Anti-Patterns

Designing for the Poor Web Experience

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background



An open-source JavaScript library for creating rich in applications. Rico provides full Ajax support, drag ar management and a cinematic effects library.

BACKGROUND

Rico is a Spanish word meaning rich. The goal of Rico is to provide a rich experience for web sites using Ajax technology.

Rico is just one small part of a larger effort at Sabre Airline Solutions to create a suite of rich internet components. behaviors and effects for the web application space.

The library is a fully object-oriented JavaScript library. Recently we refactored the library to extend the excellent prototype.js effort from the Ruby on Rails

OPEN SOURCE

Rico is provide free and open-source (Apache 2.0 License) for either your personal or commercial use. Sabre Airline Solutions retains the copyright on the Rico code produced at Sabre.

BROWSER SUPPORT

Rico has been tested on IE 5.5, IE 6, Firefox 1.0x/Win, Camino/Mac, Firefox 1.0x/Mac. Currently there is no Safari or Mac IE 5.2 support. Support will be provided in a near future release for

AJAX SUPPORT

Aiax is the term that describes a set of web developed techniques for creating interactive web applications the key ingredients is the JavaScript object XmlHttpl Rico provides a very simple interface for registering A request handlers as well as HTML elements or JavaScri objects as Ajax response objects. Multiple elements a objects may be updated as the result of one Ajax requ

Want to get started learning? Check out our demos a then read our two Ajax tutorials on the Documentation

DRAG AND DROP

Desktop applications have long used drag and drop in interfaces to simplify user interaction. Rico provides of the simplest interfaces for enabling your web applica support drag and drop. Just register any HTML eleme JavaScript object as a draggable and any other HTML

CINEMATIC EFFECTS

When actions are no longer occurring just at the page required to clue the user on what has transpired. Cir transitions can communicate change in richer ways th Rico provides several cinematic effects as well as son

BEHAVIORS

Take some raw HTML and sprinkle in some behaviors Rico you can get an Accordion component like those Laszlo. Just nest some DIVs and with one line of Java an accordion. And the latest behavior is the LiveGrid.

connect an Html table up to a stream of Ajax responses. Ajax requests are automatically called during table scrolling. The result is now Html tables can hold an unlimited amount of data scrolled into view on the fly as needed! More behaviors are planned!

Welcome

YAHOO! DEVELOPER NETWORK

Developer Network Home Help

Faceted Navigation

Fly-out Menus

Horizontal Bar Hub and Spoke Left Navigation

> Module Tabs Navigation Tabs

- NAVIGATE

- Tabs

EXPLORE DATA

Pagination

ORGANIZE DATA

GIVE FEEDBACK

▶ PERFORM ACTION

Drag and Drop

Modules

▶ In Page Editing

CALL ATTENTION

Ratings & Reviews

Auto Complete Calendar Picker

Item Pagination

Search Pagination

Architecture Review

Rating an Object

Writing a Review

Drag and Drop

Drag and Drop Objects

Review Architecture

GROUP RELATED ITEMS

ORGANIZE SCREEN/PAGE

Design Pattern Library Yahoo! Developer Network > Design Pattern Library

> Welcome to the Yahoo! Design Pattern Library. We are very happy to be sharing our library with the design and development community. This is our first drop of what we hope to be a monthly release cycle for the publication of patterns. In many cases we have bundled the patterns with pointers to related code from the Yahoo! User Interface Code Library. We hope this is a useful resource and look forward to your feedback.

What's a Pattern?

A pattern describes an optimal solution to a common problem within a s

Recent Patterns



Auto-Complete

The user needs to enter an item into a text box which could ambiguous or hard to remember and therefore has the potential to be mis-typed.

Reuters | AFP | USATOD

- Cargo Ship Blocks Sue: International Observers
- Module Tabs

The user needs to navigate through one or more stacked panes of content without refreshing the page

Results Page:

IMPROVE READABILITY 1 2 3 4 Next Ratings & Reviews

Search Pagination

The user needs to view a set of search results ranked by relevance that is too large to easily display within a single page.

ica > United States > New Yor iew York City > Things to do

Travel > Guides > North Ameri

Breadcrumbs User needs to navigate potentially large quantities of information efficiently. without becoming lost

ome U.S. Business notos Opinion Local News Odd

Navigation Tabs

The user needs to navigate through a site to locate content and features and have clear indication of their current location in the site.

*** Read 20 reviews Good 公全会会会

Rating an Object

A user wants to quickly leave their opinion on an object, with minimal interruption to any other task flow they are involved in.

YAHOO! GOBBLER"

Scratchpad

₩ We

Drag and

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modules

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1 - 5 of

2 First |

Object P

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Writing a

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simple rat



Add Website to Scratchpad

Projects(3)

National Mapping -Fab Facts, Landforms http://www.ga.gov.au/education/fa

Geography: Landfor...

🐫 Add Website to Project

The cell is engaged in

metabolic activity and performing its prepare for ... *Revie Civil War Battles *Write

Add Website to Project



掛 Create a new Project



anti-patterns

what are anti-patterns?

"Anti-patterns, also called pitfalls, are classes of commonly-reinvented bad solutions to problems. They are studied as a category so they can be avoided in the future, and so instances of them may be recognized when investigating non-working systems. The term originates in computer science, apparently inspired by the Gang of Four's book Design Patterns, which displayed examples of high-quality programming methods." - Wikipedia, Anti-Pattern.

interaction design anti-patterns

Like the software anti-pattern counterparts, the following anti-patterns are common pitfalls to avoid.

pitfalls with a pithy name

anti-patterns

big ball of mud. meandering way.

borg idiom. tiny targets. mystery meat.

buried treasure. hover and cover.

pogo stick navigation. novel notions.

against the flow metaphor mismatch jabberwocky. double duty. **linkitus**. blind type.

windows aplenty. animation gone wild.

misguided misdirections. unmarked hazards. missed

moments. missing scene.

one at a time. non-symmetrical actions.

Note: anti-patterns denoted in **bold** are discussed in this talk.

summary

Normal flow through the page takes the user on a meandering journey with the mouse.

alternate names

zig-zag interaction, scenic route

example

Actions hidden under hover (in context tools) that require the user to hover an area, then move the mouse to an area that would normally be outside the object's space (back and forth operation)

In our Y!Teachers product the first version of the hover caused a lot of mouse zig-zagging to do common operations.



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



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



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



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



Volcano World - The ... http://volcano.und.e...



Hawai'i Volcanoe... http://www.nps.gov/a...



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



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



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



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



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

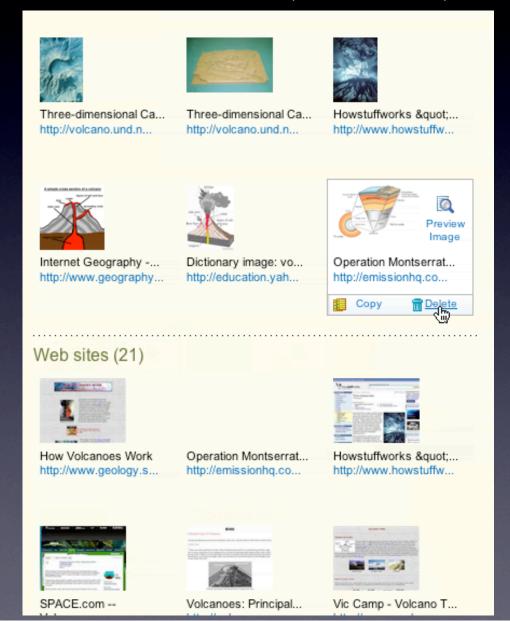


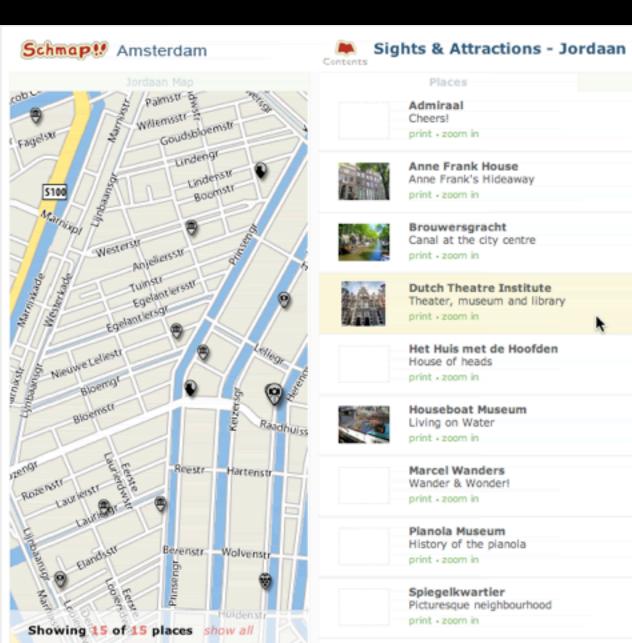
Copy of Alaska Volca... http://www.avo.alask...



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

In the redesign, we avoid any popup, any page jitter and make it possible to just move the mouse to a predictable spot to do multiple operations.





Scale: 0.8Km

Hybrid

Map

Satellite











Photo: wcities

Dutch Theatre Institute

Herengracht 168 Amsterdam, 1016 BP Tel: +31 (0)20 551 3300 info@tin.nl www.theaterinstituut.nl

This theater was established as a museum in 1924. In the 1960s, a librar and gallery space were added. In the late 1970s, it merged with the Dutch Centre of the International Theatre Institute, creating an entirely new entity. The establishment is spread over five 17th Century buildings, overlooking one of the main canals. It has a museum, a gallery, a cafe, a library with 6,000 videos and 10,000 books an also a theatre with 100 seats. In addition, it has an activity area for children, a garden, and even meeting rooms. Puppetry shows, cabaret, dance drama, circus, lectures, debates and discussions are also conducted in the auditorium.

Review © 2007, Wcities



The North Church

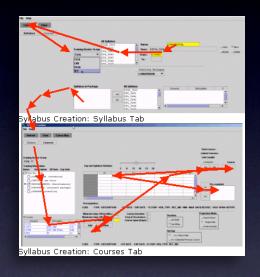
In the Jordaan print - zoom in

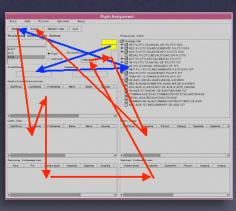


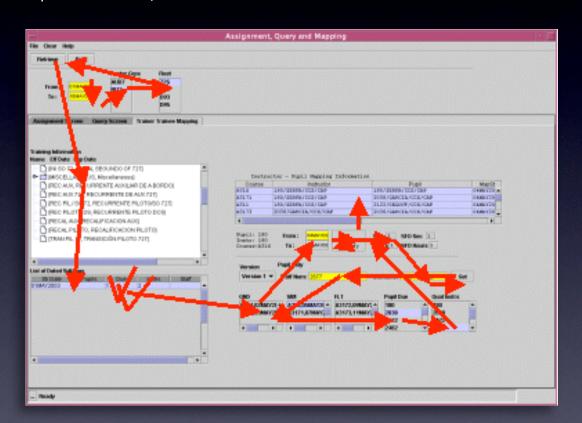
The West Church

Amsterdam's Most Famous Church

In previous company, I found this was a common occurrence in their suite of software application. By drawing red arrows indicating the user flow, it made the problem obvious and helped to refactor to a correct solution..







refactoring. meandering way

Annotate the current flow.

Take a snapshot. Draw red arrows through the interface for each user scenarios. Use this information to simplify flows and eliminate zig-zag interaction.

Draw the ideal flow.

During design refactoring, only display the elements needed for each interaction. This will allow you to focus on what is important for the interaction— and what is actually the supporting information.

Watch out for hovers. Make sure that all in-context tools that get revealed require no extra mouse move and are completely predicatable — allowing the user to gain speed in using the interface.

Follow spatial consistency.

Take advantage of user's learning the command space visually.

anti-pattern. pogo stick navigation

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.

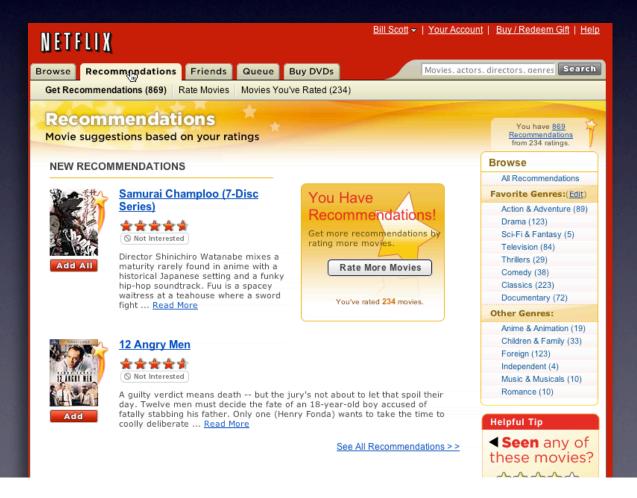
credit

Jared Spool

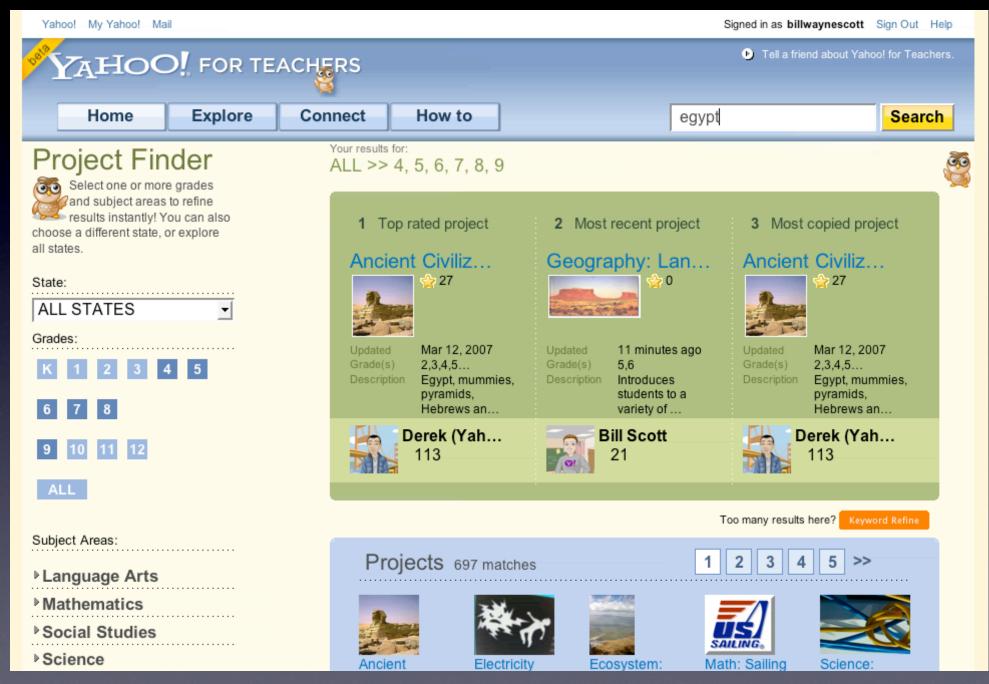
anti-pattern. pogo stick navigation

Netflix faced the problem of users needing more information on a movie. They would go down to the details of the movie, possibly adding to the queue. Then they would go back to where they come from and repeat this

Their solution involved an overlay that can support an alternate navigation stream. Then the user can come back to the main flow anytime they desire.



anti-pattern. pogo stick navigation



refactoring. pogo stick

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

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 expands to reveal information on the page.

Watch out for overlays

Can make users resort to back button anyway

summary

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

Fitt's law

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

examples

divots for expand/collapse

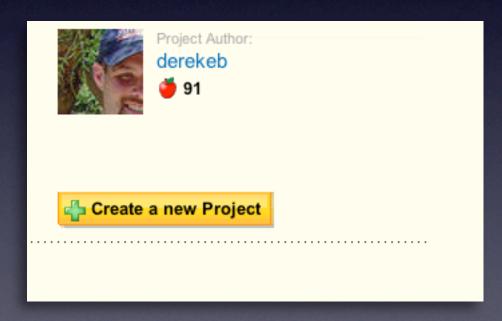
The identity card area has a summary view and an expanded view. The targeting is really small and caused lots of usability issues.

Several problems exist:

The target for expand/collapse is hidden

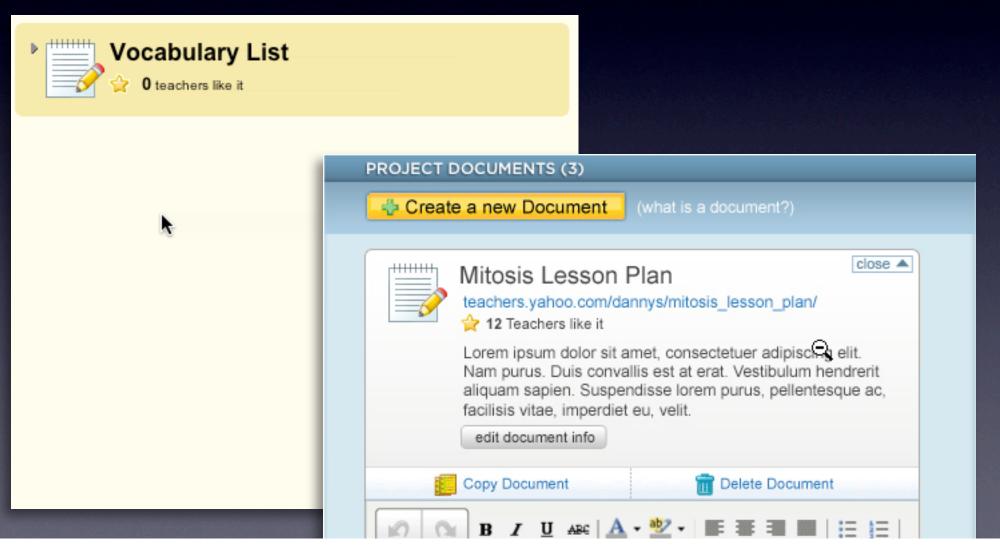
The area that reveals the target area for our identity card is only the photo and not the complete summary view

The target is a very small divot that is hard to hit.



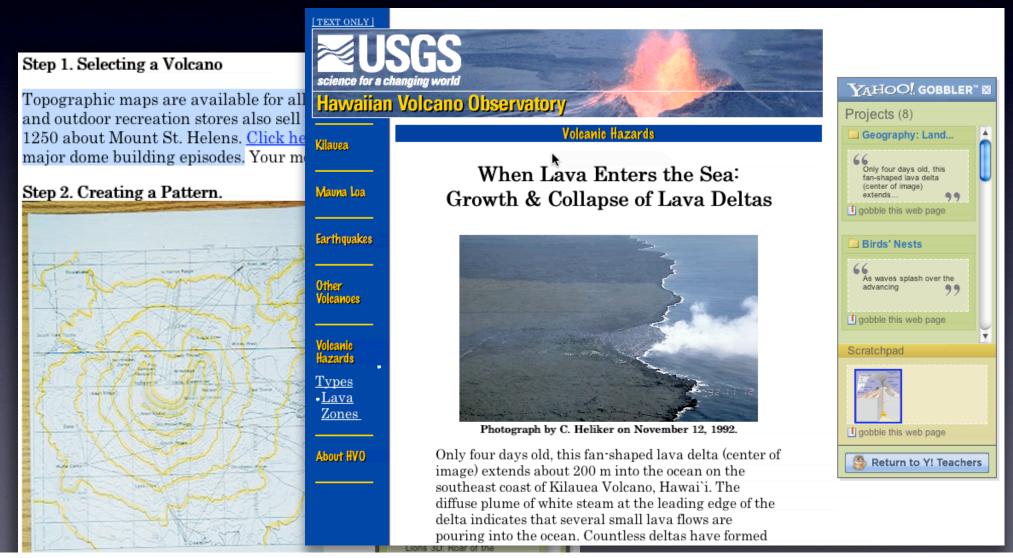
The target for opening the vocabulary list is actually anywhere in the complete title. However, it looks like you can only click the little tiny divot (8x8 pixels)

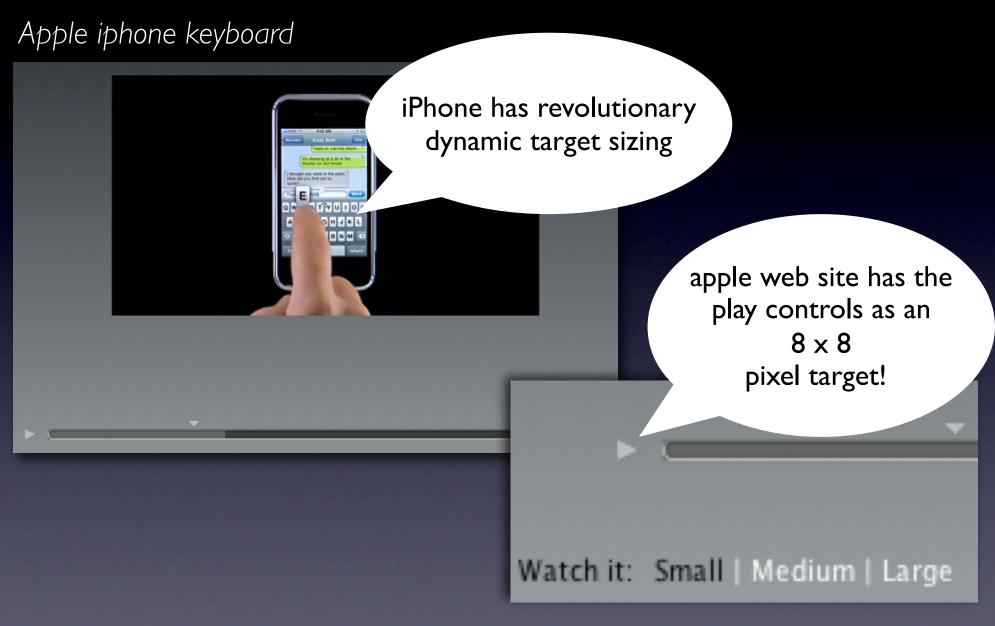
Redesign will call out "Close" as bigger target, but also cause title to have link.



The Yahoo! Gobbler has done well in tests due to the larger nature of the project drop targets.

Issue: small text drag target





strategies. tiny targets

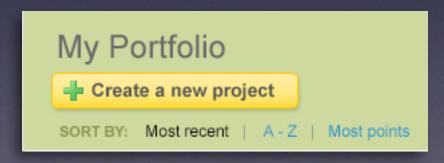
Activation targets and important commands need to be large enough, visually distinct and in proximity to operation.

Use in-context 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.

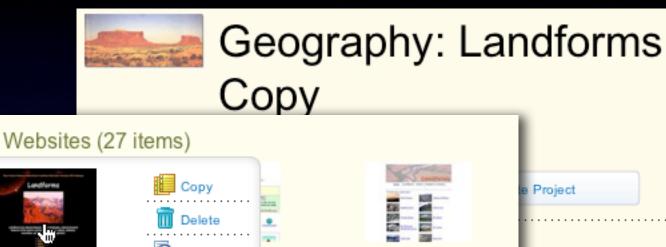
Never use 8x8 for targeting :-)

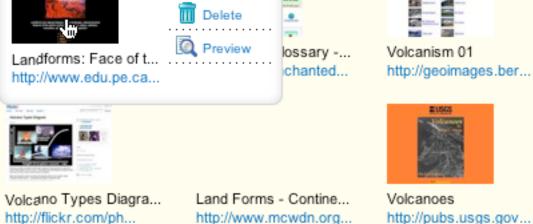


summary

Hover reveal of information and actions has become more and more popular. Hover & Cover is when the hover actually hides important contextual information around the object or gets in the way of other actions.

Original hover was extremely annoying as it Covered the item to the right (natural flow is move to right) Occluded text edit area (hung open)



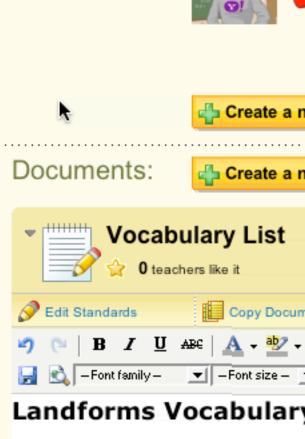








oimages.ber...



Volcano

Example from plum.com

Drop down menu shows on hover and gets in the way. Too easy to accidentally turn it on.

▼ Click to filter by: alternative, alternative & punk, art, da vinci code, example, flowers, flowers%2c%20plum%2c%20crocus, introduction, music, norway, plum, restaurant, rock, san francisco, summer, sunset, travel, vacation, video stamp, youtube

more...

1 through 20 of 33,883 results

football

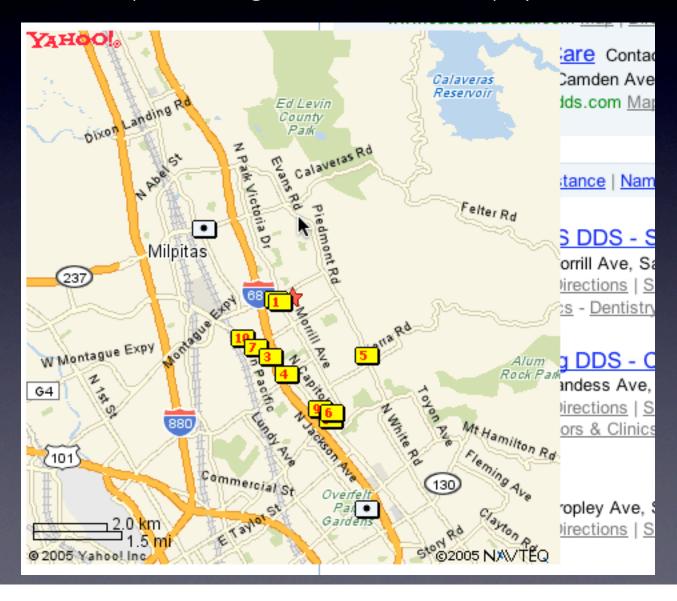
mm

CoolBlueClouds

i aint bovved

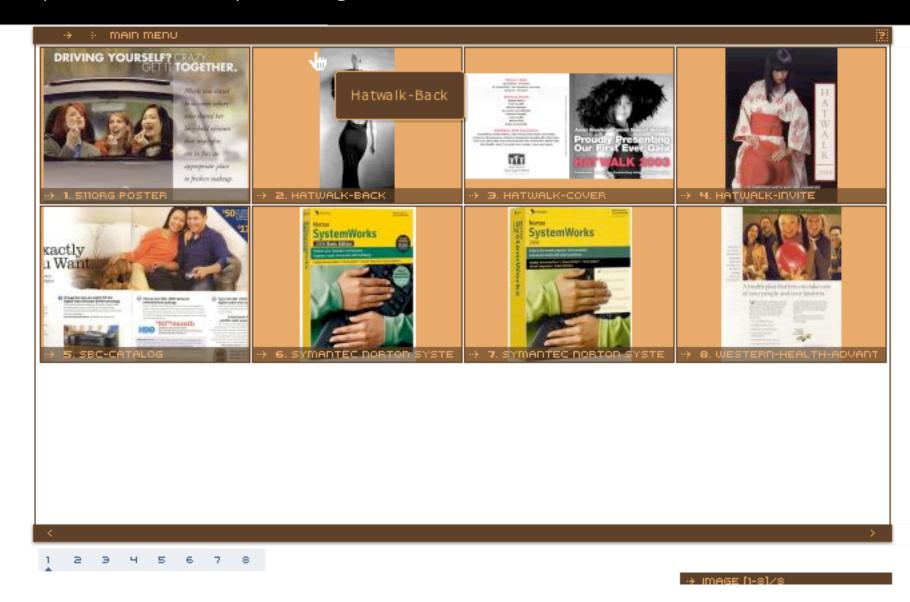
Yahoo! Local orginally had this hover beast.

Thankfully it no longer functions this way :-)



This one almosts leads to a new anti-pattern-- hover madness

Seriously what were they thinking?



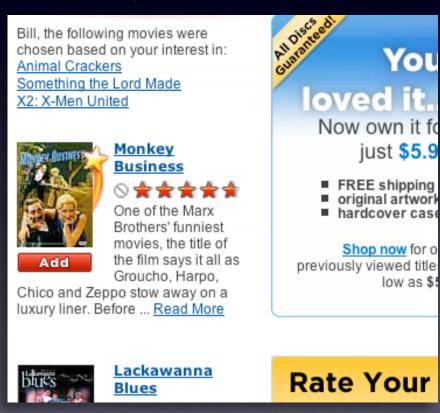
refactoring. hover & cover

For in-context tools, attempt to **reserve same space** for both hovered and non-hovered state

For hover details (information) place the hover in a manner that **does not cover** up important controls, will not cause accidentaly popup & down and is easy to deactivate.

For hover details, allow a 1/4 second delay before activating.

For in-context tools, **show** hover state **immediately** and provide **consistent targeting** for operations from object to object (allow user to get action item just in time)



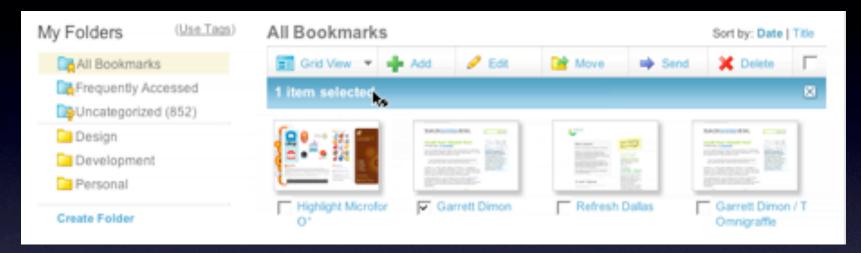
summary

Not all idioms play well together. Some idioms are more powerful than others. For example, tree controls, drag and drop, selection mechanisms all set up an "interaction theme".

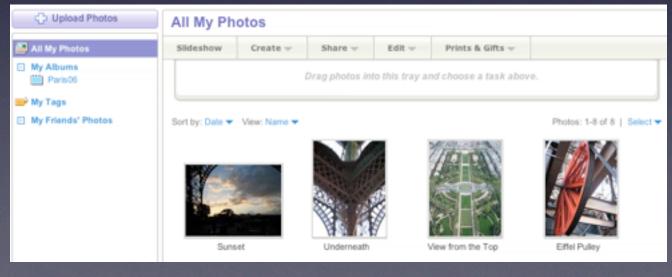
Just like visual styles need to be consistent, interaction styles also need to be consistent throughout the entirety of the interface

Borg Idiom is the phenomonon of an idiom (once adopted) assimulating the rest of the interface. Sometimes the assimulation is just the fact that one idiom dominates due to the way the interface clues the user to their presence.

Here was an early attempt on Yahoo! Bookmarks to blend drag and drop with item selection (checkbox idiom). It has odd side effects during the interaction.

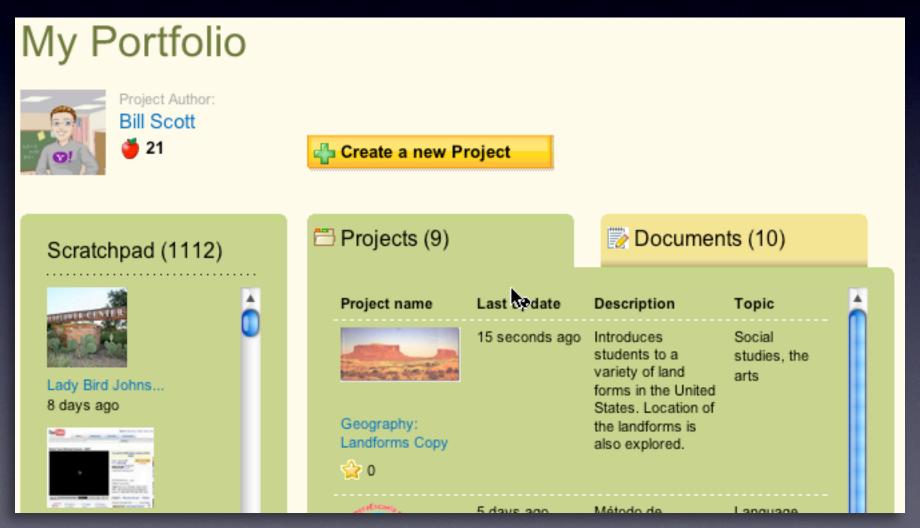


In Yahoo! Photos (no longer available) drag selection was implemented well. One issue was the page metaphor + drag selection + a tray idiom.



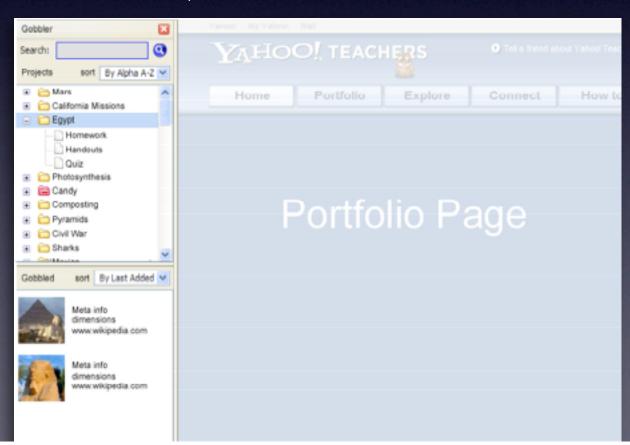
Original design did not accurately reflect the hierarchical nature of projects containing documents.

The tab idiom incorrectly communicated that these objects were in parallel.



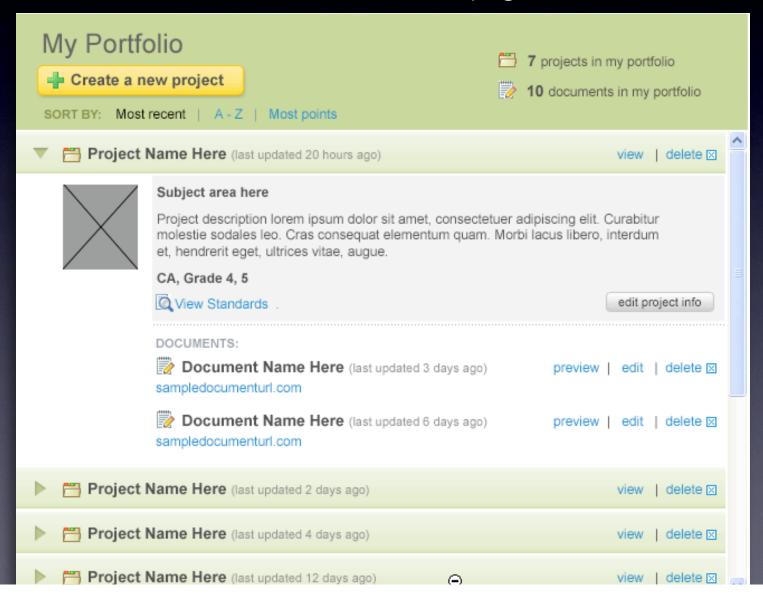
An initial redesign proposed using a tree control. It would communicate projects contain documents. It would also become a navigation that would naturally repeat itself to the "gobbler" as well

Tree controls are a "strong" idiom. They are not very friendly on the web. They require some dexterity to navigate. They play better on a desktop where "controls" are favored over "active content".

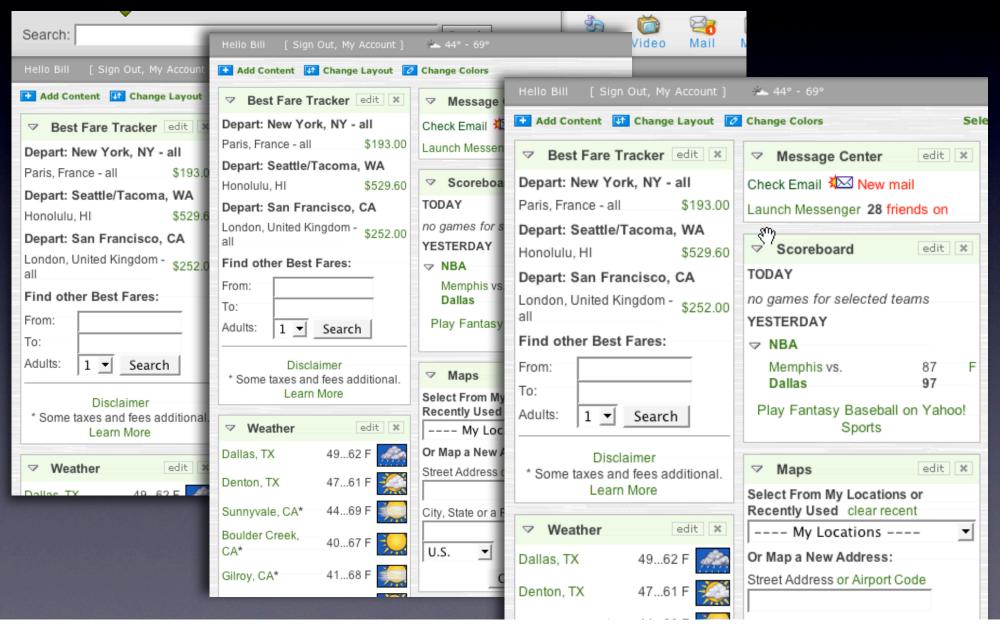




The final approach was to take a more content-driven approach rather than a "control-oriented" approach. This fit nicely with the rest of the interface, leaving all of the site to look like normal web pages.

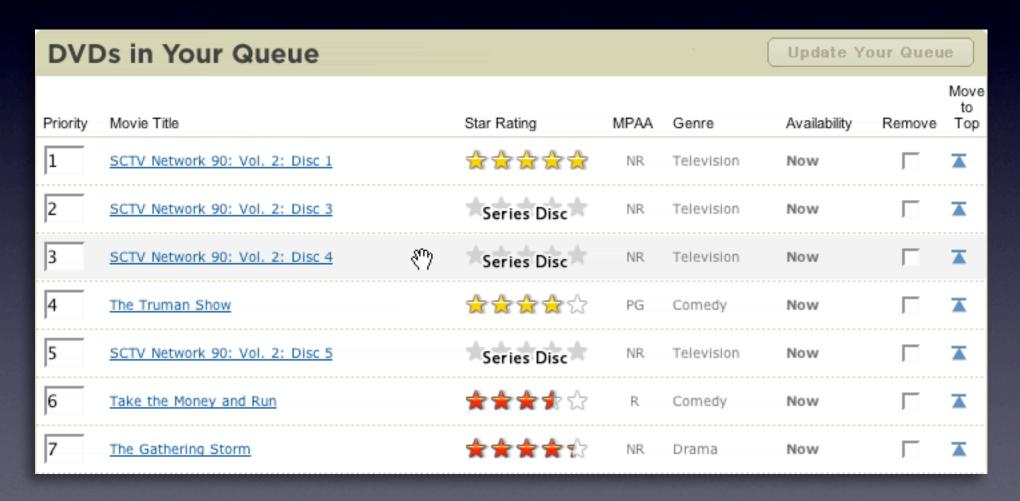


Three idioms living in parallel with each other. The old style overwhelms the other two.

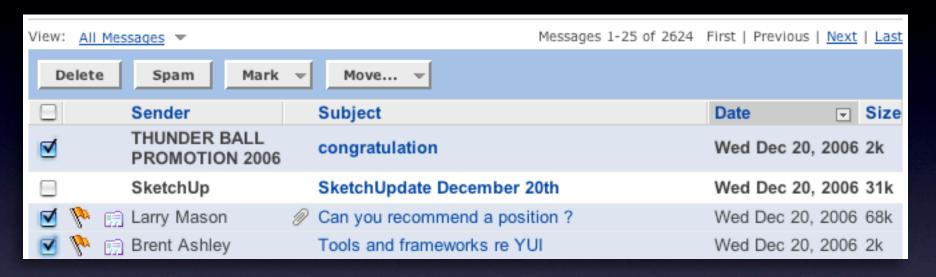


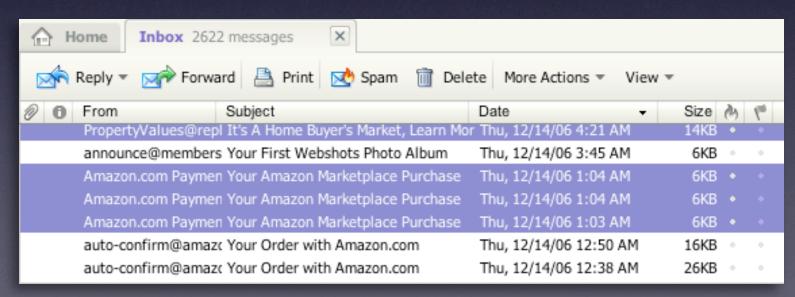
Netflix recently added drag/drop to their movie queue.

Notice they were able to mix two idioms without one taking over from the other.

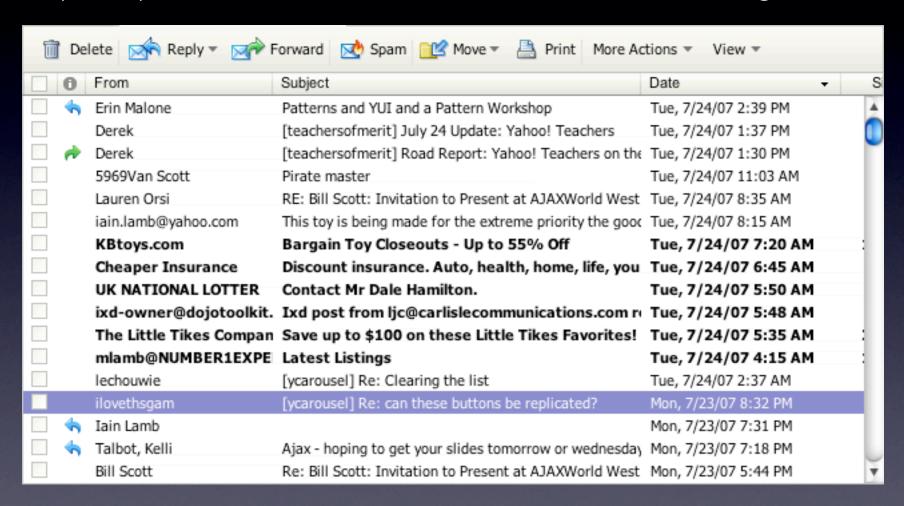


Two approaches. Object selection (highlight idiom). Item selection (checkbox idiom). Is it possible to marry the two?





Current Yahoo! Mail successfully married the two interaction idioms. It did it in a way that you can use either idiom as both have their advantages.



refactoring. borg idiom

For content-oriented rich sites, avoid becoming control-heavy. Stay away from the tree control and other strong desktop style controls. Make your content interactive, thus making the content the control.

Before adding any interaction style, **make sure it will scale** across all know parts of your interface.

Either allow yourself to be assimilated (be consistently borg :-) or eliminate the Borg from your site.

Watch out when mixing drag and drop with checkbox style selection.

Avoid mixing selection styles.

summary

Creating a new interface for a common idiom that is more confusing than the original. Sometimes it is just misusing a component for a new purpose.

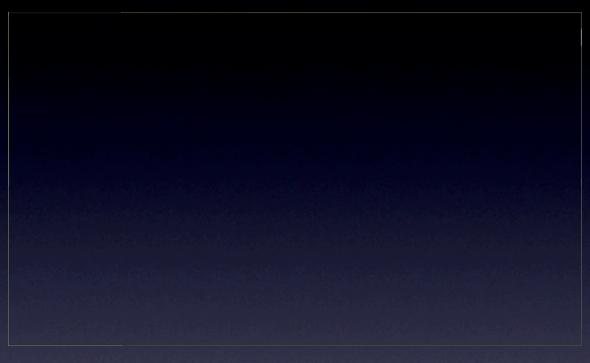
examples

Using drag and drop for simple attribute setting; using odd navigation schemes for some supposed effect

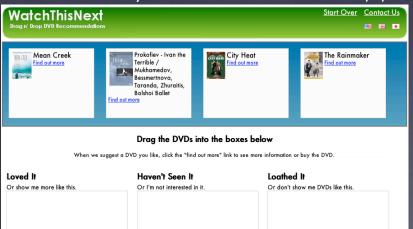
This is just bizarre. Especially the "Search Jobs" link. And it plays music ;-)



This guy won an award! Look it's just marking stuff as 'favorite'.



And this is yet another novel approach to favorites





Classics



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



The Great Escape

★★★★★

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

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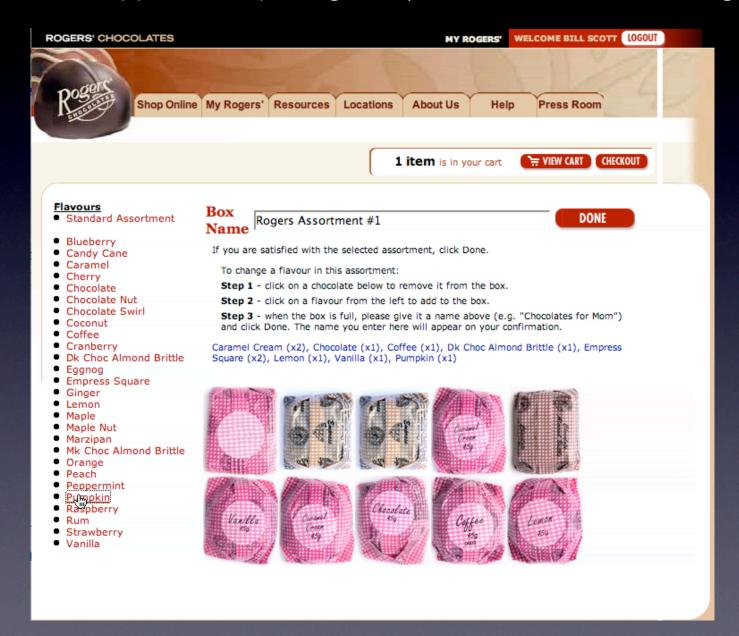
Jane, two up-al yuppies who ex lifestyle before name for it. But his lucrative job Read More



Add

again -- this tim the life and time Perhaps the mo

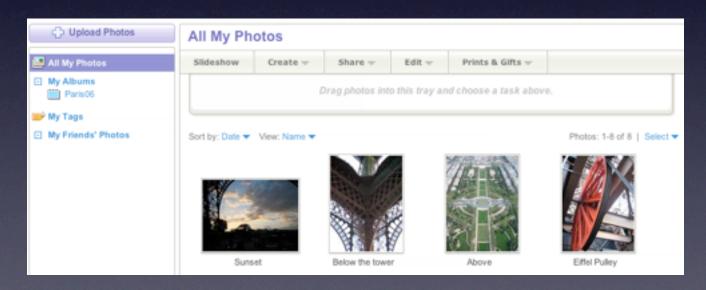
novel approach to putting candy in a box... how about drag and drop?



Yahoo! Photos (going away) tried a novel approach to selection. It involved the new concept of a "tray" for holding temporarily selected items.

Technically perfect. But design-wise misguided. Created two targets for commands: selected items and items in the tray.

As a result the menu commands were duplicated for the tray and for the current selection. Confusing.



editors have some graphic capabilities, they're L limitations. Buzzword, however, can flow text around To place a graphic into this document, open the Image the Insert Image icon. Or, you can select Image... from



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on

refactoring. novel notion

Understand the purpose of each type of component

- Carousels do not replace scrolled lists
- Drag and drop is not for single attribute setting

Don't construct an artificial interface to support an idiom (don't create the house for the nail)

If you think you need something never created before, think twice about it

anti-pattern. linkitus

summary

The syndrome of having no idea where a link will lead you. could be an in page action, could reveal information, could take you to new page, could popup something, could engage on hover. Can also be aggravated by inconsistent use of links on the same page.

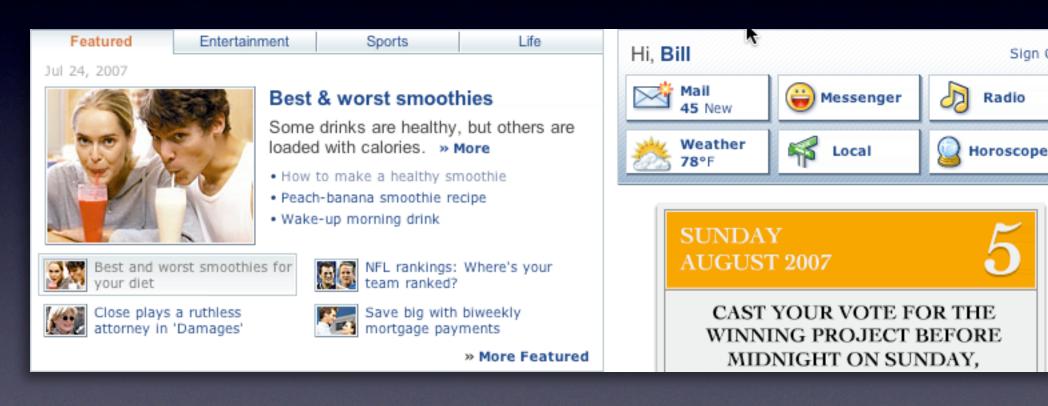
examples

yahoo.com inconsistent use of links on main page, teachers.yahoo.com around id card

anti-pattern. linkitus

On the home page, there are three kinds of links:

- Reveal other content in context
- Take you to the article
- Expose area (hover to reveal, click to go to tool)



anti-pattern. linkitus

Bizarre use of links. Hover reveals information. Click does nothing.

Very close to being a candidate for Novel Notions.

KFOX Kihncert On The Green July 1, 2007

Rest, Relax, & Get Ready For Fireworks! July 2, 2007 Day On The Meadow July 3, 2007 NBC11 Festival For Independence July 4, 2007



ON STAGE . DIRECTIONS . EHC LIFEBUILDERS . SPONSORS . VOLUNTEER . EVENT MAP FAQ



The Bay Area's

GENERAL INFORMATION

About The Event Beneficiary Hours Tickets

GETTING THERE

<u>Directions</u> <u>Public Transportation</u> <u>Parking</u>

AT THE FESTIVAL

ATM Locations
Audio/Video
Bathrooms
Beverages/Food
Children At The Festival
Fireworks
First Aid
Information
Lost & Found
Merchandise
On Stage
Performing or Selling



To begin using the FAQ page, simply move your mouse over the blue title of any topic to the left for additional information. If you still have questions that we haven't answered here, just give us a call at the event hotline 408.294.2100 x444 or Email Usl







(Change...)







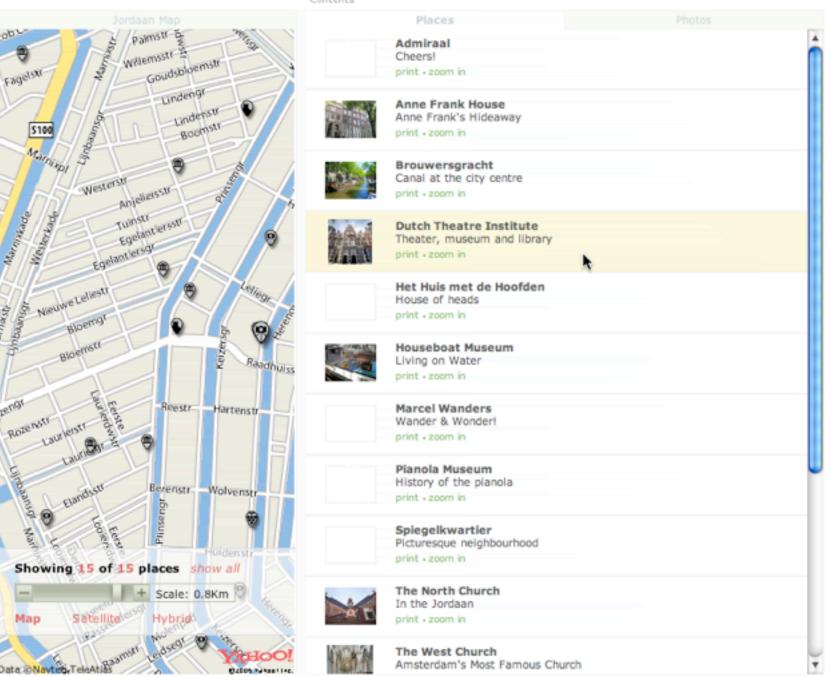




Photo: wcities

Dutch Theatre Institute

Herengracht 168 Amsterdam, 1016 BP Tel: +31 (0)20 551 3300

info@tin.nl

www.theaterinstituut.nl

This theater was established as a museum in 1924. In the 1960s, a library and gallery space were added. In the late 1970s, it merged with the Dutch Centre of the International Theatre Institute, creating an entirely new entity. The establishment is spread over five 17th Century buildings, overlooking one of the main canals. It has a museum, a gallery, a cafe, a library with 6,000 videos and 10,000 books and also a theatre with 100 seats. In addition, it has an activity area for children, a garden, and even meeting rooms. Puppetry shows, cabaret, dance, drama, circus, lectures, debates and discussions are also conducted in the auditorium.

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- NASA Scientist Confirms Light Show on Venus
- Youthful Star Sprouts Planets Early



NASA's Spitzer Space Telescope has spotted a stellar prodigy which may provide insight into when planets began to form in our own solar system. > Read More

















NASA TV (Live)

NASA TV & Video

Video On Demand

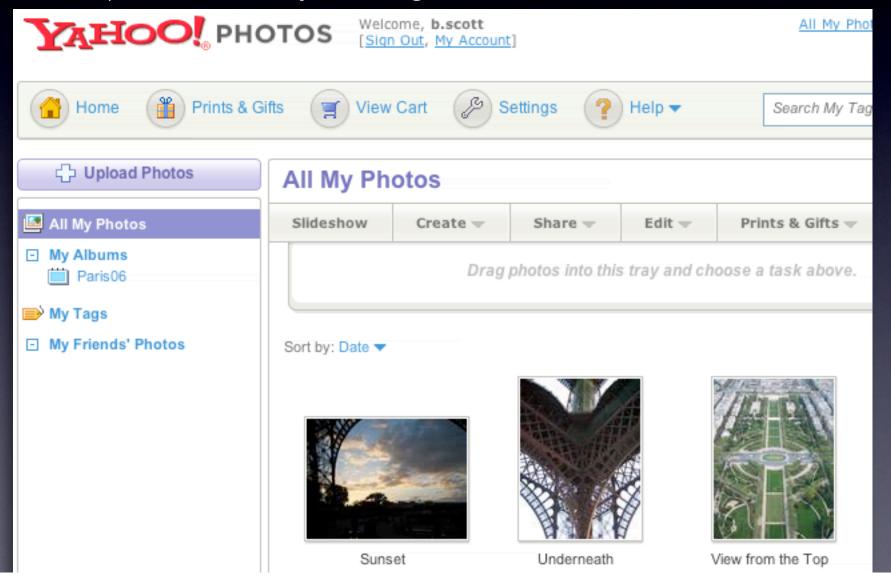
Popular Content

NAS

anti-pattern. windows aplenty

summary

The practice of throwing up unnecessary idiot boxes. So many reasons this is just wrong...



summary

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

examples

amazon carousel, tab animation, (stuff from transition talk)

Why the extra little slide in?



Step Eleven

Water thoroughly so the soil is moist to a depth of 6 to 8 inches.



Step Twelve

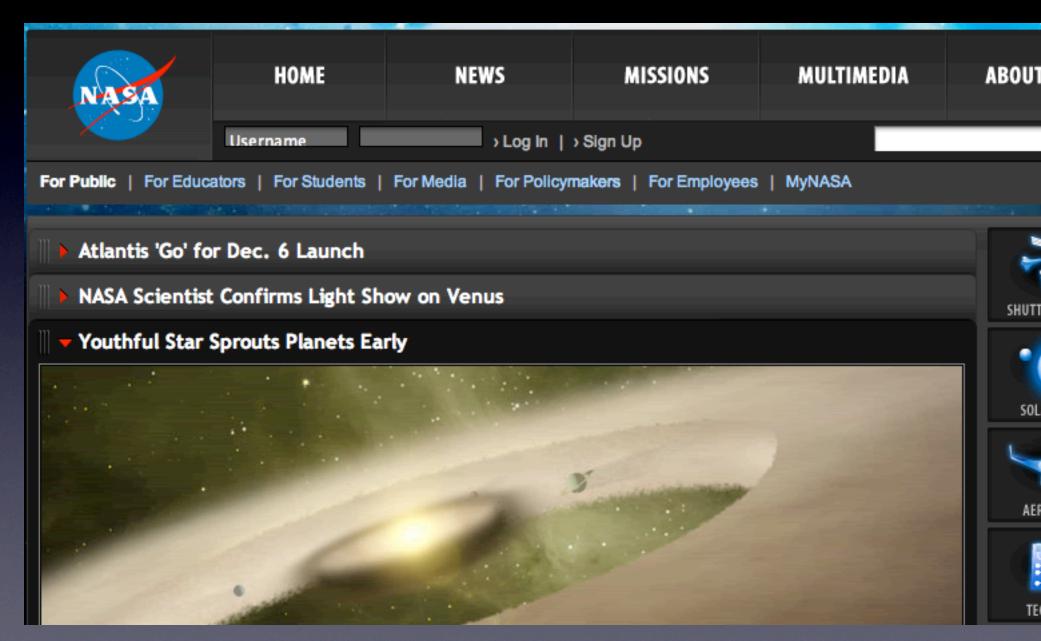
Keep the seed bed moist (but not soggy) until sod roots knit with soil below. In hot weather, you may have to water more than once a day.

Tips & Warnings

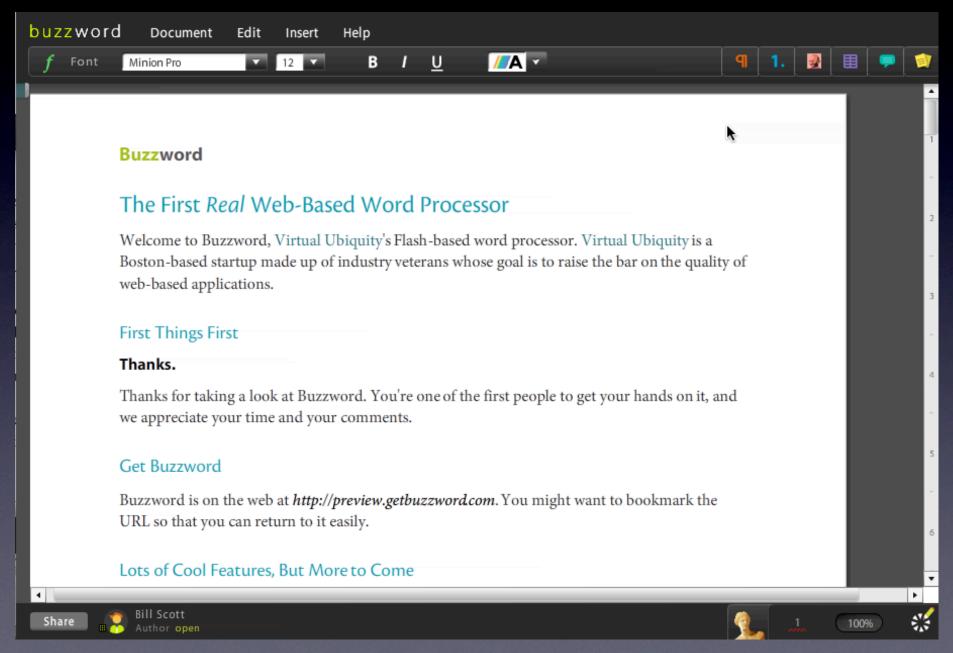


- •
- Lay the sod on dry soil to avoid a muddy mess.
- When laying sod, kneel on a piece of plywood so you don't disturb soil or damage sod, and use kneepads to keep your knees from getting sore.
 - Laying sod is hard work. Enlist the help of friends, and use a wheelbarrow to cart pieces around.
- Keep <u>pets</u> and kids off your new lawn by enclosing it with stakes and string.
- Avoid letting sod dry out, whether it's stacked in a pile or already laid. Occasionally sprinkle with water from a handheld hose to keep it moist,

animated menus... so 90's



too many things animating on hover



Wow! What more can I say?

Seems to be either a pixel at a time or going so fast you can't use it



More from the gratuitous animation department...



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Not sure how much animation does for a tab control -- tab-o-sel? Candidate for Novel Notions



Terminal: built right in.

OK, it's not very sexy. In fact, it's quite the opposite. But Coda is all about the little things that make your web development a squidgeon easier. If you need to SSH into a server and run some MySQL queries, or restart Apache, or debug some PHP in real time, there's only one way you're gonna do it: terminal. Coda's got a terminal one mouse click away.



egrep 'bellslwhistle' /usr/share/dict/web2

Features? Our terminal has 'em. Connect to a local shell or connect via SSH to a remote server. Put a Terminal in a split, or put a Terminal in its own tab. Copy and paste from the output, or scroll back into the buffer. It's a terminal! And it's convenient!

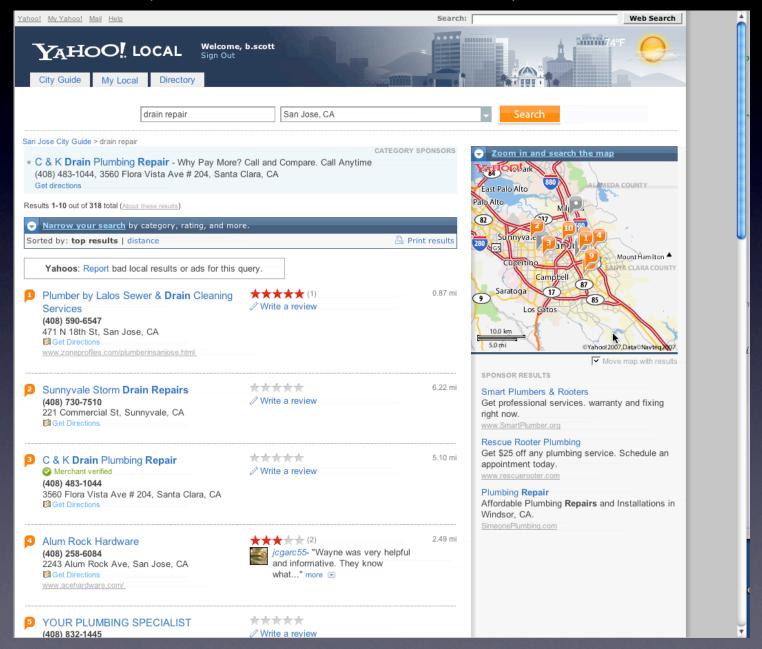
export CLICOLOR=1

Wait! There's kind of more! ANSI colors also work! You can also, via the preferences, change the font and background colors, or the terminal font itself. Unfortunately, you can't yet set the background to a picture of Arwyn. But e-mail us, we'll always consider it.



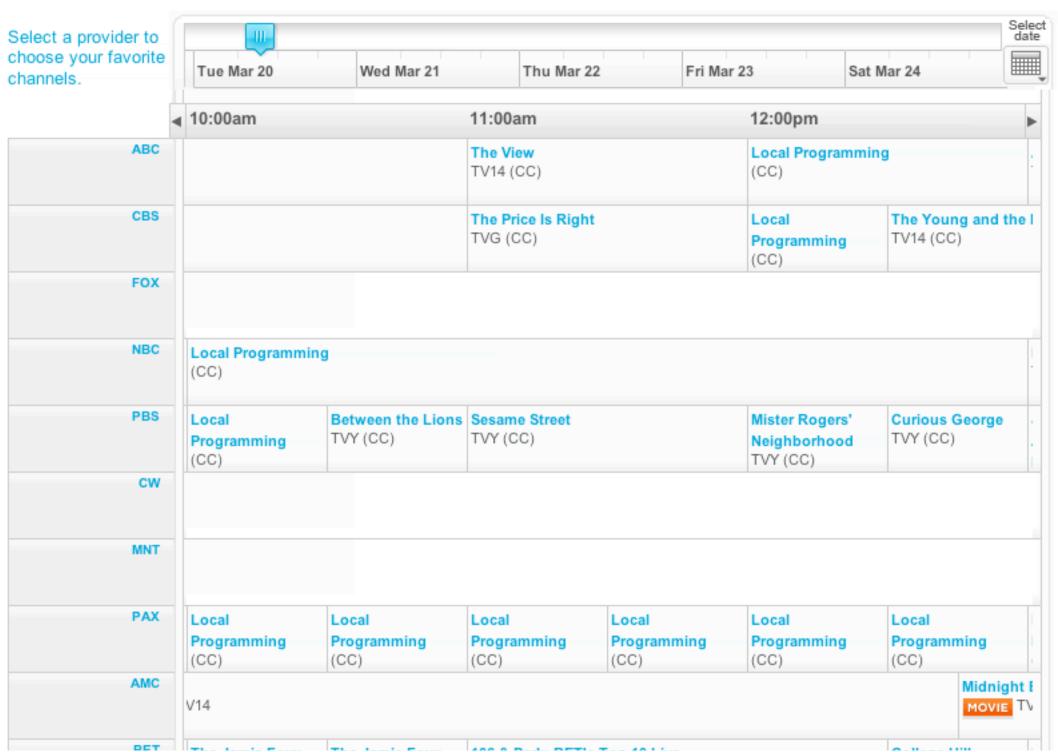


the stalker pattern. can also see an example from Netflix community.



TV Listings





TV Listings



Display My Favorite Channels Only Select Favorites	Tuesday, July 24 ▼ 7 pm ▼ Go Jump to: Now Primetime Tonight								
	∢ 7:00pm		8:00pm	9:00pr	9:00pm				
245 TNT	The Closer TV14 (CC) HDTV		Without a Trace TV14 (CC) HDTV	Without a Trace TV14 (CC) HDTV					
247 TBS	MLB Baseball (CC)								
248 FX	Damages TVMA (CC)		Damages TVMA (CC)		That '70s TV14 (CC			That '70s) Show TV14	
249 COMEDY	Mind of Mencia TV14 (CC)	American Body Shop TV14 (CC)	Daily Show With Jon Stewart TV14 (CC)	Colbert Report TV14 (CC)	Rodney Carrington Live at the Majestic TV14 (CC)				
254 AMC	Patriot Games TV14 (CC) Buffalo S TV14 (CC)						o Soldiers (CC)		
256 TCM	Flying Tigers (CC) Air						r Force		
265 A&E	Criss Angel: Mindfreak TVPG (CC)	Criss Angel: Mindfreak TVPG (CC)	Criss Angel: Mindfreak TVPG (CC)	Criss Angel: Mindfreak TVPG (CC)	Dog the Bounty Hunter TVPG (CC)		Dog the Bounty Hunter TVPG (CC)		
266 вю	Breaking Vegas TVPG (CC)		Mobsters TVPG (CC)		Notorious TVPG (CC)				
269 ні з т	Ice Road Truckers TVPG (CC)		Modern Marvels TVPG (CC)		Mega Disasters TVPG (CC)				
273	Kathy Griffin: My	Life on the D-List	Flipping Out	Kathy Griffin: N	My Life on	the D-List	Kath	y Griffin:	

refactoring. animation gone wild

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**.

summary

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

examples

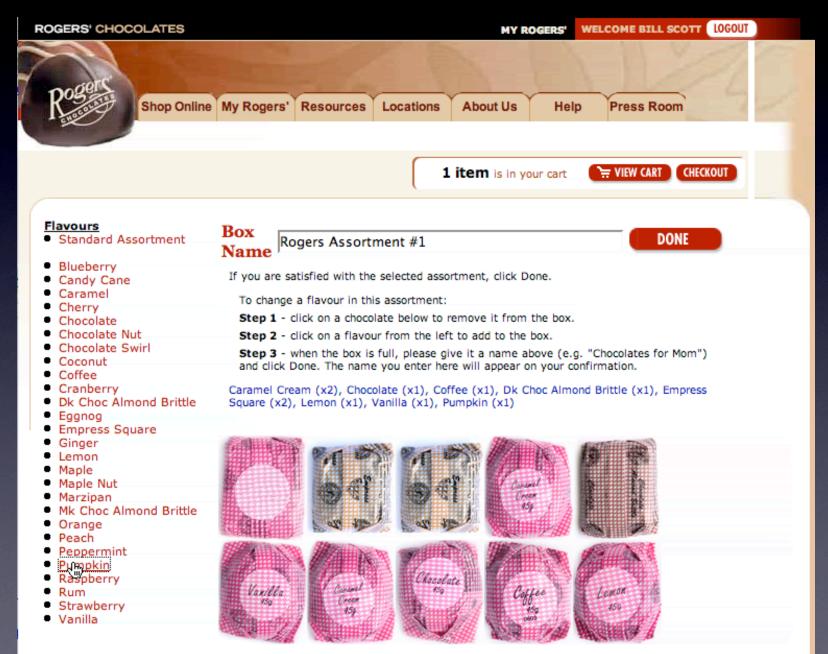
Drag and drop is classic example.

solutions

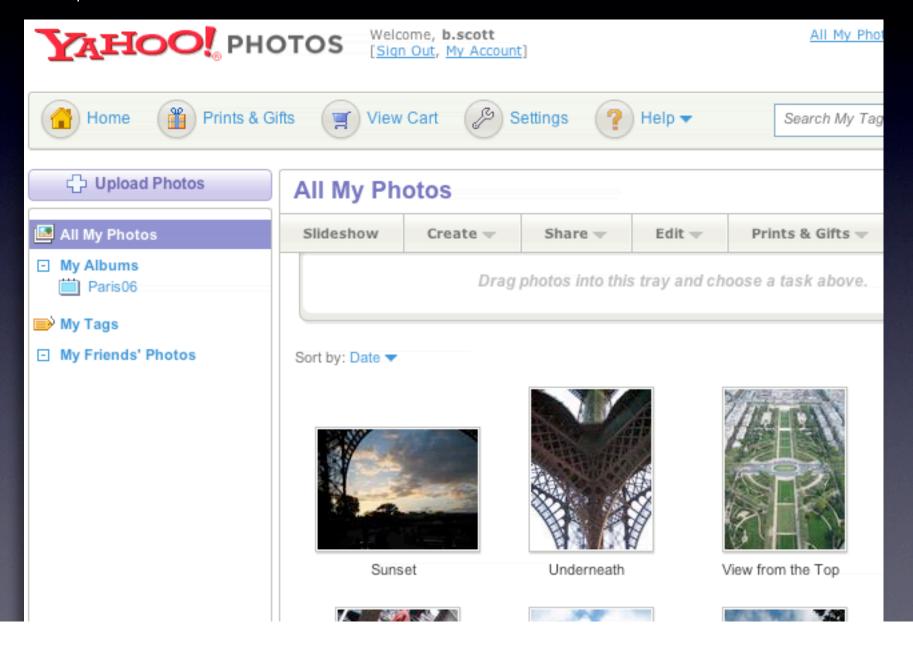
Use interesting moments grid to think through each moment

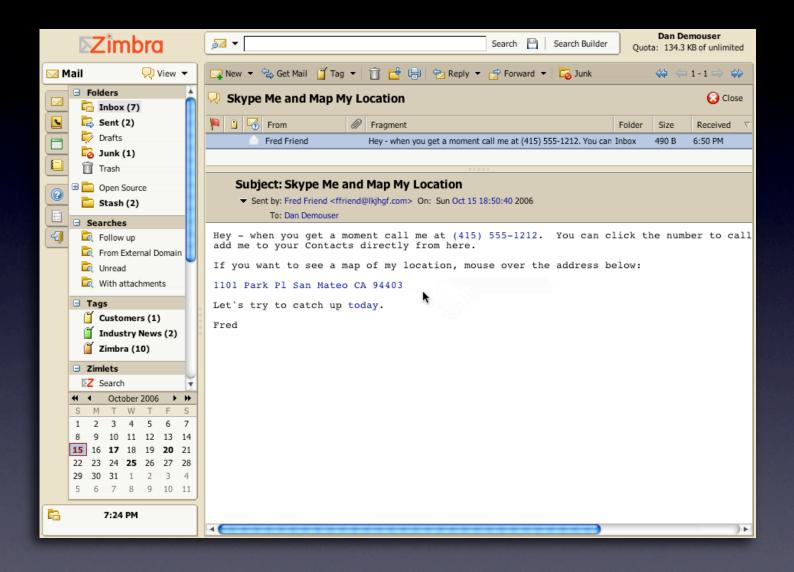
	Page Generation	Mouse Hover	Drag Initiated	Drag over Valid	Drag over Invalid	Drag over Original	Drop Accepted	Drop Rejected	Drop on Original
Page Content	Hint	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cursor	Normal	Move Cursor	Move Cursor	Move Cursor	Move Cursor	Move Cursor	Normal	Normal	Normal
Drag Object	Normal	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
Drop Target	Normal	Normal	Normal	Insertion Bar	N/A	N/A	1. Insertion Bar Removed	with drag object N/A	with drag object N/A

no feedback during interaction... less "learnable"

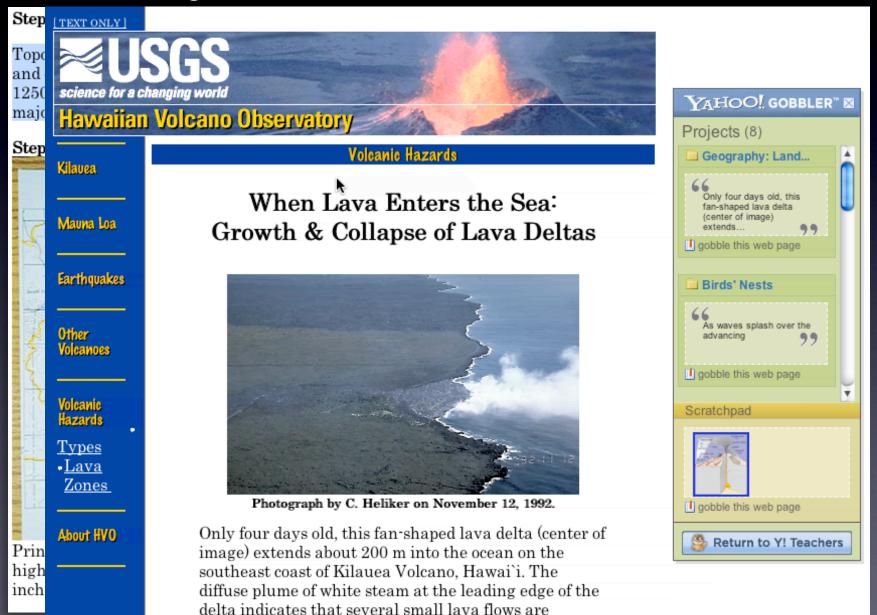


Using Y! Photos as example again. Notice missing feedback at key point piles on the problems.





Turns out that a number of events exist during drag and drop that we can use to our advantage.



refactoring. missed moments

Map out all the interesting moments.

Use the interaction matrix or other technique to map events to actors on the page.

Use the moments to communicate.

Its the nuance that matters.

Think... "interactive directions"

Moment-by-moment directions are the key. Users get lost easily

anti-pattern. one at a time

summary

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

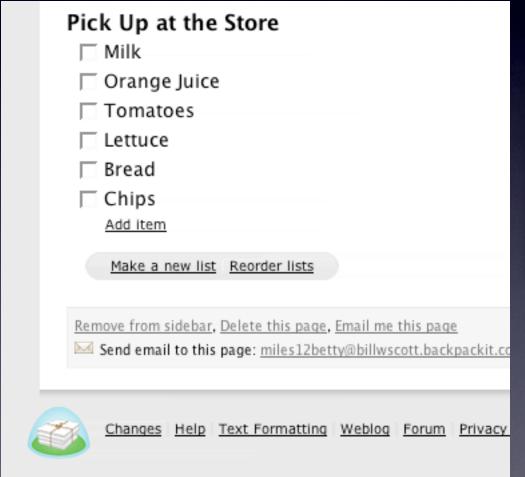
examples

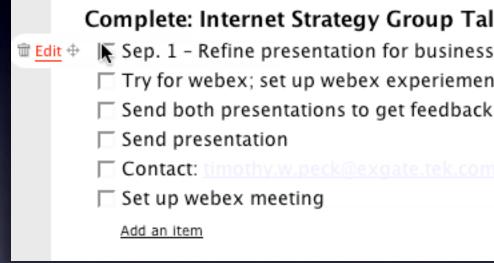
backpackit

anti-pattern. one at a time

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

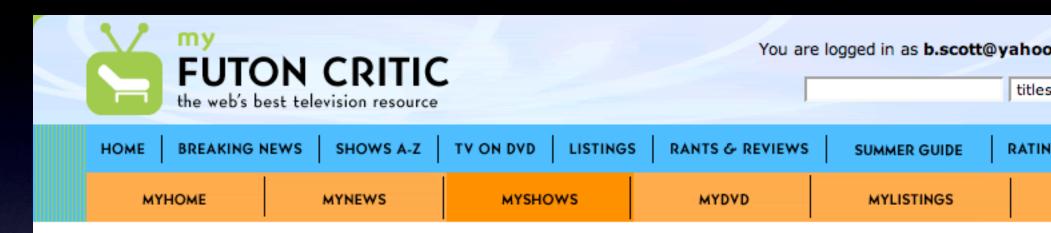
These kind of interfaces (in context tools) always present a problem for doing operations on multiple items.





anti-pattern. one at a time

Takes one at a time check box to the extreme



SHOWATCH							
series	alert me?	date start/end	network	time slot	status		
AMAZING RACE, THE	П	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	<u>v</u>	2/7/88 - ???	FOX	saturdays (9:00 PM-10:00 PM EST)	currently airing (2006-2007 season)		

refactoring. one-at-a-time

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 in-context 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 servicable.

anti-patterns

big ball of mud. meandering way.

borg idiom. tiny targets. mystery meat.

buried treasure. hover and cover.

pogo stick navigation. novel notions.

against the flow metaphor mismatch jabberwocky.

double duty. **linkitus**. blind type.

windows aplenty. animation gone wild.

misguided misdirections. unmarked hazards. **missed**

moments. missing scene.

one at a time. non-symmetrical actions.

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