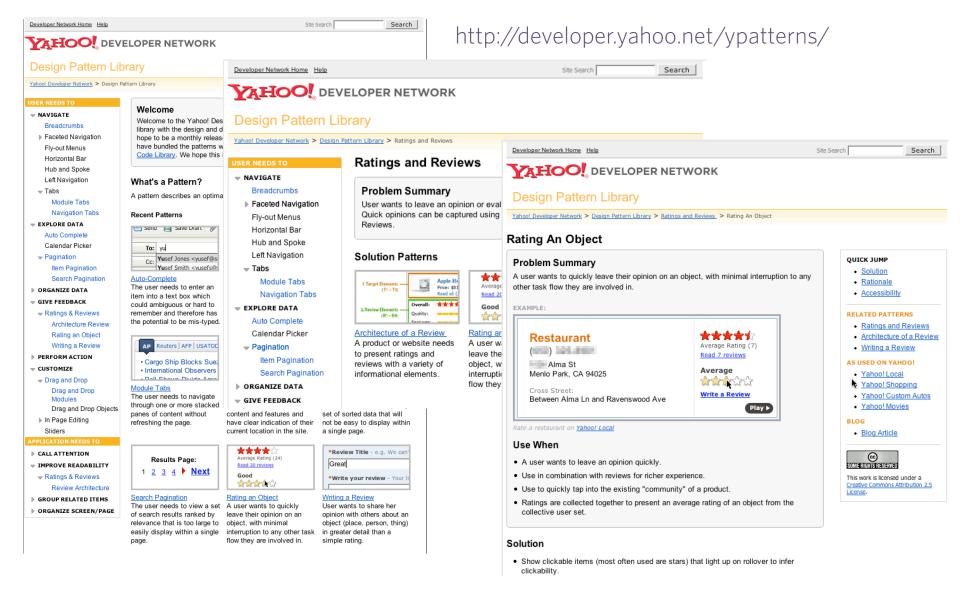
# Yahoo! News



# Yahoo! Pattern Library Release





#### http://yuiblog.com



#### Yahoo! Design Pattern Library Released

February 13, 2006 on 7:54 am by Bill Scott | In Design |

I'm excited to announce that today we are releasing the Yahoo! Design Pattern Library to the public under a friendly Creative Commons License. The goal in releasing this library is for us to share the common patterns that we see emerging at Yahoo! It is hoped that by opening up our design patterns we can share our current thinking as well as solicit your valuable feedback.

We believe design patterns are powerful. First, they offer a solution in context of a problem. Second, they provide a name for the solution. Taken together as a set, pattern libraries form a solution language that can enhance our ability to communicate design ideas. Lastly, they provide us a context in which to discuss a number of associated issues: the thinking behind a solution; issues around accessibility, and de-gradeablity; other related patterns; examples of usage; and code samples to name a few.

In case patterns are a new concept to you, here's a little history to get you up to speed.

Background on Patterns

#### SYNDICATE

#### All Entries:



All Comments:



#### RECENT POSTS

Developing a JavaScript Library for Yahoo!

Welcome to the Yahoo! User Interface Blog

The Yahoo! User Interface Library

Yahoo! Design Pattern Library Released

Search Pagination Design Pattern

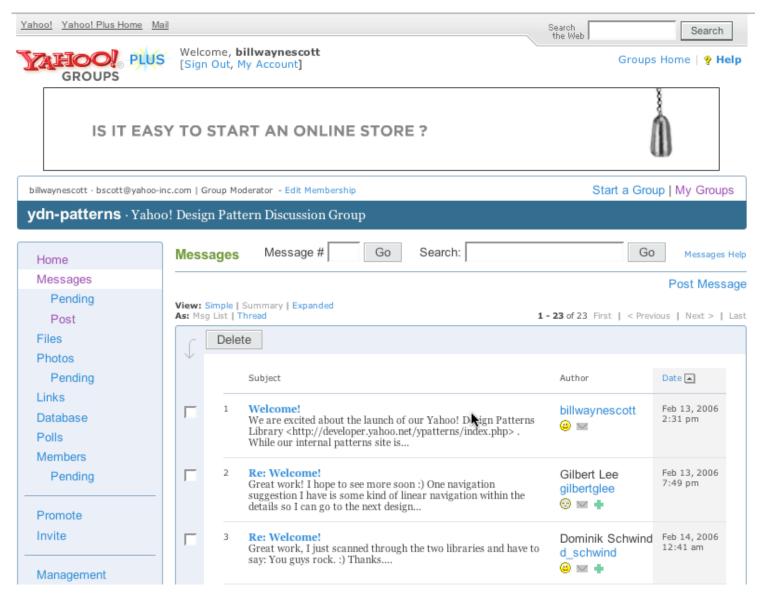
Item Pagination Design Pattern

Rating an Object Pattern



#### Yahoo! Patterns Discussion Group

http://groups.yahoo.com/group/ydn-patterns/





Breadcrumbs. Module Tabs.
Navigation Tabs. Auto Complete.
Pagination. Item Pagination.
Search Pagination. Ratings and
Reviews. Architecture of a Review.
Rating an Object. Writing a
Review. Drag and Drop. Drag and
Drop Modules.



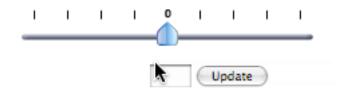
**Drag and Drop. Drag and Drop Modules. In Page Editing.** In Page Custom Editing. Direct State Editing. Grid Cell Editing. Inline Custom Editing. Inline Tag Editing. Popup **Custom Editing. Slide-out Custom Editing. Inline Text Editing. Persistent Portals. Inline Reordering. Indication. Busy Indication.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



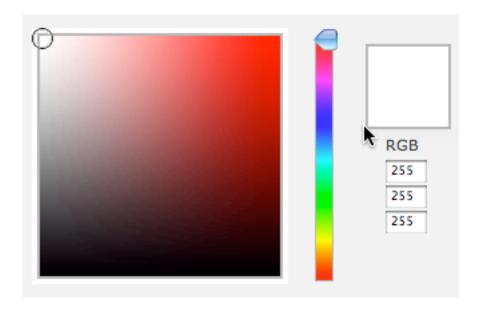
## Yahoo! UI Library

- Normalization (Event Utility)
- Messaging (Connection Manager for AJAX)
- Direct Representation (Animation and Position)
- Direct Manipulation (Drag and Drop)
- Rich Interactive Widgets (Slider, TreeView, Calendar, AutoComplete













```
<script>
  var myCal;
  function init() {
    myCal = new ygCalendar("myCal","myCalContainer");
    myCal.render();
  }
</script>
<div id="myCalContainer"></div>
```







こんにちは、ゲストさん

<u>ログイン</u>

#### Yahoo!トラベル 海外航空券予約





三井住友銀行の 外貨両替

<u>トップ > 海外航空券予約 > アメリカ、カナダ > アメリカ合衆国 > ヒューストン</u>

[PR] 癒しのニュージーランド旅行で豪華賞品&ボーナスマイルをゲット!

出発日別最安料金検索 出発日(当月を含む6か月以内)を選択すると、選択された出発日の前後3日間の最安料金を検索できます。

2005年	*)
-------	----







検索

このリストから条件を指定して絞り込む

	出発地: 指定なし	~	· 航空会社:	指定なし	~	
	料金: 指定なし 💟 円以上	指定なし 🔻 円未満	<ul><li>・ 有効期間:</li></ul>	指定なし 🕶 日月	X上	
	座席クラス: 🗏 エコノミー	□ ビジネス	ファースト			
	・旅行形態: 🗹 往復(帰国便変更不可) 🖳 往復(帰国便を現地で変更可能) 🕒 片道					
・その他の条件: 直行便 カード決済可能 子ども料金あり オンライン空席照会、予約可能						









DESIGNING FOR AJAX 12

#### Yahoo! Ul **Auto Complete**





#### Yahoo! UI Tree View

#### APPLICATION NEEDS TO

#### CALL ATTENTION

- ▶ Help
- Invitation

Jump to Details

Progress Indication

▶ Transitions

Zoom

- ▶ IMPROVE READABILITY
- ▶ GROUP RELATED ITEMS
- ▶ ORGANIZE SCREEN/PAGE



# Designing for Ajax

Principles and Patterns for Designing Rich Internet Applications



# Designing for Ajax

- RichnessWhat is richness?
- Ajax Patterns
   DNA of an Ajax Pattern
- Principles
   Principles for Ajax Design



# Richness

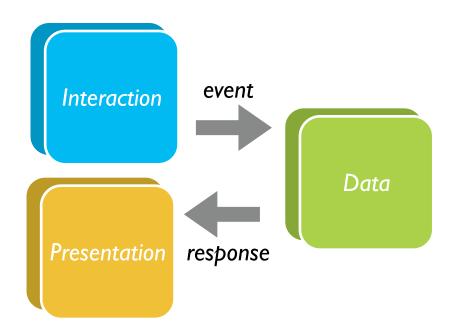


## Defining Richness: Web in 3D

Interaction Dimension

Data Dimension

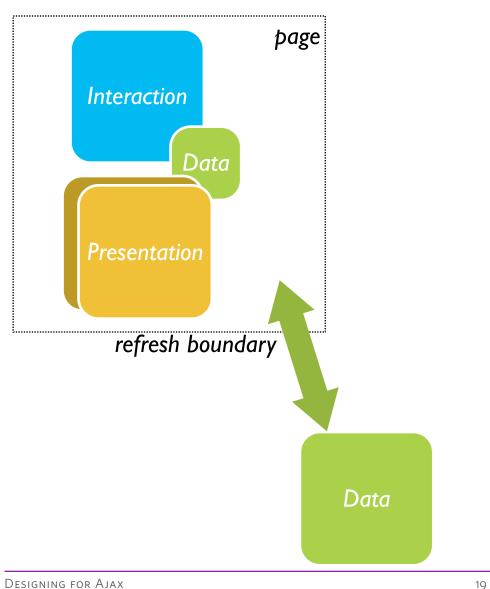
Presentation Dimension





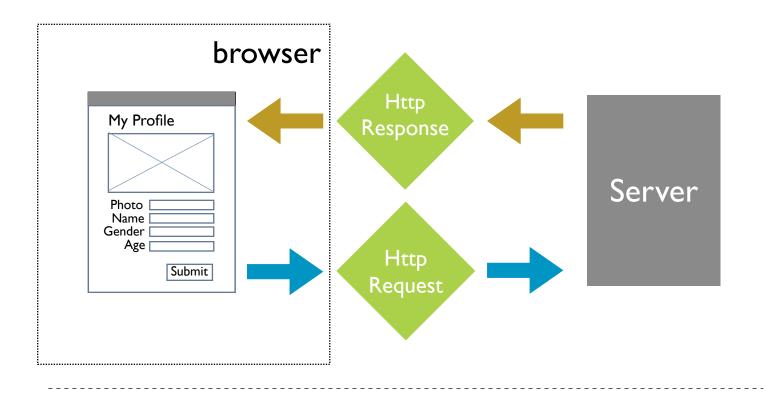
### Classic Web

- Interaction course-grained
- Data loaded with the page or obtained via refresh
- Presentation: page-based updates





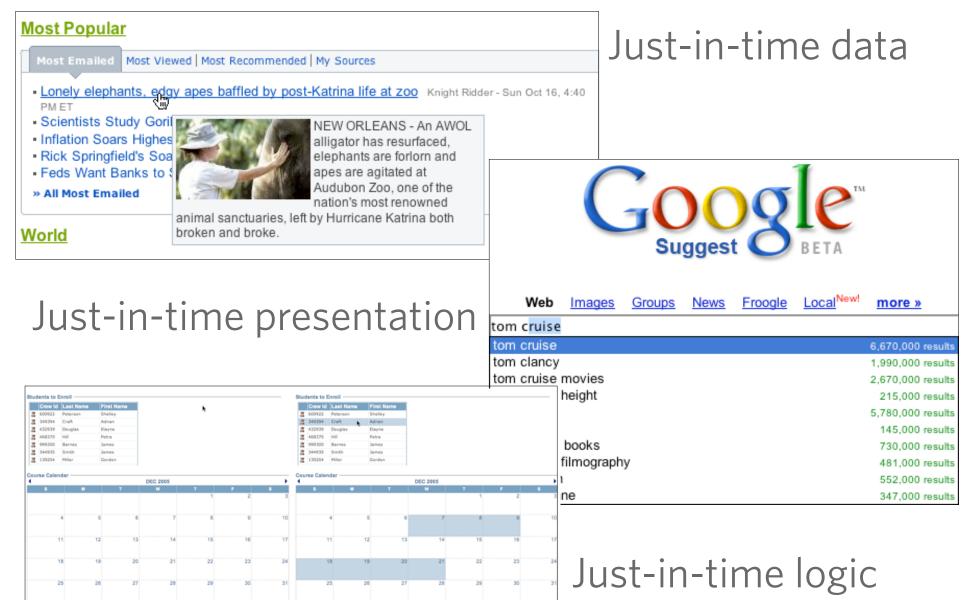
## Classic Web Illustrated







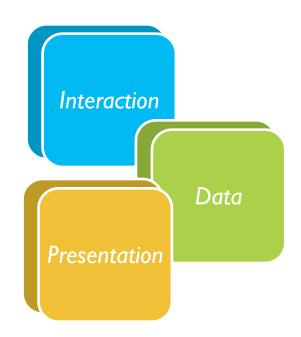
## Ajax = Just-in-Time. Immediacy.





## Ajax Model - New & Improved!

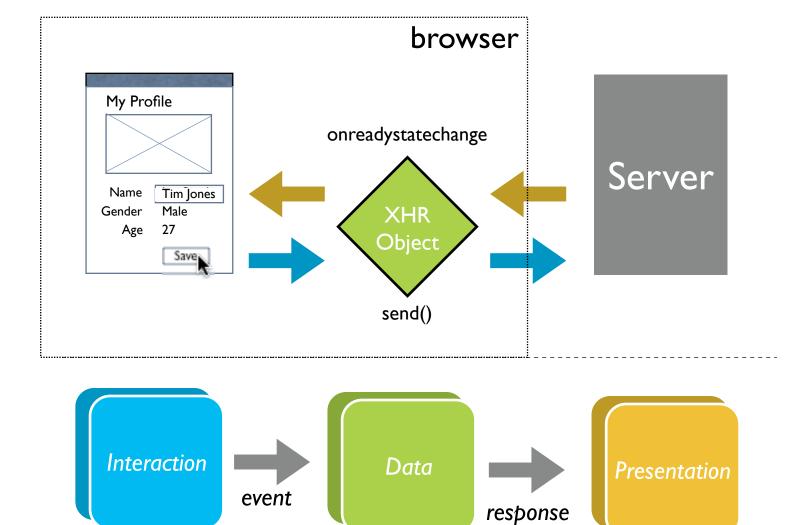
- Now with Deeper Interaction!
- Now with Just-in-Time Data & Just-in-Time Logic!
  - ★ XMLHttpRequest (XHR) is the secret sauce!
- Now with Richer Interface!



All dimensions are closer



# Ajax Illustrated





## AJAX vs Ajax

- AJAX = Asynchronous JavaScript and XML
  - Strict definition is using XMLHttpRequest (XHR) to retrieve XML within a web page
- Ajax = The set of technologies that allow web applications to provide rich interaction, just-in-time information and dynamic interfaces without required page refresh
- The Secret Sauce XHR
  - Ajax = XHR + DHTML (HTML, CSS, JavaScript) + Rich design



## Other Remote Scripting Techniques

- Hidden IFrame
- <img> src
- <script> src hack
- CSS href hack
- JS to faceless Java applets
- JS to faceless Flash
- NO CONTENT Response
- Cookies



# Ajax Patterns



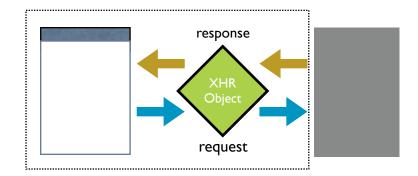
**Drag and Drop. Drag and Drop Modules. In Page Editing.** In Page Custom Editing. Direct State Editing. Grid Cell **Editing. Inline Custom Editing. Inline Tag Editing. Popup Custom Editing. Slide-out Custom Editing. Inline Text Editing. Persistent Portals. Inline Reordering. Indication. Busy Indication.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



### But What Can XHR Do?

- Make a request
- Return a response

And do it asynchronously





## Anatomy of a Pattern

- Ajax design patterns contain three steps
  - Trigger (event or timer)
  - Operation (Ajax, remote scripting)
  - Update (presentation)

\_\_\_\_\_\_









# **Trigger**

- Every pattern starts with
  - a user event
  - a timer event

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









## **Operation**

Ajax patterns open the door to immediacy

- Lookup I can get information when I need it
- Persist I can save in real-time
- Validate I can prevent errors early
- Invoke I can make things happen now
- Message I can communicate instantly









### Operation. Lookup

#### I can get information when I need it

Auto Complete. Deferred Content Loading. Dynamic Goal. Narrowing Choices. Refining Search. Live Search. Dynamic Filter. Detail Zoom. Endless Scrolling. Expandable Paging Boundary. Fresh Content. Hover Detail. In Place Drill Down. On Demand Refresh. Periodic Refresh. Resizable Modules. Scrolling Modules. Auto Form Fill.

\_\_\_\_\_







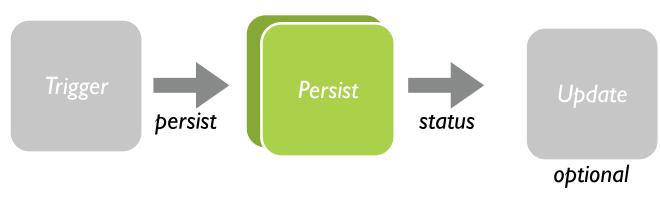


#### **Operation.** Persist

#### I can save in real-time

Drag and Drop Modules. In Page Editing. In Page Custom Editing. Direct State Editing. Grid Cell Editing. Inline Custom Editing. Inline Tag Editing. Popup Custom Editing. Slide-out Custom Editing. Inline Text Editing. Inline Reordering. Auto Save. Remembered Collection. Remembered Preferences. Rating an Object.

-----





## **Update**

Finally, patterns reflect a visual change

Indication. Busy Indication. Cursor Busy. In Context Busy. In Context Progress. Inline Status. Transition. Brighten Transition. Cross Fade Transition. Dim Transition. Expand Transition. Fade In Transition. Fade Out Transition. Flip Transition. Move Transition. Self-Healing Transition. Collapse Transition. Slide Transition. Rich Internet Object. Available. Selected. Identifiable Object. Slide-out. Popup Balloon.





### Pattern-O-Matic





# Principles



## Principles for Ajax Design

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



## Keep it direct

Prefer interaction inside the page
Use direct editing on content
Keep your tools nearby
Create smart tools that infer context
Use drag and drop where appropriate



### submit hyperlink

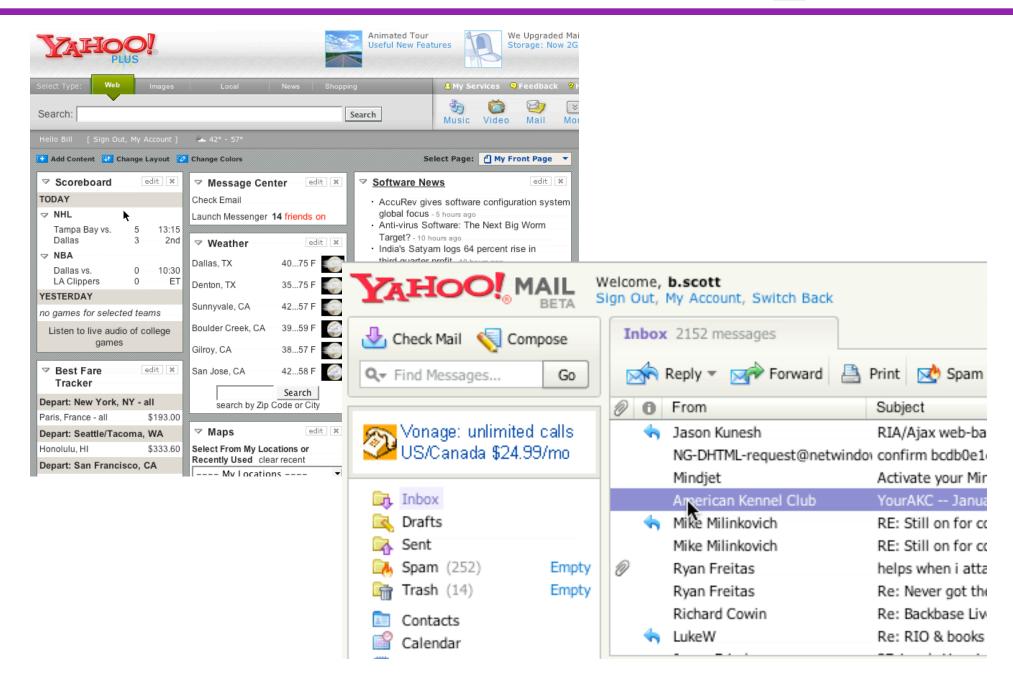


mouseout hover keypress keydown mousedown drop filter choices mouseup drag click select focus blur resize move timeout



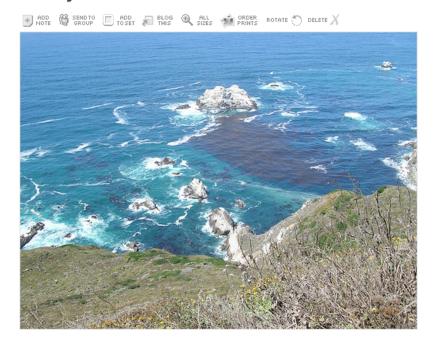
Drag and Drop. Drag and Drop Modules. In Page Editing. In Page **Custom Editing. Direct State Editing. Grid Cell Editing. Inline Custom Editing. Inline Tag Editing. Popup Custom Editing. Slide-out Custom Editing. Inline Text Editing. Inline** Reordering.



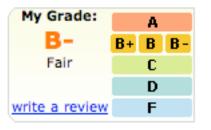


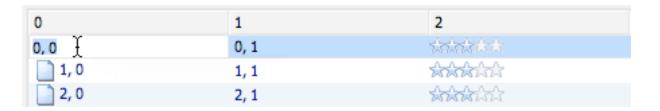


#### **Rocky Waters**

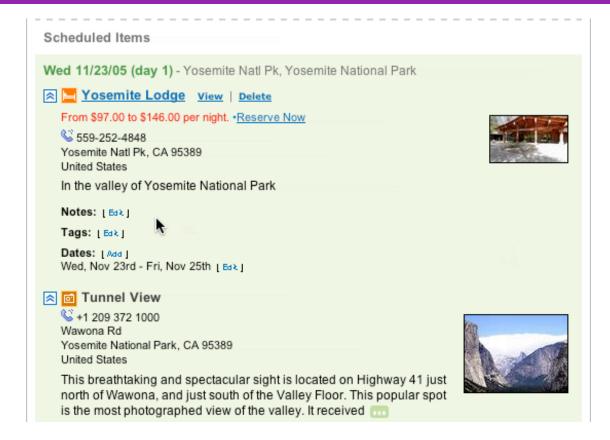












6 0	From	Subject
	reter boersma	No. [10 Di
<b>"</b>	Yahoo! Toolbar	Welcome t
	Weekend Extra	5 Tips for



- Inline Text Editing
  - Do we need save/cancel? Is so, when?
  - Try to not disturb the page when switching modes
- Discoverability
  - Not expected model of most content
  - Any visual treatment clutters the screen
  - On page tips?
- Once someone learns it, is it so useful it outweighs initial discoverability issues?
- Combine with invitations, spotlights, inline indicators



## Provide live feedback

Design for immediacy

Design for relevancy

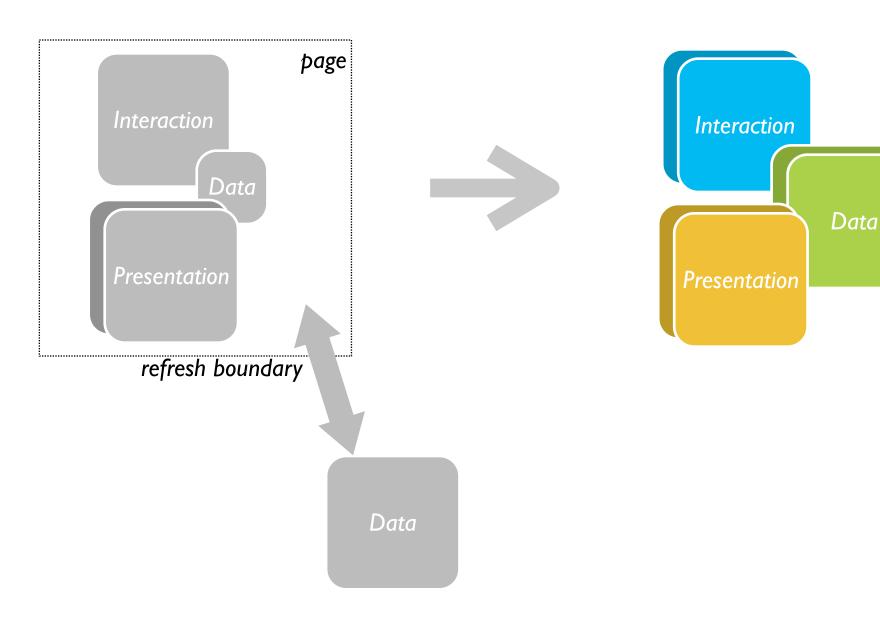
Use live previews (look before you leap)

Play the confidence game

Create nimble clients

Watch out, feedback can be distracting

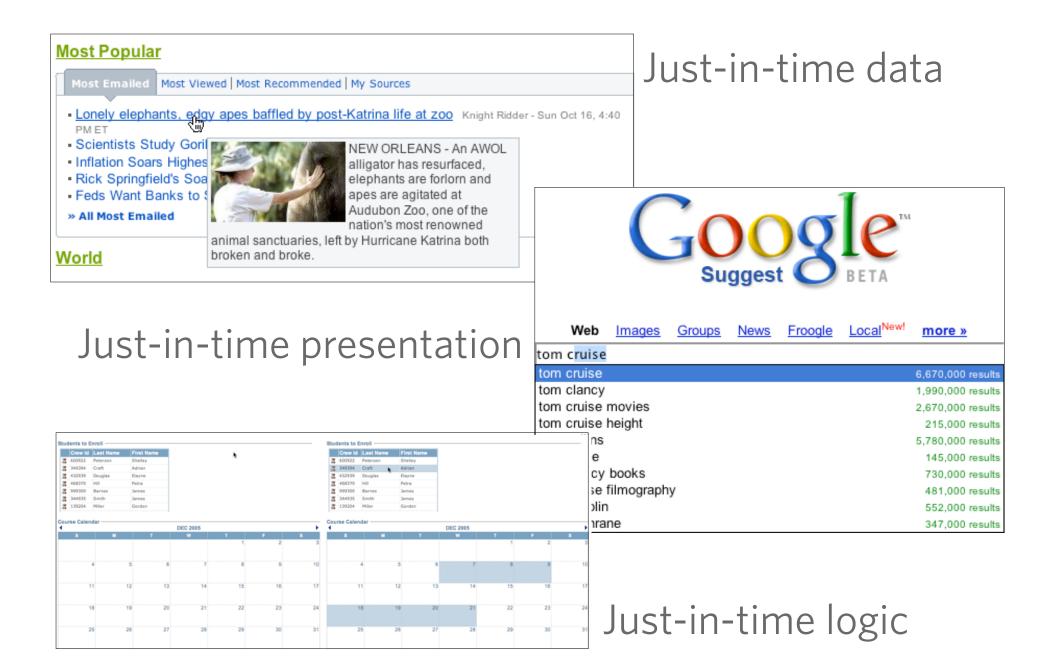






Indication. Busy Indication. **Cursor Busy. In Context Busy. In Context Progress. Inline Status. Auto** Complete. Balloon Error Tip. **Deferred Content Loading. Dynamic Goal. Narrowing Choices. Refining Search.** Live Search.









#### Instant Search BETA

Search the Web

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

Why feel lucky when you can be right? With Instant Search, results instantly appear for <a href="Yahoo! Shortcuts">Yahoo! Shortcuts</a> and common searches. Give it a spin! Type in these examples below, or try your own searches:

- · boston weather
- wikipedia
- nfl

- · 22 5th ave new york ny
- san francisco coffee shops
- dmv

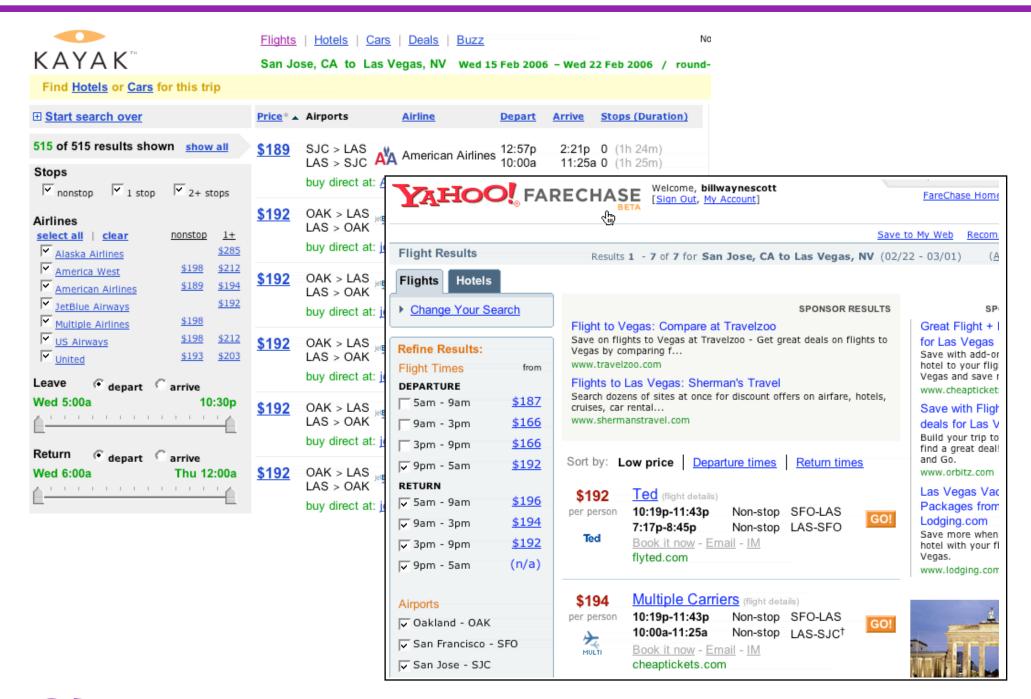




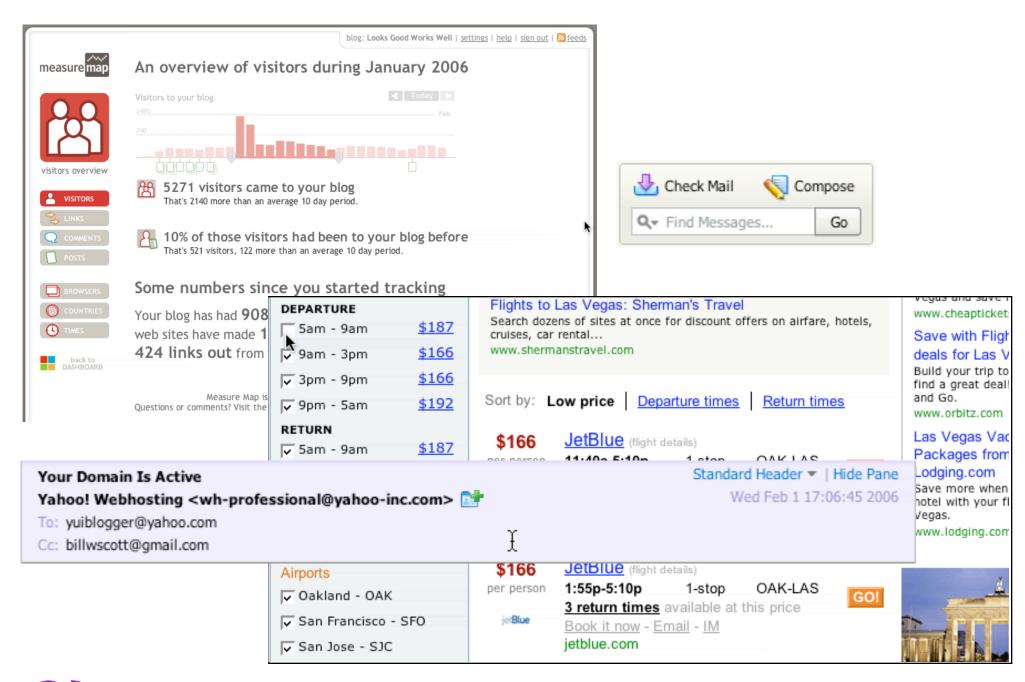




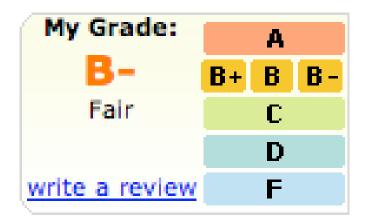










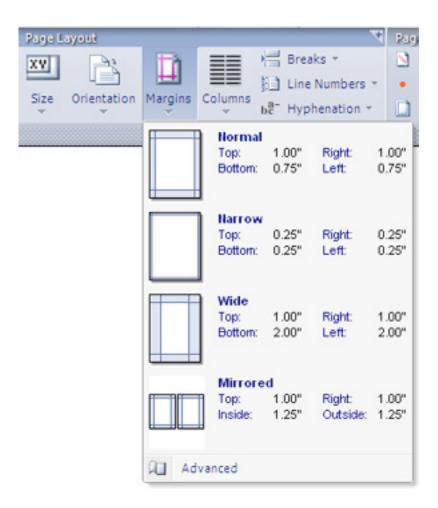




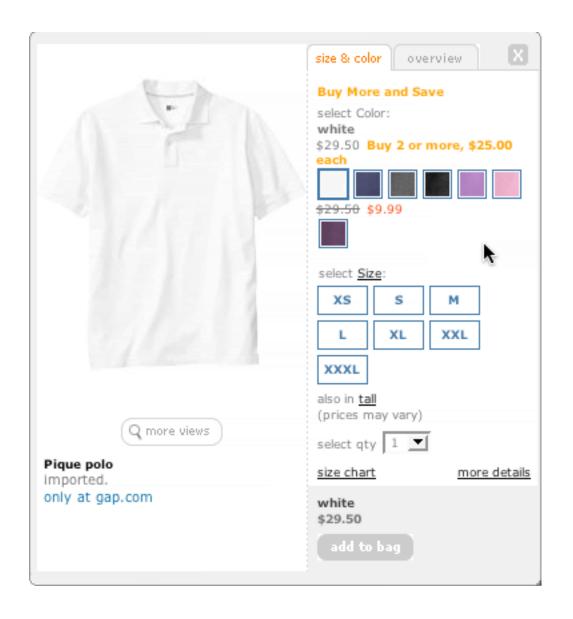




- Microsoft Vista/Office 10
  - Hover over gallery item
  - Shows live preview without committing
  - Only on click is the preview accepted
    - At which point the menu goes away and selection is retained
    - Otherwise mouse out returns to normal view









- Distracting or narrowing? When live search works
- Search is hard to narrow without distracting Its only distracting when I don't like the results
  - Google suggests information I don't want distracting
  - Yahoo! Instant search narrows too quickly
  - Auto complete is a bounded problem easy to narrow
  - Oddyssey of Y!Mail Beta Search
- Obvious conclusion
  - The results are direct results-- not indirect results
  - The results are actually narrowing and not diverging
  - The results are narrowing and yet not distracting



- In context feedback should
  - Not disturb the unrelated elements on the page
  - Be close in proximity
  - Either animated or clearly visible
  - Be transient
  - Not jerky (distracting)



## Offer an invitation

Rediscover hover

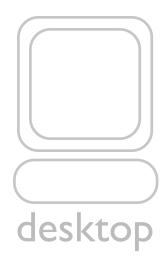
Use invitations to aid in discoverability

Use lightweight events as the welcome mat

Don't confuse invitation with action - keep it safe

Invite, don't proselytize





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

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



hover blur focus Click

key shiftclick doubleclick dragdragdrop

hover blur focus click key shiftclick doubleclick drag dragdrop



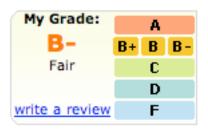
# Invitation. Cursor Invitation. Drop Invitation. Tool Tip Invitation. Hover Invitation.







Li	sts
	Remove this item
	Add item or I'm done adding items
	Make a new list





#### classic



\$9.99-\$29.50 Buy More and Save



double mini striped pique polo \$29.50 Buy 2 or more, \$25.00 each See All



allover striped pique polo \$29.50 Buy 2 or more, \$25.00 each See All

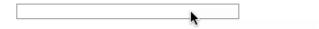


rugby stripe pique polo \$29.50 Buy 2 or more, \$25.00 each See All

<b>6</b> 0	From	Subject
	reter boersing	ווט טון .טא
7	Yahoo! Toolbar	Welcome t
. 15	Weekend Extra	5 Tips for



To see a product preview in action, hover over the link below.

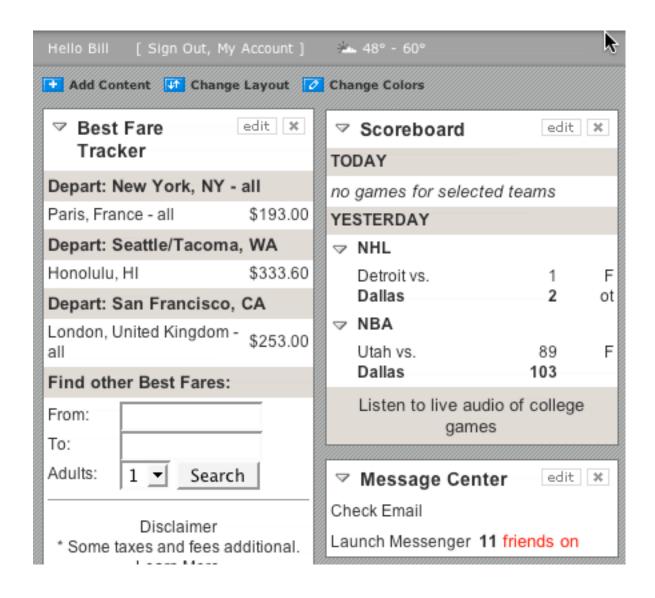


Forty Associates recently added product previews to their Web site as part of a small beta program. During the beta, visitors to Associate sites who viewed a product preview clicked through to Amazon.com over 4% of the time; those clicks resulted in a purchase nearly 6% of the time.

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

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







#### Students to Enroll -

	Crew Id	Last Name	First Name
1	349394	Craft	Adrian
1	432939	Douglas	Elayne
1	468370	Hill	Petra

Course Calenda	ar ———		DEC 2005			<b>•</b>
S	M	T	W	T	F	S
				1	2	3
4	5 600922/Peterson	6	7 999300/Barnes	8	9	10
		344935/Smith 139204/Miller				
11		13		15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31



### Discovering Idioms

- Idioms must be discovered and learned
  - User is not even aware of inline editing on a web page
  - Challenge is how to get them to discover and learn the idiom
- Discovering Features
  - Features employing a learned idiom must be first discovered
  - Challenge is how to indicate an idiom is employed with the least amount of visual clues



- Help tip announcing the feature that employs the idiom
  - But users don't often read text
- One-Second Spotlight on tip to catch user's attention
  - Once they have successfully used feature, remove help text
- Help switch
  - Depress to see help bubbles, tips around the page
  - Combine with tip to spotlight the feature
- Tour
- Hover techniques



## Use dynamic space

Planning the backstage

Use overlays and expands correctly

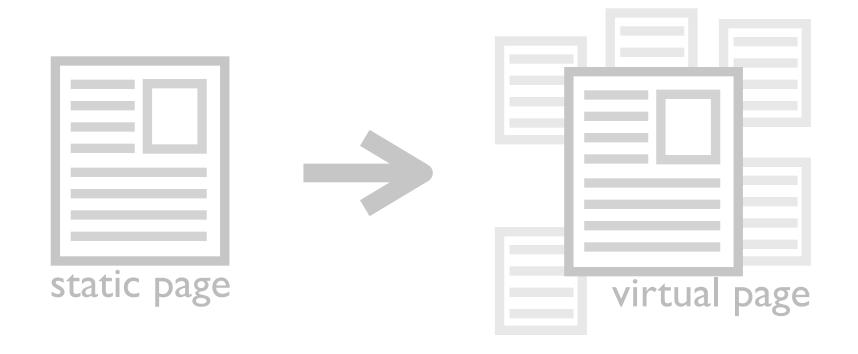
Use time to your advantage

Use slide, zoom, flip, lens, overlay to extend space

Use transitions to introduce new characters

Use zoom to focus on detail







Detail Zoom. Opacity Focus.
Configurable ModuleFaceplate. Configurable
Module-Flip It. Configurable
Module-Inline Configure.
Configurable Module-Slide
Out Drawer. Slide Out. Flip.
Opacity Fade.

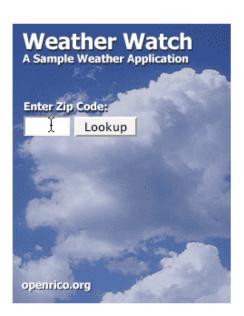


- Overlays float above the document layer
- Does not disturb the page
- Use overlays for
  - Information that is not part of collection
  - Something temporarily has priority, focus
  - To replace page transition
  - For transient input
  - For contextual information

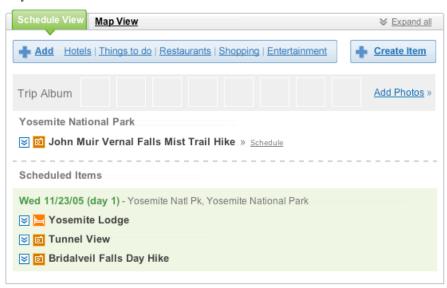




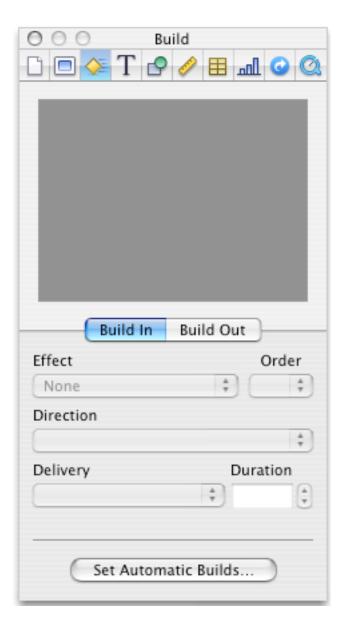
- In context panels expand/collapse in place
  - When one of many can be manipulated
  - To manage large collections
  - To manage navigation container
  - To manage content container



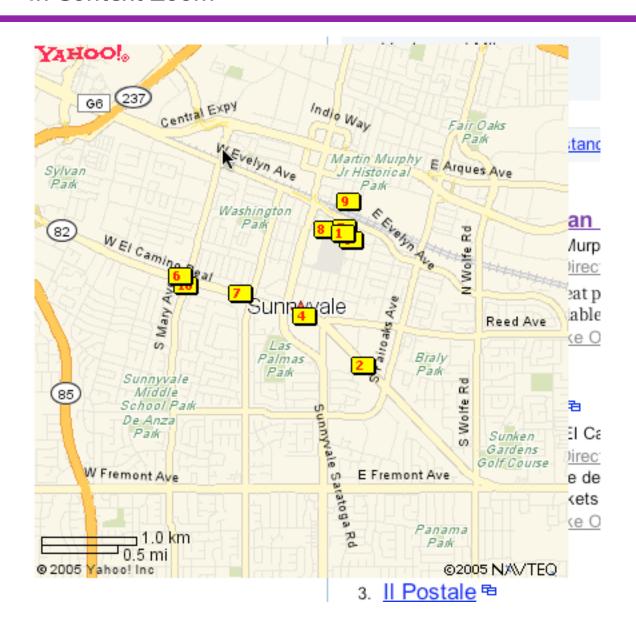














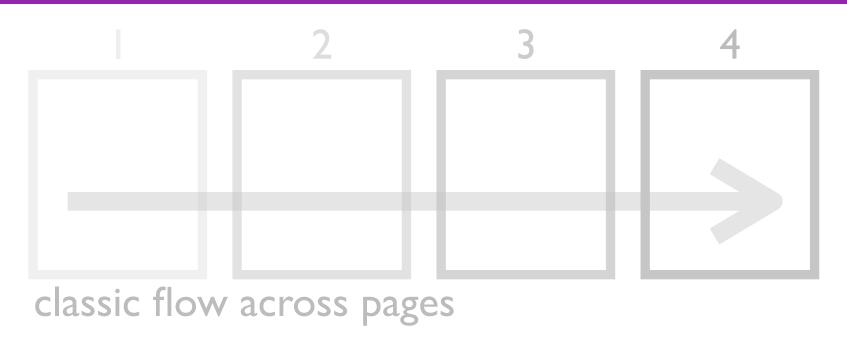
- Diminish disruption to the flow
- Use transitions to communicate origin, destination
- Use transitions to communicate symmetry of action
- Discoverability. Users may not discover your hidden areas. Use invitations to expose where hidden areas are



# Cross borders reluctantly

Page boundaries cause mental interruptions
When paging make it lightweight as possible
Use lightweight in-context popups to stay in page





2 3 4

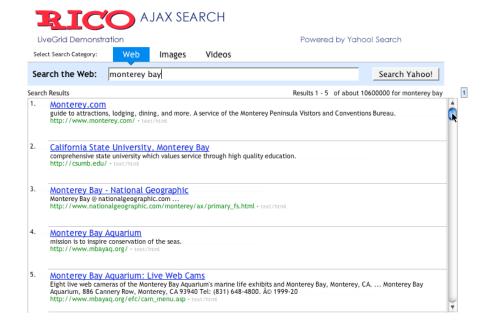
rich flow within page

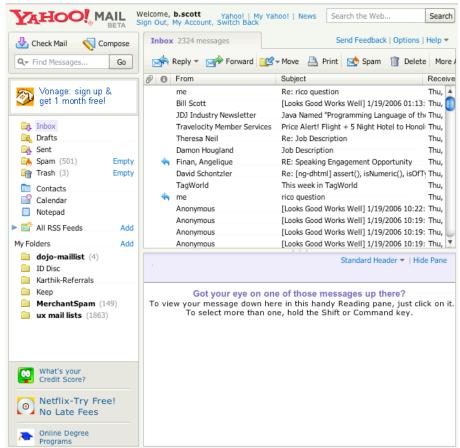


**Endless Scrolling. Expandable Paging Boundary. Fresh Content. Hover Detail. In Place Drill Down. Inline Assistant.** Inline Validation. Validate Then Suggest. On Demand Refresh. Resizable **Modules. Scrolling** Modules.



### Rico LiveGrid





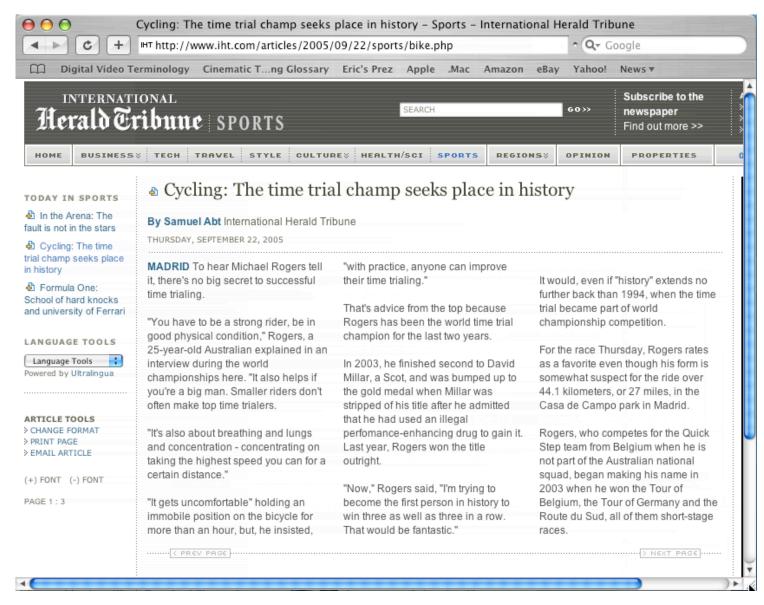
Yahoo! Mail Beta (Oddpost)



- Scrolling search
  - Normally only the first few results matters
- Scrolling collections
  - Very useful, sorting & scrolling used to explore the results
  - Not sure what is useful
  - Each item is unique in specific attributes
  - Example: games, merchandise, mail messages, photos
- Is the data naturally chunked?
- Can you solve the dual scroll bar problem?
- Will sorting, filtering, exploring be important?



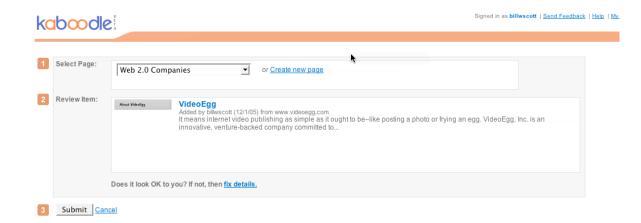
## At the very least make your paging fast

















### Required information for Google account

Your current email address: someone@somewhere.com

e.g. myname@example.com. This will be your username and sign-in.

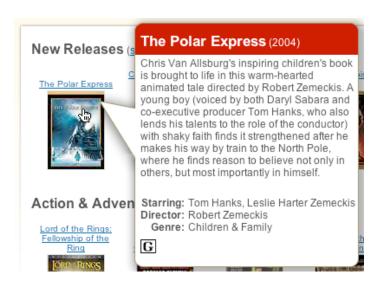
Choose a password:

Minimum of 6 characters in length.

Password strength: Too short



- For introduction of features
- For giving instruction
- For revealing information
- For interrogative feedback
- For obtaining input
- For important interruptions
- For indication of status or progress
- For offering an invitation



- Make activation & deactivation feel lightweight
- Avoid using secondary browser windows
- Use visual styles that suggest lightness
- Think of popups as auxiliary areas of the screen

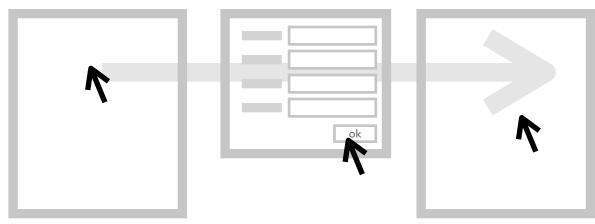


# Leave a light footprint

Use hover, blur, focus, click as footprints
Keep actions immediate and light
Watch your click weight
Design for engaging moments
Use invitations

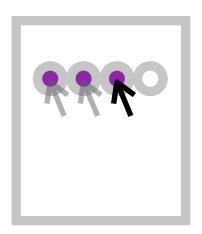






heavy click-weight





light-weight actions



Auto Save. In Context Tools. In Page Action. Remembered Collection. Remembered Preferences. Auto Form Fill. Live Ratings.



### 1 2 3 4 >> See All

### straight fit



loose staight fit (sandblasted vintage) \$49.50



straight fit corduroy pants \$44.50 Buy 1 or more, save \$14.55 each See All



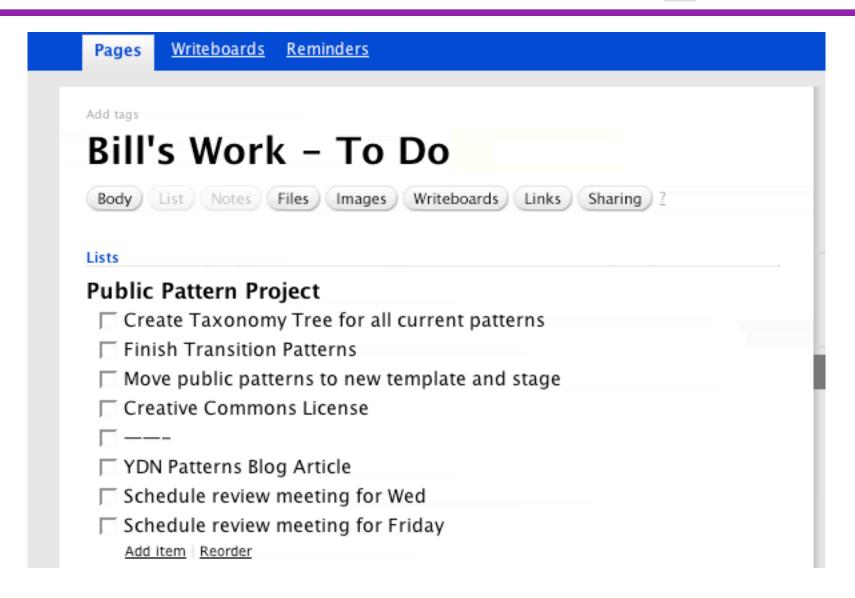
straight fit (blasted black) \$49.50



straight fit (dark authentic) \$44.50

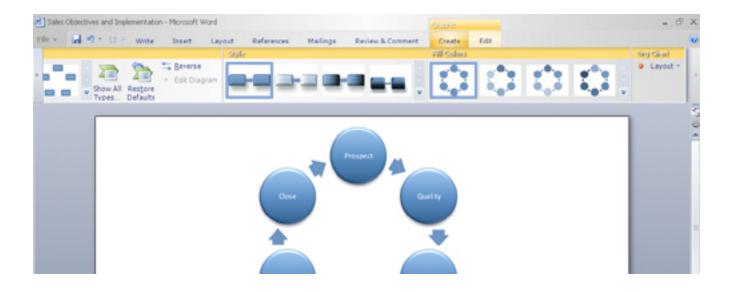








## Microsoft Vista, Office 10 Contextual Command Tabs





### RECOMMEND THIS STORY

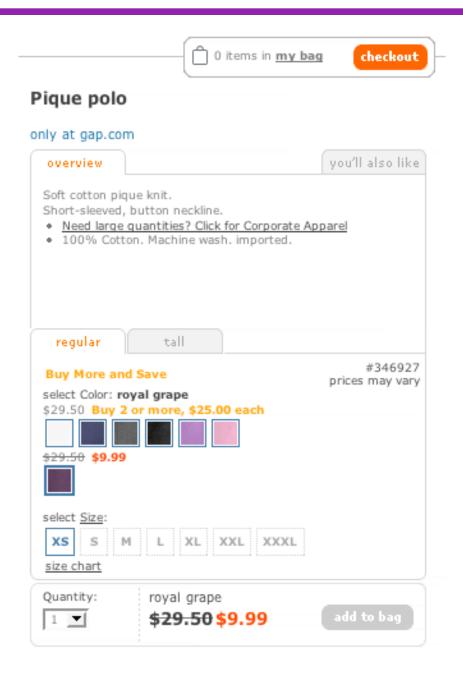










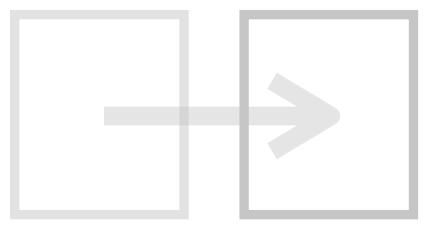




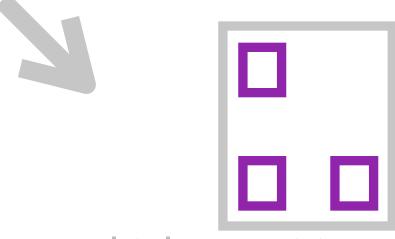
## **Show transitions**

Keep transitions to a minimum; communication is the key Engage the user during longer transitions Communicate status & progress for waiting transitions Communicate change for state transitions Show relationships for relational transitions





page-based transitions



multiple transitions, single page



Transition. Brighten Transition.
Cross Fade Transition. Dim
Transition. Expand Transition.
Fade In Transition. Fade Out
Transition. Flip Transition.
Move Transition. Self-Healing
Transition. Shrink Transition.
Slide Transition.



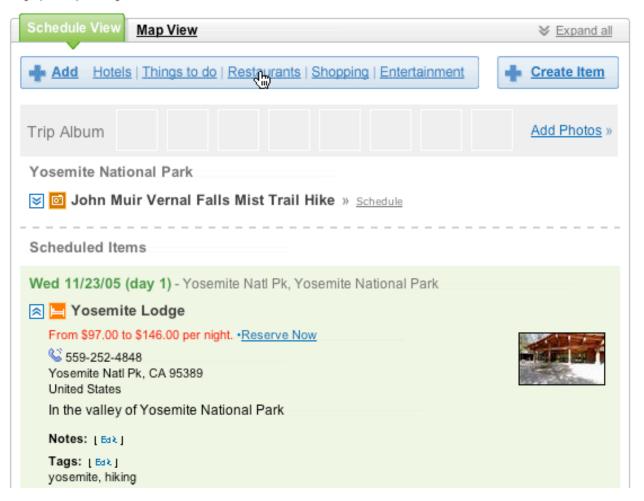


### Yosemite Thanksgiving [Edit]

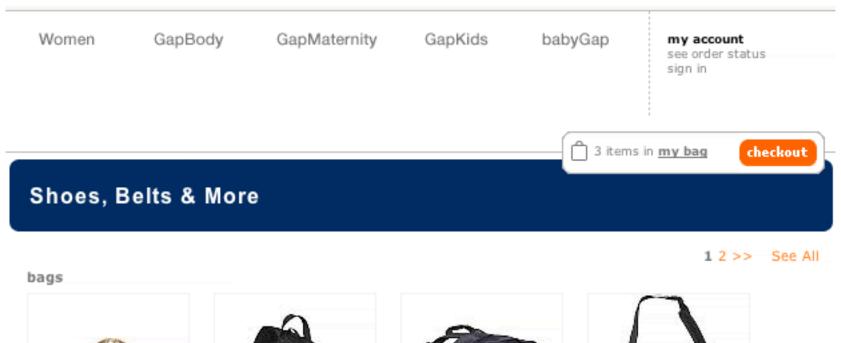
A trip to YOSEMITE NATIONAL PARK Fun in Yosemite with Daniel & Kids

This trip is public ◆Sharing settings ◆Email this trip

[ Update photos ]









Premium canvas duffle bag \$49.50



urban nylon sling \$34.50

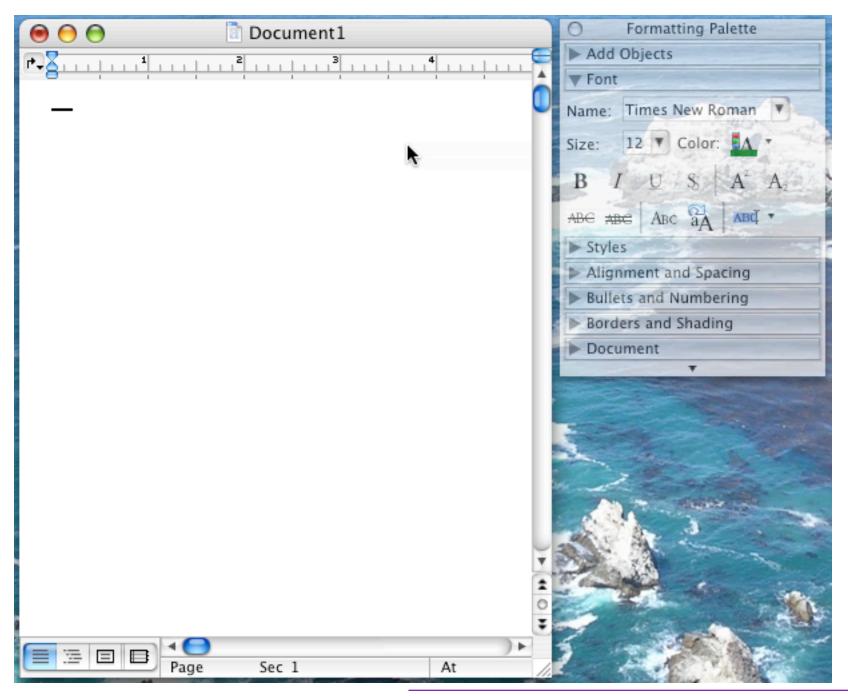


urban nylon backpack \$29.50

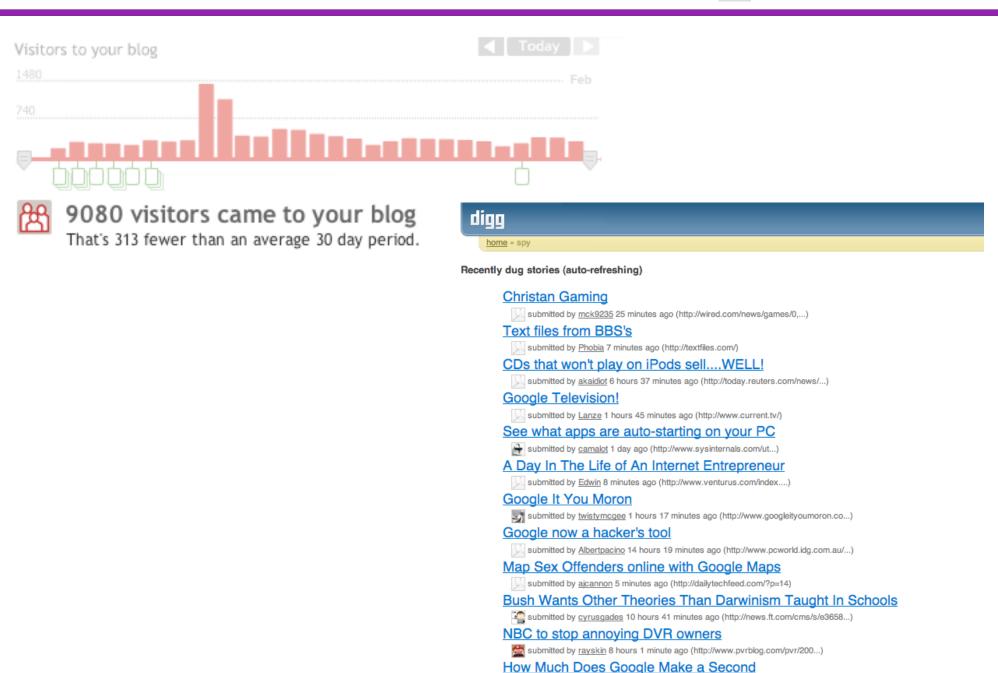


nylon commuter bag \$68.00











	Lists
	☐ Remove this item
	☐ And this one too
童 <u>Edit</u>	adding a new item
	Add item or I'm done adding items

Lis	ts
ı	Remove this item
ı	And this one too
26	
	Add item or I'm done adding items



- Brighten. Raise importance
- Cross Fade. One leaves, another enters
- Dim. Lower importance
- Expand. Open in context of others
- Fade In. Good for adds
- Fade Out. Good for deletes
- Flip. Edit configuration
- Move. Change relationship, tweening
- Self-Healing. After delete or "yank"
- Collapse. Close in context of others
- Slide. Similar to expand but child window



- Cut transitions in half?
- Try to communicate without transitions, then turn up the contrast knob -- adding them in incrementally
- Use when
  - Multiple items change
  - In context deletes, adds, moves
  - Items hide/show
- Don't overuse



# Think in objects

Think rich internet objects instead of documents

Objects have identity (recognizable)

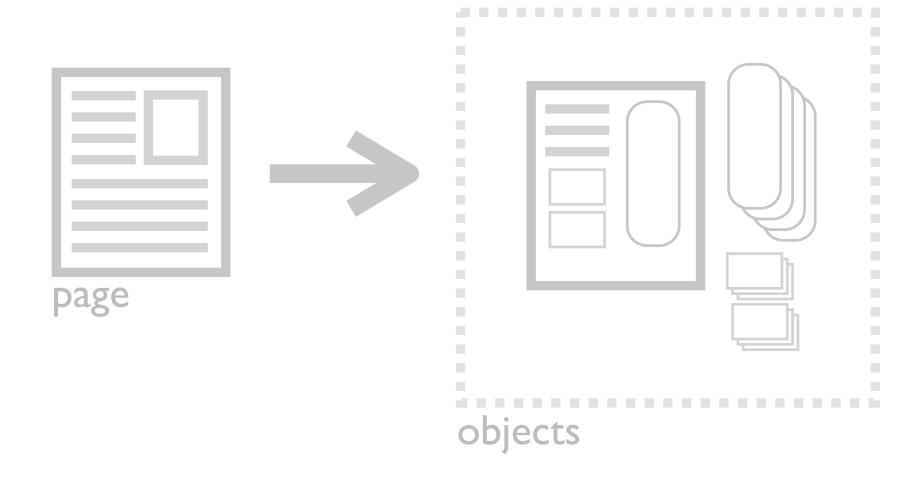
Objects have a life (permanence)

Objects are owned (personal)

Objects are shareable (community)

Objects have personality (engagement)





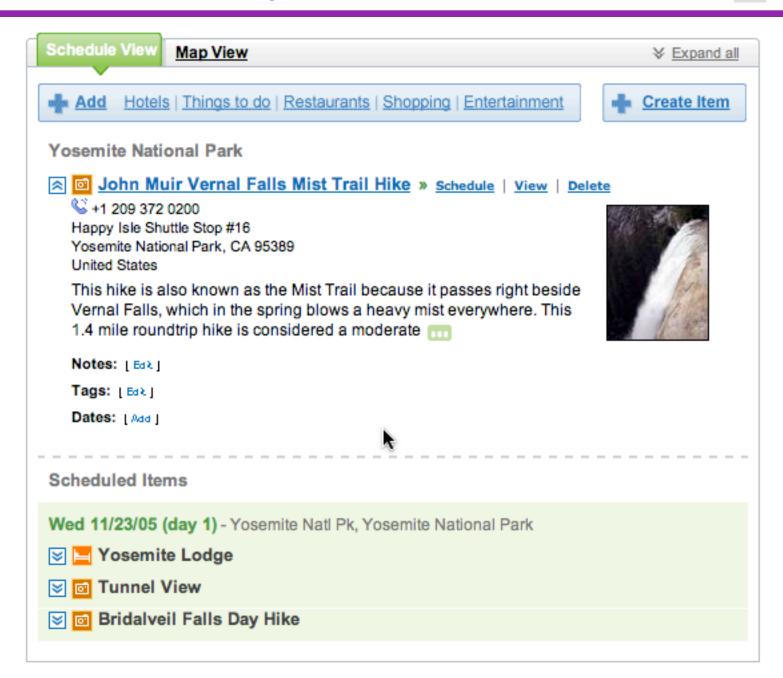


## Rich Internet Object. Available. Selected. Identifiable Object.



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







- How to distinguish from content?
- How to share, mail, print, etc. (in context tools?)
- How to create collections and share
  - Photos, albums
  - Trips, sets

