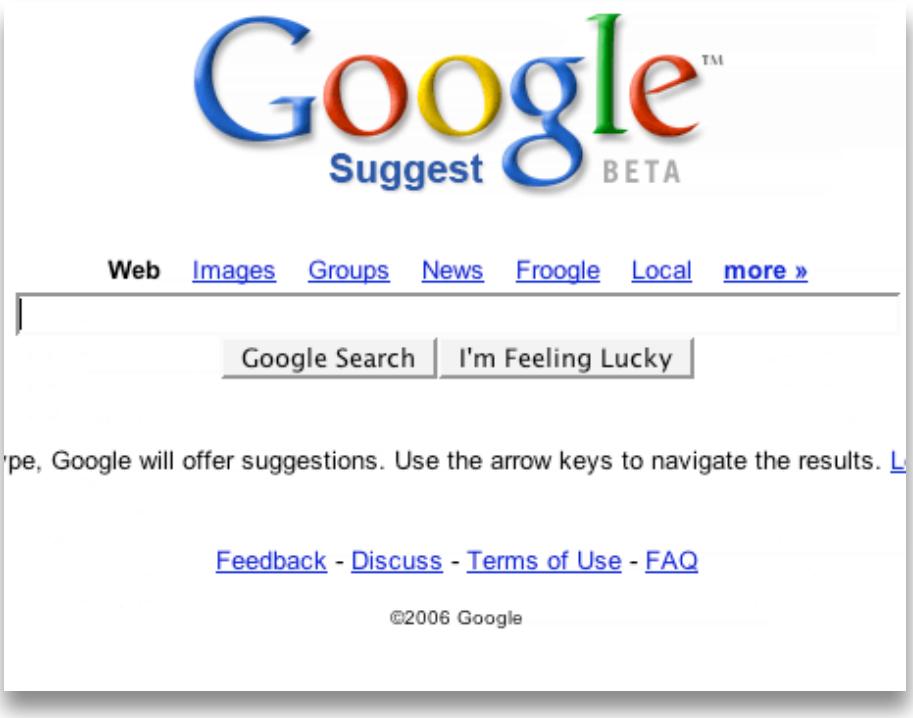


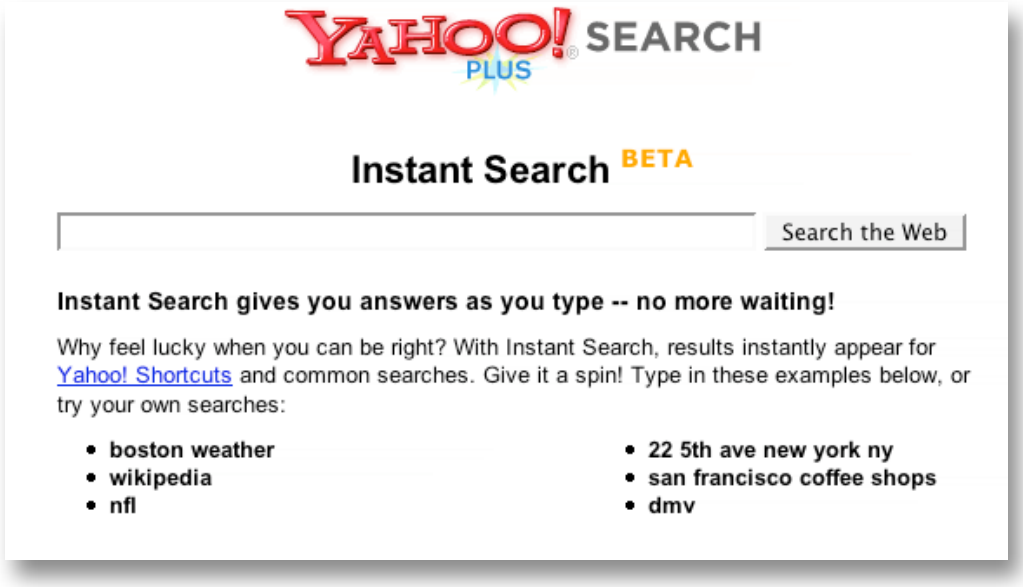
y! small biz. **live previews**



Keep the goal in mind

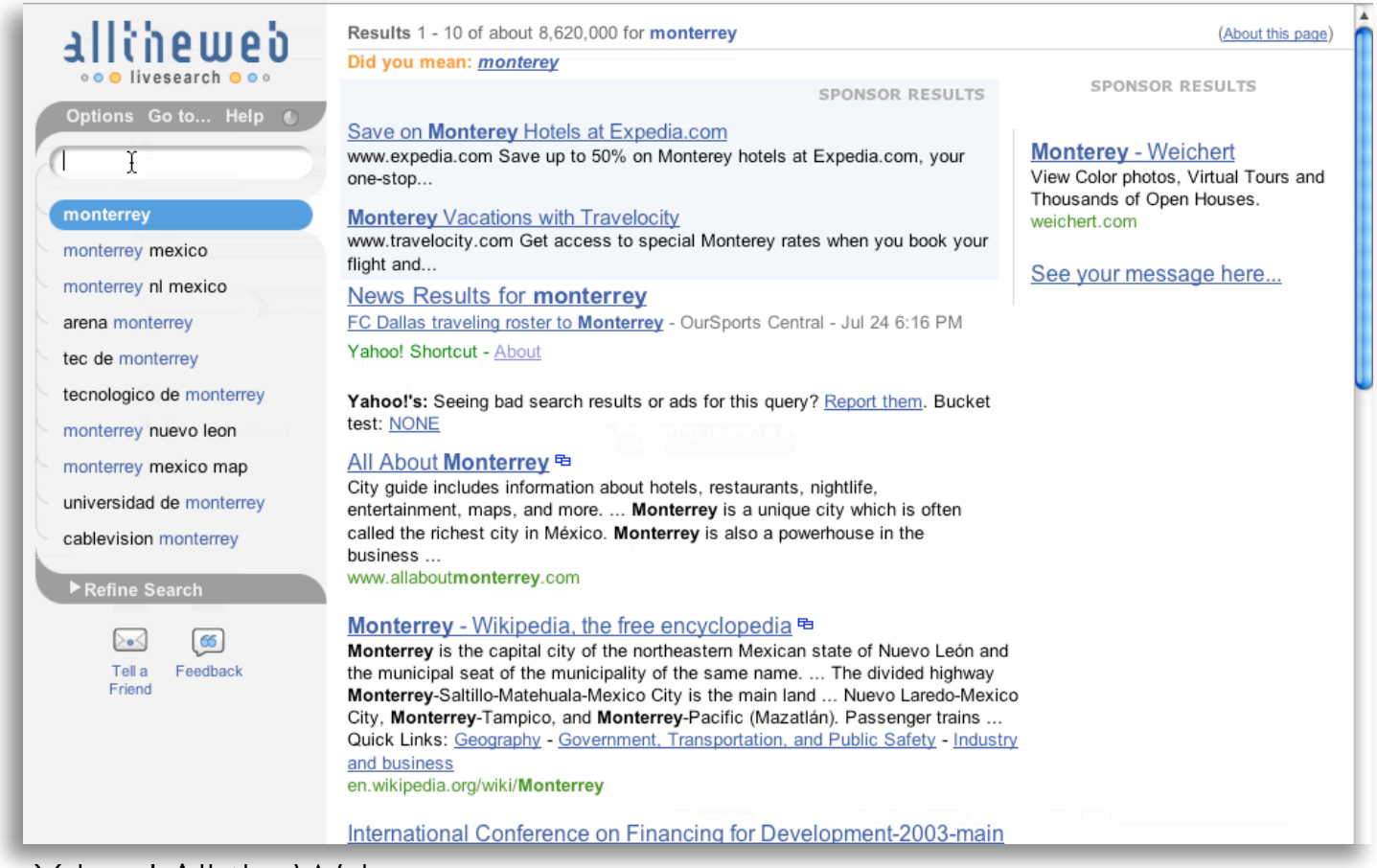
Design for relevancy
Is it narrowing or distracting





Keep the goal in mind

Design for relevancy
Is it narrowing or distracting?
Use feedback to boost confidence
Let the user iterate where possible



Yahoo! All the Web

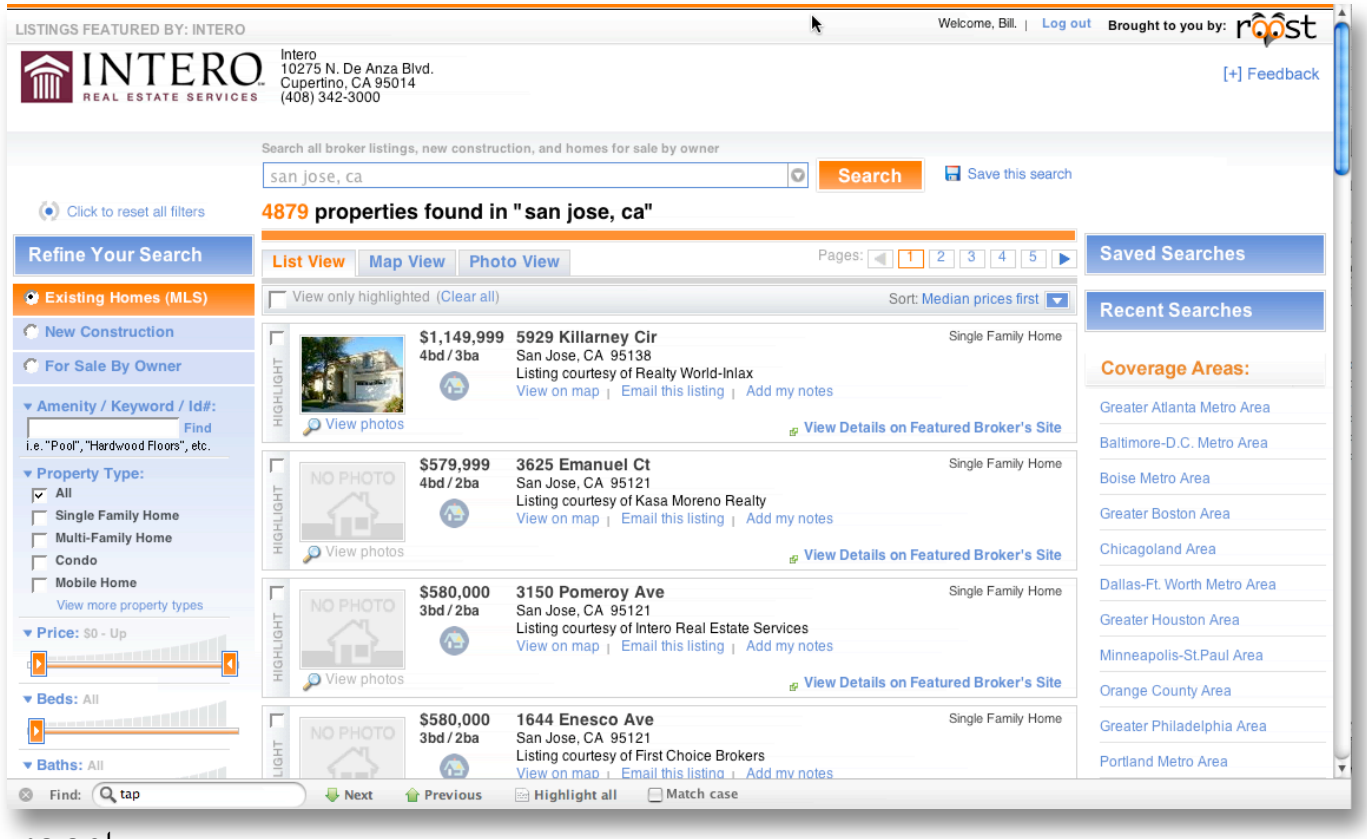
Keep the goal in mind

Design for relevancy

Is it narrowing or distracting?

Use feedback to boost confidence

Let the user iterate where possible

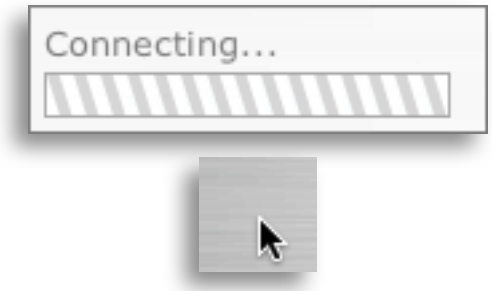


roost

Shape user perception

Make time pass faster

Make application feel more responsive

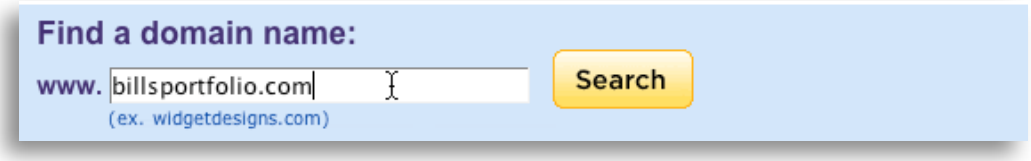


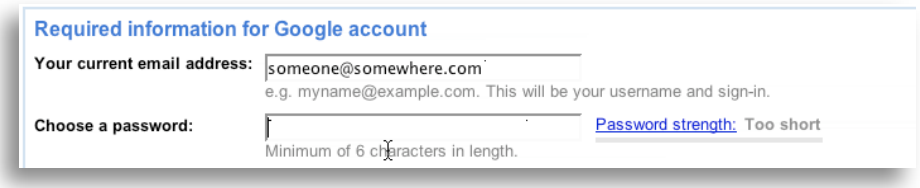
Prevent errors before-hand

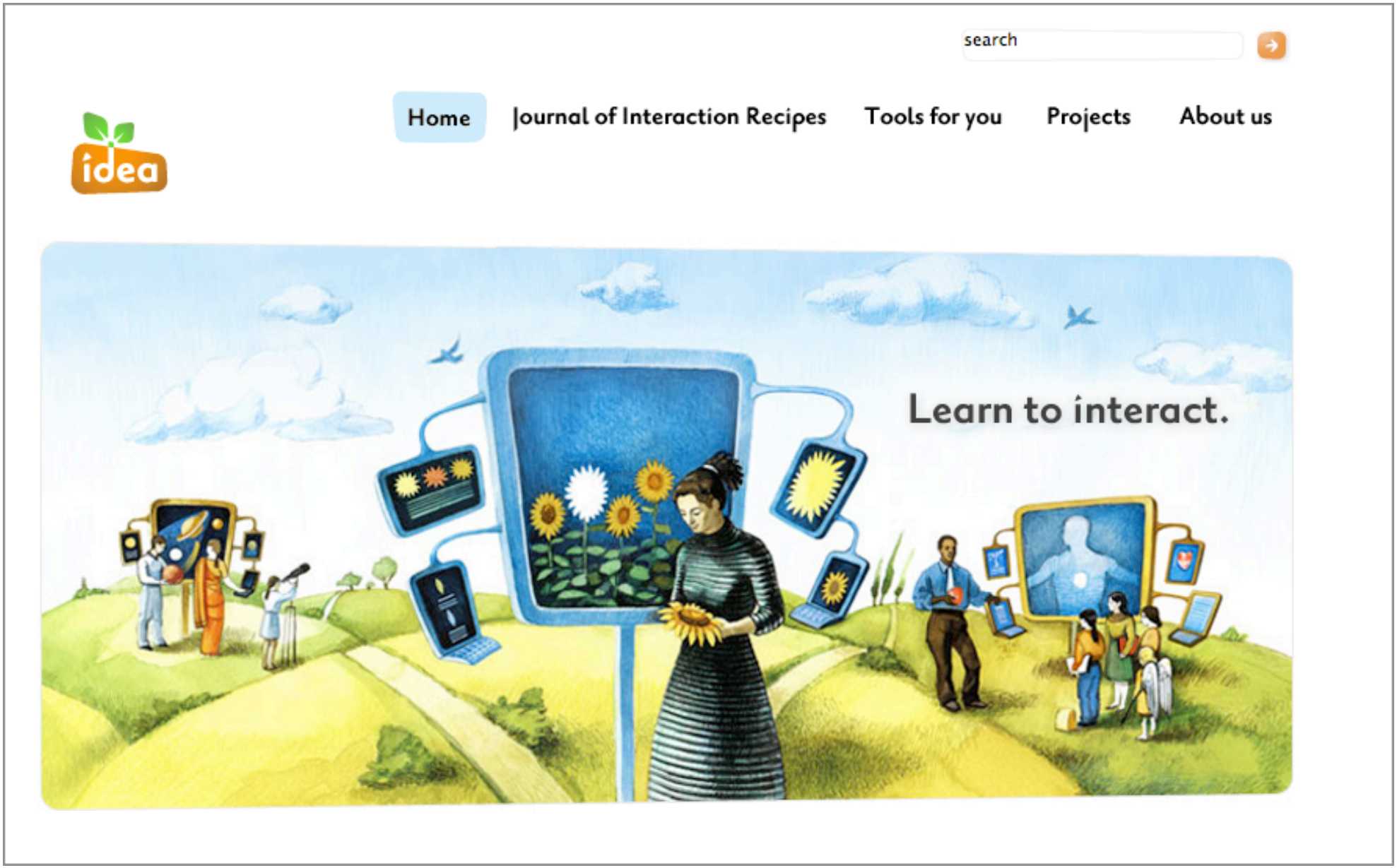
Ounce of preventive design worth pound of error-handling

Look before you leap

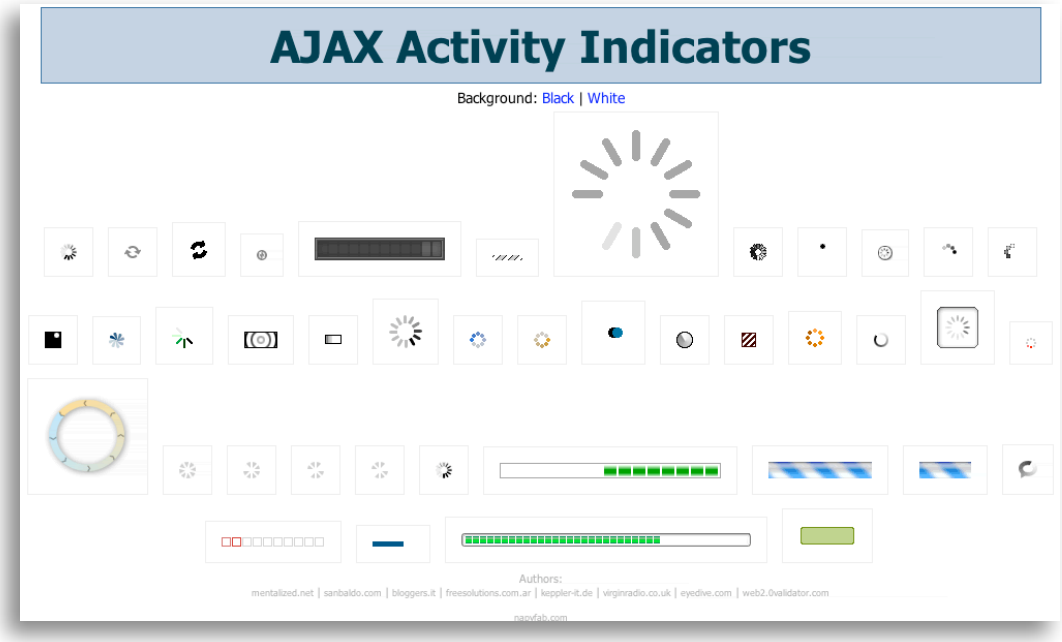
Use live-previews

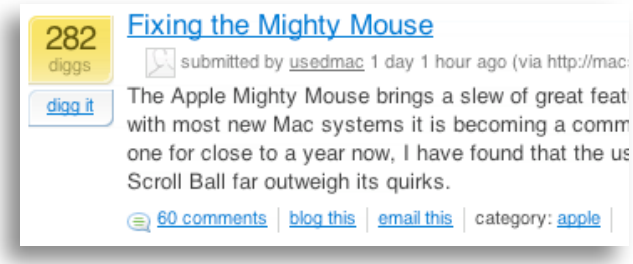


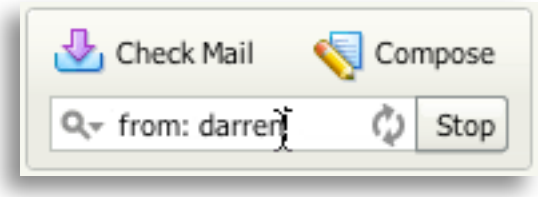




idea.org. **You are Here.**



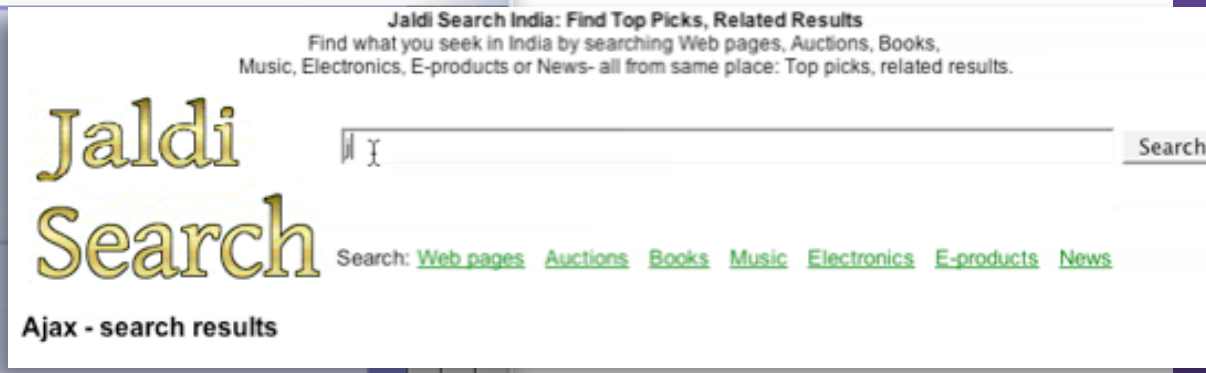




Keep feedback focused

Avoid side-noise (peripheral distractions)

Use laws of proximity in context feedback



Keep feedback focused

Use nuance

Think "deeper interaction"

Multi-variate data

focus + context

farecast.com

yahoo! finance

summary

Not providing feedback throughout an interaction. These missed moments can confuse the user about what to do.

examples

Drag and drop is classic example.

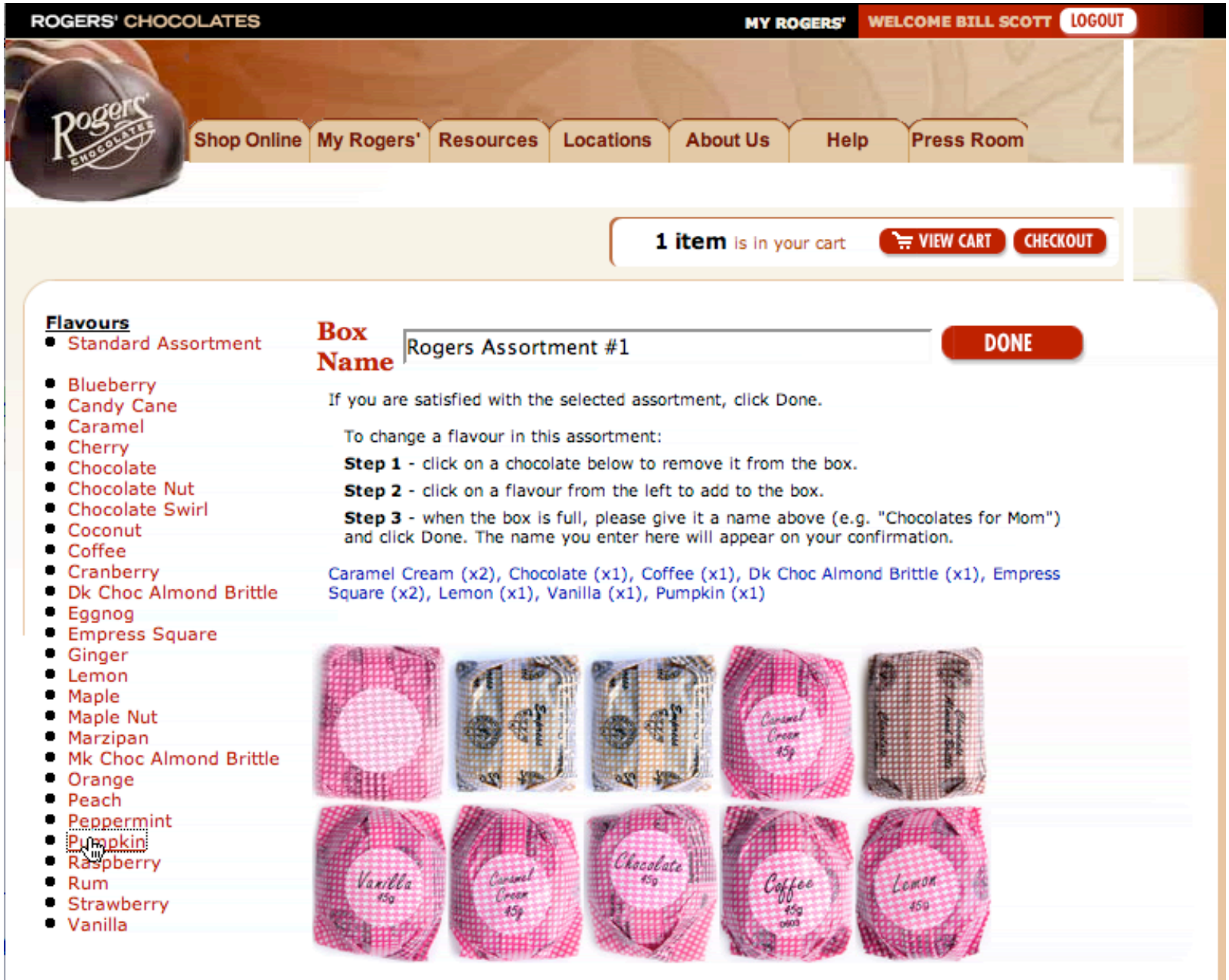
solutions

Use interesting moments grid to think through each moment

Anti-Pattern. **Missed Moments.**

	Page Generation	Mouse Hover	Drag Initiated	Drag over Valid	Drag over Invalid	Drag over Original	Drop Accepted	Drop Rejected	Drop on Original
Page Content	Hint	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cursor	Normal	Move Cursor	Move Cursor	Move Cursor	Move Cursor	Move Cursor	Normal	Normal	Normal
Drag Object	Normal	Normal	Reduced Opacity & Tracking	Reduced Opacity & Tracking	Reduced Opacity & Tracking + Invalid Badge	Reduced Opacity & Tracking	2. Modules animates into the area just below insertion bar 3. Module comes to rest in new area 4. Modules slide up in a self-healing transition to close hole	Normal Opacity + Zoom Back to Original	Normal Opacity + Zoom Back to Original
Orig Location	Normal	Normal	Hole Opens	Hole Remains	Hole Remains	Hole Remains	Hole Remains	Hole refilled with drag object	Hole refilled with drag object
Drop Target	Normal	Normal	Normal	Insertion Bar	N/A	N/A	1. Insertion Bar Removed	N/A	N/A

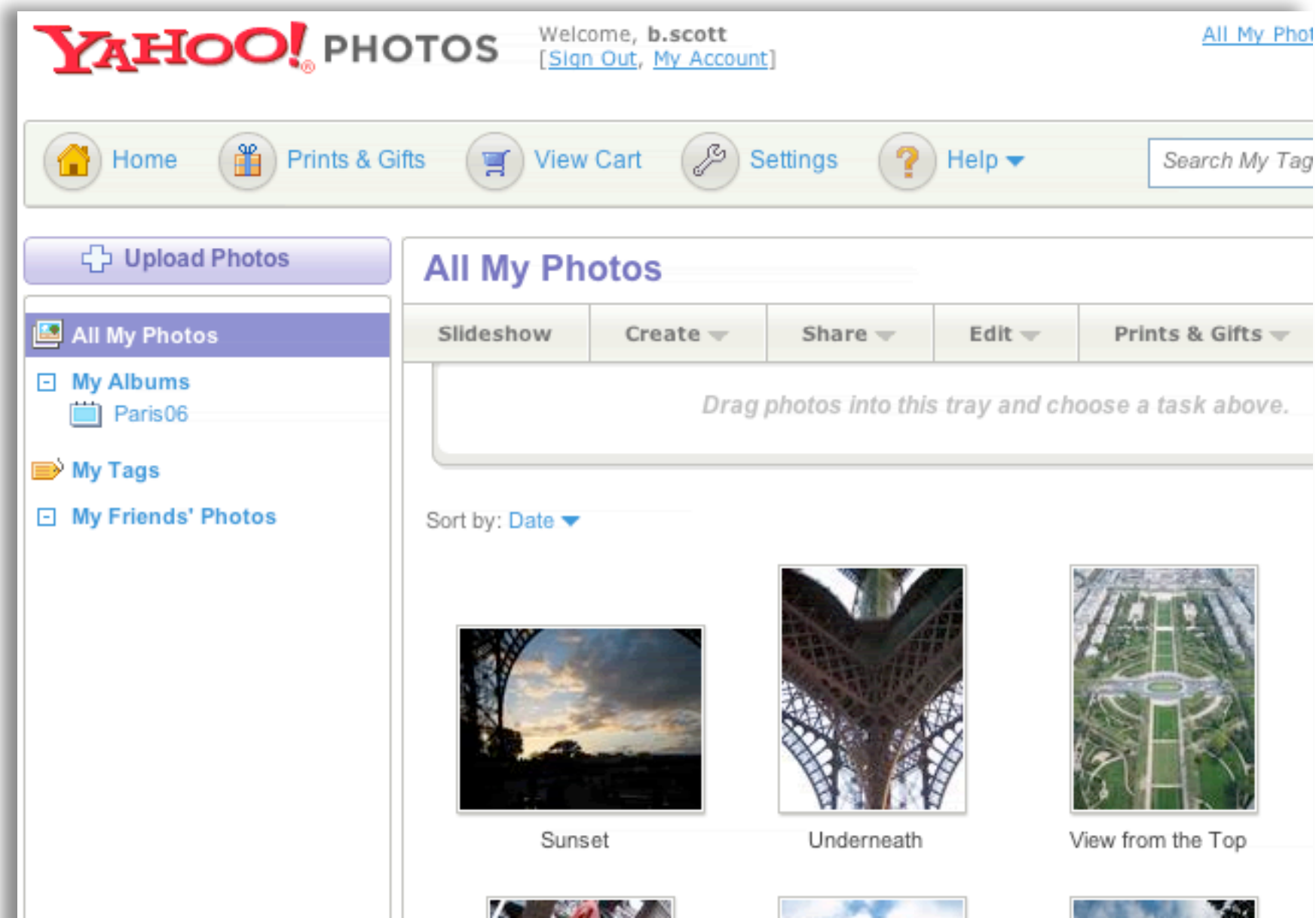
no feedback during interaction... less "learnable"



Anti-Pattern. **Missed Moments.**

Anti-Pattern. **Missed Moments.**

Using Y! Photos as example again. Notice missing feedback at key point piles on the problems.



Example

ALL PRODUCTS

SOFT WHITE CHEESE

SHEEPS MILK CHEESE

PRESSED CHEESE

FRESH CHEESE

COWS FETA

BLUE CHEESE

GIFT PACKS

MERCHANDISE

GOATS MILK CHEESE

6 CHEESE GIFTBOX

2 CHEESE SELECTION

new

4 CHEESE PLATTER

AGED AIREDALE

BRIE

CHEESE TIN

CREAMY HAVARTI

DANSEYS PASS

DUNTROON

FARMHOUSE

FUCHSIA CREEK FETA

HALLOUMI

Exercise 2

Button Mahem

Button Mahem

Background

Netflix originally DVD-only service

Actions fairly simple on main page (1 primary action)

Add *to DVD queue OR* ***Save*** *for later to DVD queue*

New service added: Instant Watch

Now two queues (DVD queue, instant queue/playlist)

Actions increase (3 primary actions)

Add *to DVD* AND ***Add*** *to Instant* AND ***Play*** *Now*

Button Mahem

First attempt

Anti-patterns anyone?

Second attempt

Slightly better, but still problems

Exercise

1. Critique current button interactions
2. Design a solution for displaying the 3 actions

Considerations

Surface that a title can be watched instantly (promote instant watching)

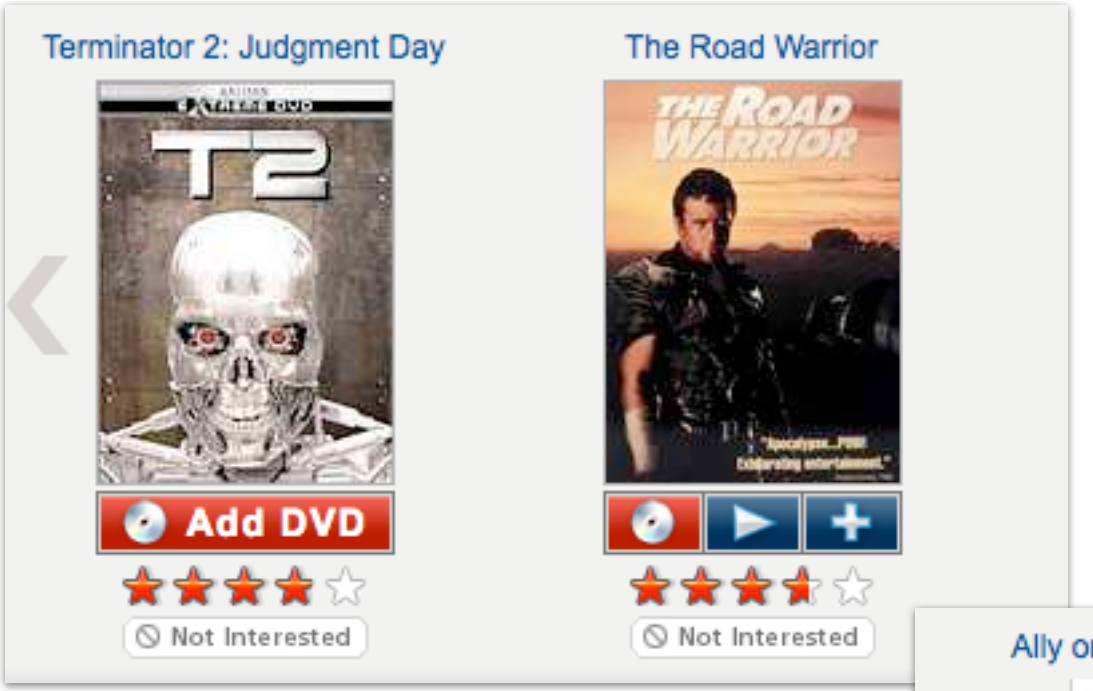
Avoid negative impact to engagement for adding or playing movies

How it interacts with the BOB

Minimize visual noise

Avoid anti-patterns: hover & cover, mouse trap, non-symmetrical interaction, etc.

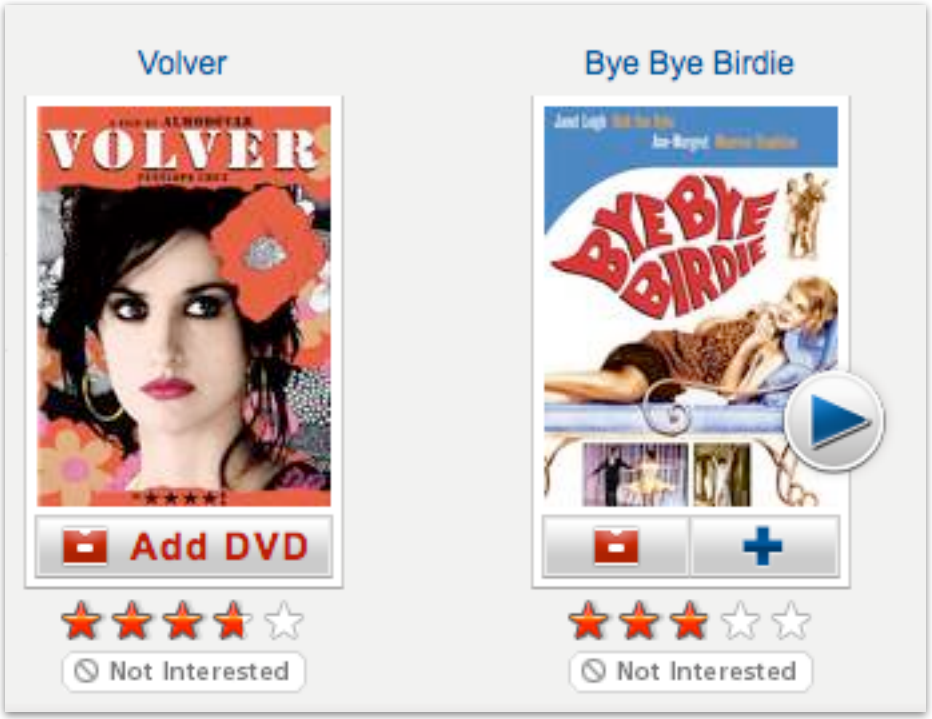
Attempt #3



side-by-side triple buttons, red & blue colors

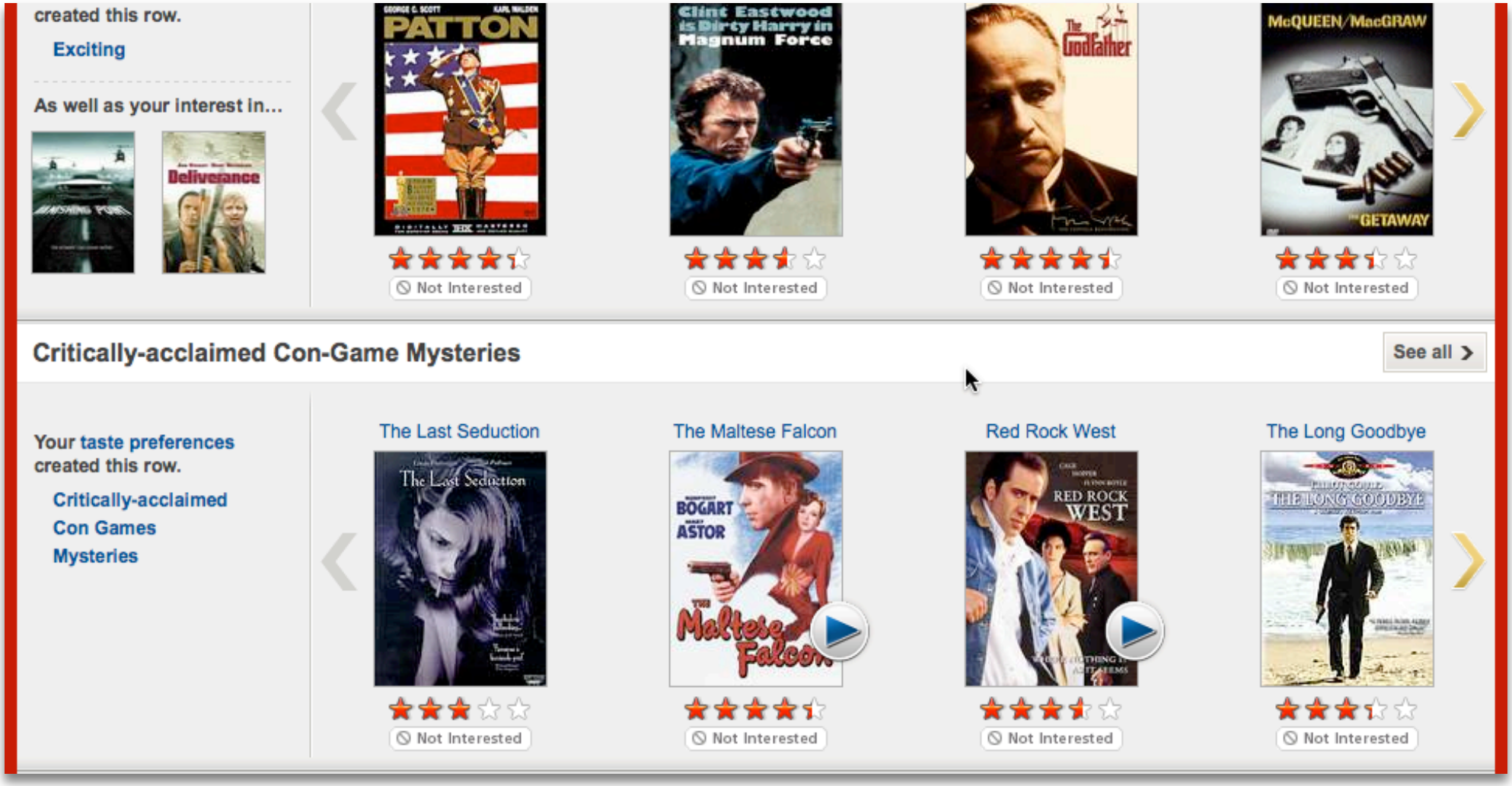
side-by-side triple buttons, gray colors

Attempt #3



split play + violator

Attempt #3



buttons in a layer

Contextual Tools

Q & A Time

Presentation

http://billwscott.com/share/presentations/2009/webvisions/dwi_workshop.pdf

Blogs

http://looksgoodworkswell.com

http://theresaneil.wordpress.com

http://designingwebinterfaces.com

Books

About Face 3: The Essentials of Interaction Design. Cooper. 2007.

Designing Interfaces: Patterns for Effective Interfaces. Tidwell. O'Reilly. 2006.

Don't Make Me Think. Steven Krug. New Riders. 2005.

Web Form Design: Filling in the Blank. Wroblewski. Rosenfeld Media. 2008.

Upcoming: Designing Social Interfaces. Malone & Crumlish. O'Reilly. 2009.

Design of Sites. Duyne, Landay, Hong. Prentice Hall. 2006.

Designing Web Interfaces: Principles & Patterns for Rich Interactions. Scott & Neil. O'Reillly. 2009.

Pattern Libraries & Screenshot Collections

http://designinginterfaces.com

http://www.welie.com/patterns/

Pattern Taxonomy: http://tr.im/ly6E

http://developer.yahoo.com/ypatterns

Yahoo! Internal Pattern Library: http://tr.im/m0zz

http://www.designingsocialinterfaces.com/

http://uidesignpatterns.org/designPatterns

http://quince.infragistics.com

http://designlibrary.blinkinteractive.com/

http://interface.fh-potsdam.de/infodesignpatterns/patterns.php

Interface Design Patterns: http://tr.im/lxdu

Search Patterns: http://www.findability.org/archives/000194.php

http://uipatternfactory.com/

http://ui-patterns.com/

http://patterntap.com/collections/

http://konigi.com/

Flickr Factory Joe: http://tr.im/lxfR

Flickr Design Solutions: http://tr.im/lxfZ

Flickr UI/UX Collection: http://tr.im/lxgE

Flickr Xian Collection: http://tr.im/lxgQ

Flickr DWI Book Figures: http://tr.im/lxgV

Flickr DWI Screencasts: http://tr.im/lxh2

http://designingwebinterfaces.com