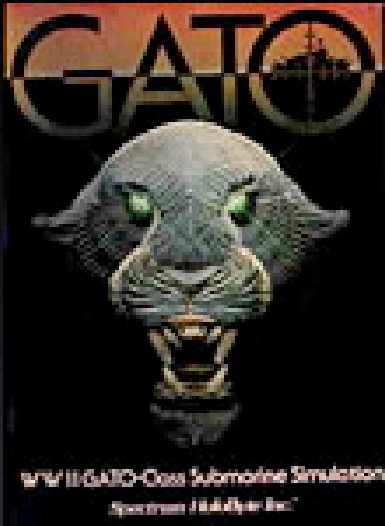


impact of Ajax

Bill Scott
Yahoo! Ajax Evangelist
b.scott@yahoo.com



background.



Rico JavaScript for Rich Internet Applications

Home Features Demos Documentation Downloads About

An open-source JavaScript library for creating rich internet applications. Rico provides full Ajax support, drag and drop 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 folks.

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 Safari.

AJAX SUPPORT

Ajax is the term that describes a set of web development techniques for creating interactive web applications. One of the key ingredients is the JavaScript object XMLHttpRequest. Rico provides a very simple interface for registering Ajax request handlers as well as HTML elements or JavaScript objects as Ajax response objects. Multiple elements and/or objects may be updated as the result of one Ajax request.

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

DRAG AND DROP

Desktop applications have long used drag and drop in their interfaces to simplify user interaction. Rico provides one of the simplest interfaces for enabling your web application to support drag and drop. Just register any HTML element or JavaScript object as a draggable and any other HTML element or JavaScript object as a drop zone and Rico handles the rest.

CINEMATIC EFFECTS

When actions are no longer occurring just at the page level but within the page itself, more clues are required to clue the user on what has transpired. Cinematic effects such as scaling and smooth sliding transitions can communicate change in richer ways than traditional web applications have explored before. Rico provides several cinematic effects as well as some simple visual style effects in a very simple interface.

BEHAVIORS

Take some raw HTML and sprinkle in some behaviors and what do you get? Well in Rico you can get an accordion component like those found in Macromedia Flex and Lasso. Just nest some DIVs and with one line of JavaScript turn your div panels into an accordion. And the latest behavior is the LiveGrid. LiveGrid allows you to 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!

See Rico in Action!

YAHOO! DEVELOPER NETWORK

Design Pattern Library

Yahoo! Developer Network > Design Pattern Library

USER NEEDS TO

- NAVIGATE
 - Breadcrumbs
 - Faceted Navigation
 - Fly-out Menus
 - Horizontal Bar
 - Hub and Spoke
 - Left Navigation
 - Module Tabs
 - Navigation Tabs
- EXPLORE DATA
 - Auto Complete
 - Calendar Picker
- Pagination
 - Item Pagination
 - Search Pagination
- ORGANIZE DATA
- GIVE FEEDBACK
 - Ratings & Reviews
 - Architecture Review
 - Rating an Object
 - Writing a Review
- PERFORMANCE ACTION
- CUSTOMIZE
 - Drag and Drop
 - Drag and Drop Modules
 - Drag and Drop Objects
 - In Page Editing
 - Sliders

APPLICATION NEEDS TO

- CALL ATTENTION
- IMPROVE READABILITY
 - Ratings & Reviews
 - Review Architecture
- GROUP RELATED ITEMS
- ORGANIZE SCREEN/PAGE

Welcome

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?

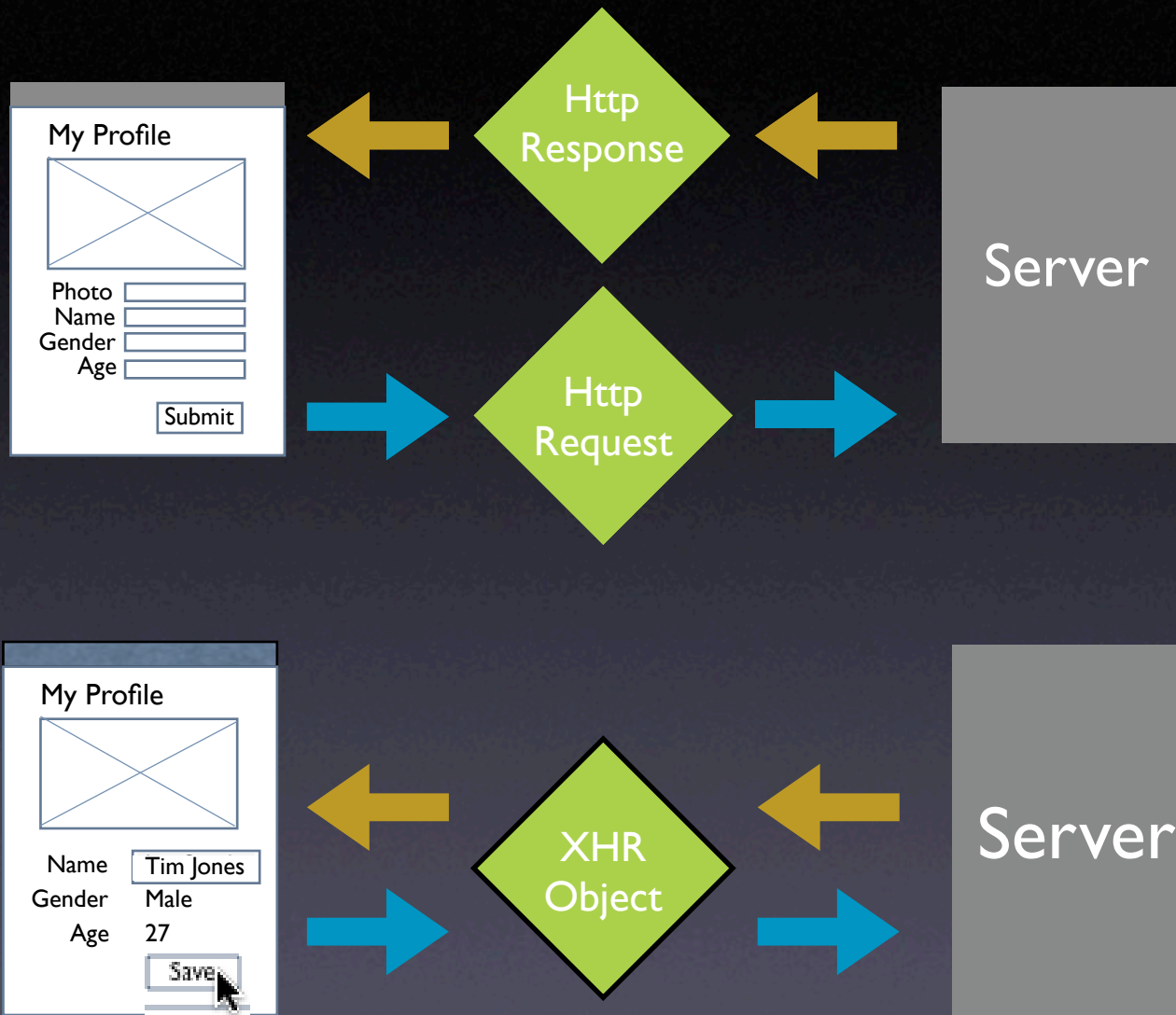
A pattern describes an optimal solution to a common problem within a specific context. [more...](#)

Recent Patterns

- Auto-Complete**
The user needs to enter an item into a text box which could be ambiguous or hard to remember and therefore has the potential to be mis-typed.
- Breadcrumbs**
User needs to navigate potentially large quantities of information efficiently, without becoming lost.
- Drag and Drop Modules**
The user needs needs to re-arrange the layout of modules on a web page directly with the mouse.
- Module Tabs**
The user needs to navigate through one or more stacked panes of content without refreshing the page.
- 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.
- Object Pagination**
The user needs to view data items from a potentially large set of sorted data that will not be easy to display within a single page.
- Results Page:**
1 2 3 4 Next
- 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.
- 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.
- Writing a Review**
User wants to share her opinion with others about an object (place, person, thing) in greater detail than a simple rating.



classic model. rich model.



Amazon Diamond Search (before & after)

Amazon.com Diamond Search

[Click here](#) to return to our dynamic diamond search.

Select a shape(s) [\(Learn more about diamond shape\)](#)

(optional)



Round



Princess



Marquise



Emerald



Radiant



Pear



Oval



Heart

Enter a price range

(optional)

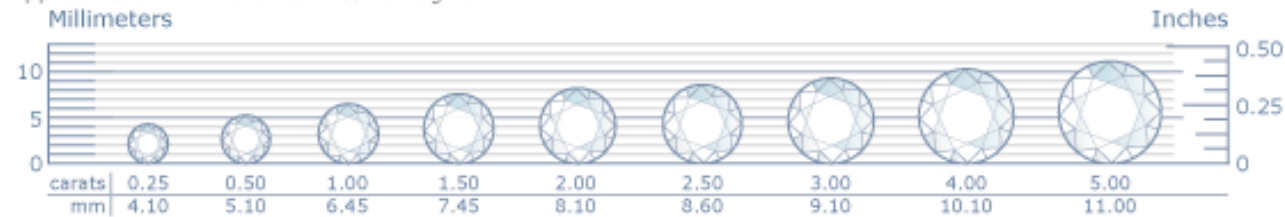
Price from \$ to \$ (Note: Enter a numeric value, for example, 500 to 1000)

Enter a carat weight [\(Learn more about carat weight\)](#)

(optional)

Size from to carats. (Note: Enter a decimal value, for example, .2 to 1)

Approximate millimeter sizes of carat weights:



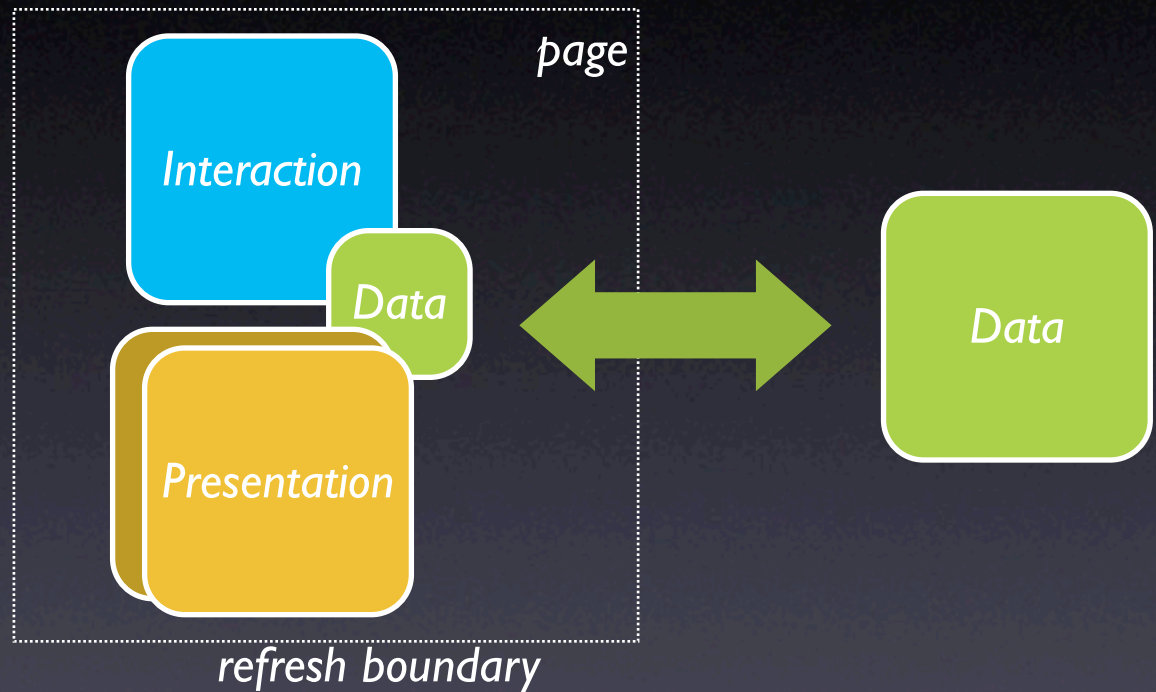
Diagrams above are not actual size, but the increase in proportion is to scale. To print a page with actual-size diagrams and measurements of all shapes, [click here](#).

Select a cut range [\(Learn more about diamond cut\)](#)

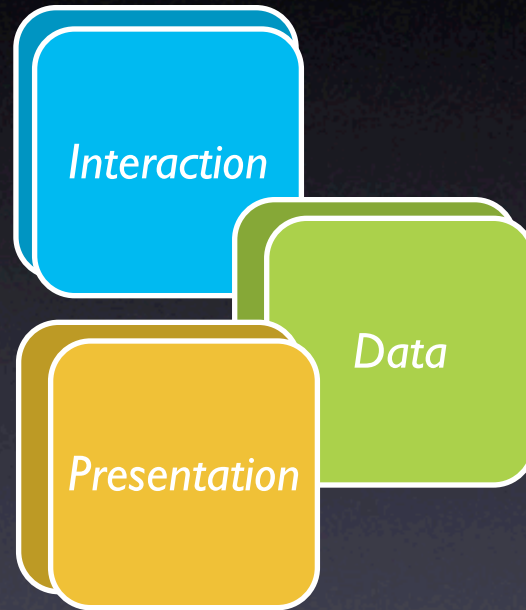
(optional)



interaction. presentation. data.



data near. interaction rich.



internet application spectrum

Page-based (PIA)

Page navigation

URL

Browser history

Back button = undo

Document model

Static content

Read-only

Synchronous

Page services

Browser chrome

Transient

Transitional Applications

Rich Interaction (RIA)

Micro content

Application state

Application history

Application undo

Object model

Dynamic content

Read/Write

Asynchronous

Web services

Application controls

Sovereign



internet application spectrum. examples.

Page-based (PIA)

Page navigation

gmail (classic)

Browser history

Back button = undo

google search

Document model

Static content

mapquest

Synchronous

Page services

Browser chrome

Transient

backpackit

flickr

Transitional Applications

gsuggests

gmail

gmaps

yphotos3

yfinance

gfinance

Rich Interaction (RIA)

Micro content

gmail beta

Application history

Application undo

ANOTHER EXAMPLE

Object model

Dynamic content

writely

Asynchronous

Web services

Application controls

Sovereign



internet application spectrum. technologies.

Page-based (PIA)

Page navigation

URL

Browser history

Back button = undo

Document model

Static content

Read-only

Synchronous

Page services

Browser chrome

Transient

Rich Interaction (RIA)

Micro content

Application state

Application history

Application undo

Object model

Dynamic content

Read/Write

Asynchronous

Web services

Application controls

Sovereign

flash

Transitional Applications

ajax

dhtml



tim o'reilly's definition of web 2.0

Web 1.0	Web 2.0
DoubleClick	Google AdSense
Ofoto	flickr
akamai	bit torrent
mp3.com	napster
britannica online	wikipedia
personal websites	blogging
evite	upcoming
domain name speculation	search engine optimization
page views	cost per click
screen scraping	web services
publishing	participation
content mgmt systems	wikis
directories	tagging (folksonomy)
stickiness	syndication
SINGLE VENDER	MASHUP
READONLY	READ/WRITE
CONTENT MGMT SYSTEMS	CURATED MGMT SYSTEMS

<http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html>



the tipping point.

law of the few

connectors

mavens

salesmen

sticky message



sequence of events.

invented and held captive in redmond
dot com bust

innovation under the radar

seeds were sown by the browser wars

firefox rises from the ashes

google's gambit

ajax christened

tipping point



ajax trends



shift. to event granularity.

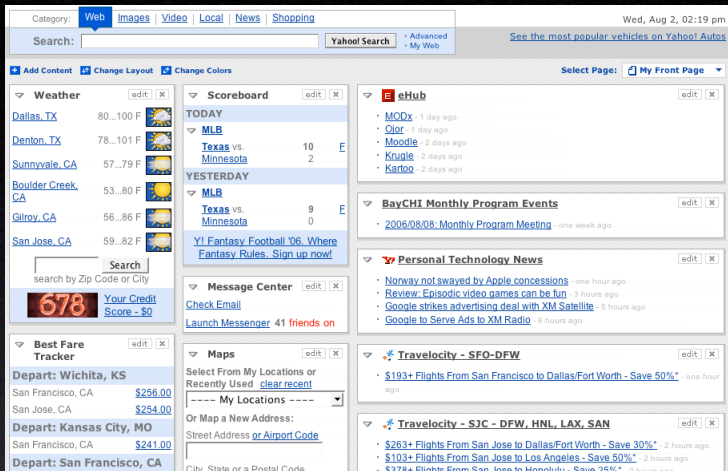
submit hyperlink



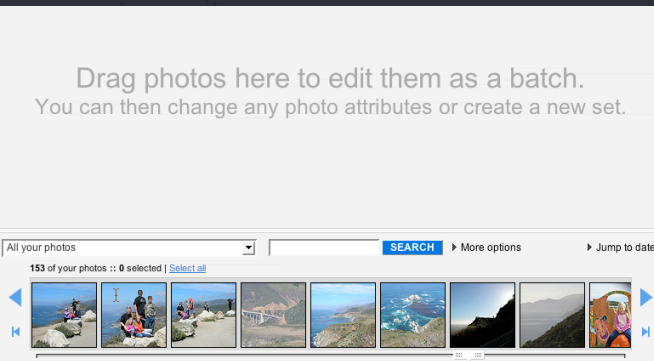
mouseout hover keypress keydown mousedown
drop filter choices mouseup drag click select focus
blur resize move timeout



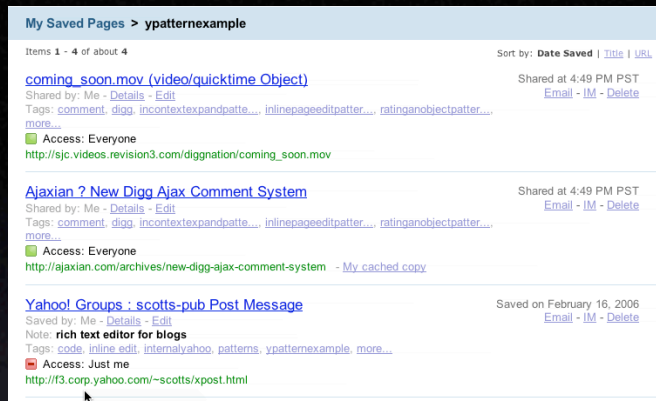
trend. directness.



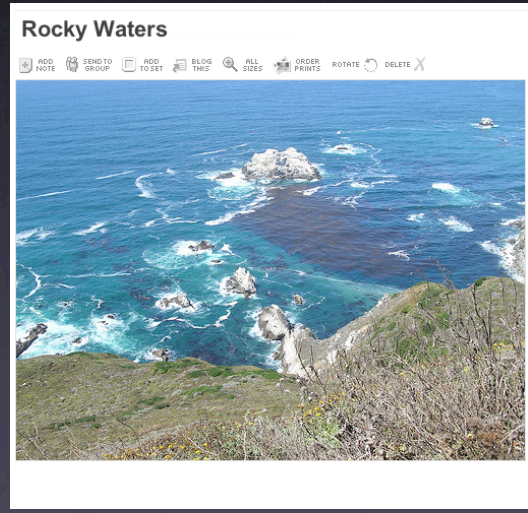
pattern. drag and drop.



- Create a home page for the VisDe to make findability easier
- Account for experimental patterns as well as established patterns



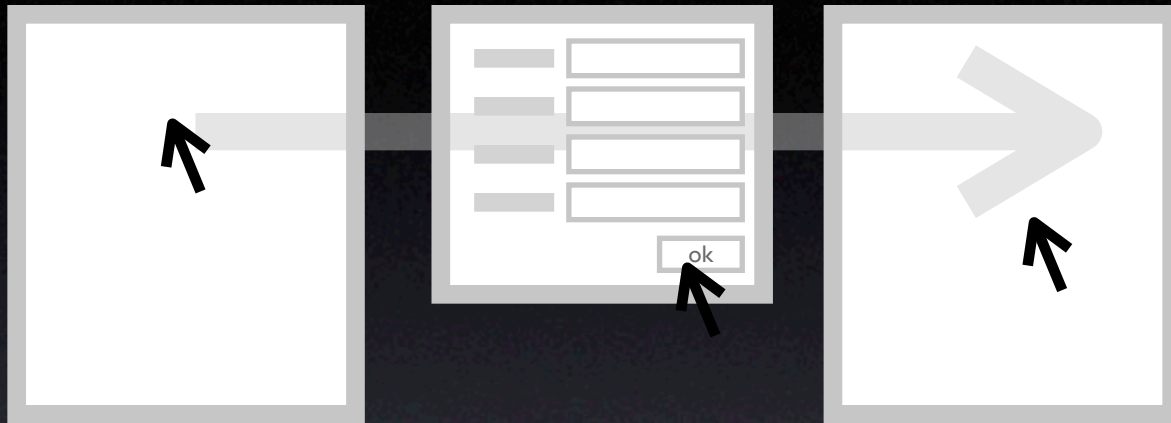
pattern. inline editing.



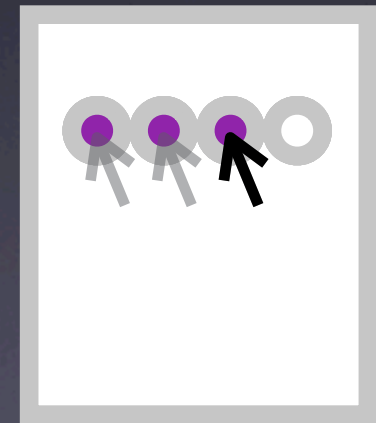
pattern. in-context tools.



shift. to lightweight events.



heavy click-weight



light-weight
actions



trend. light footprint.

0 items in my bag checkout

Pique polo

only at gap.com

overview you'll also like

Soft cotton pique knit.
Short-sleeved, button neckline.

- Need large quantities? Click for Corporate Apparel
- 100% Cotton. Machine wash. Imported.

regular tall

Buy More and Save #346927 prices may vary

select Color: royal grape
\$29.50 Buy 2 or more, \$25.00 each

\$29.50 \$9.99

select Size:
XS S M L XL XXL XXXL

size chart

Quantity: 1 royal grape \$29.50 \$9.99 add to bag

pattern. remembered collection.

RECOMMEND THIS STORY

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

pattern. rating an object.

Classics

Featured Subgenre CLASSIC COMEDIES

Recommendations

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

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

[More Recommendations >](#)

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

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

282 diggs

Fixing the Mighty Mouse

submitted by [usedmac](#) 1 day 1 hour ago (via [http://mac](#))

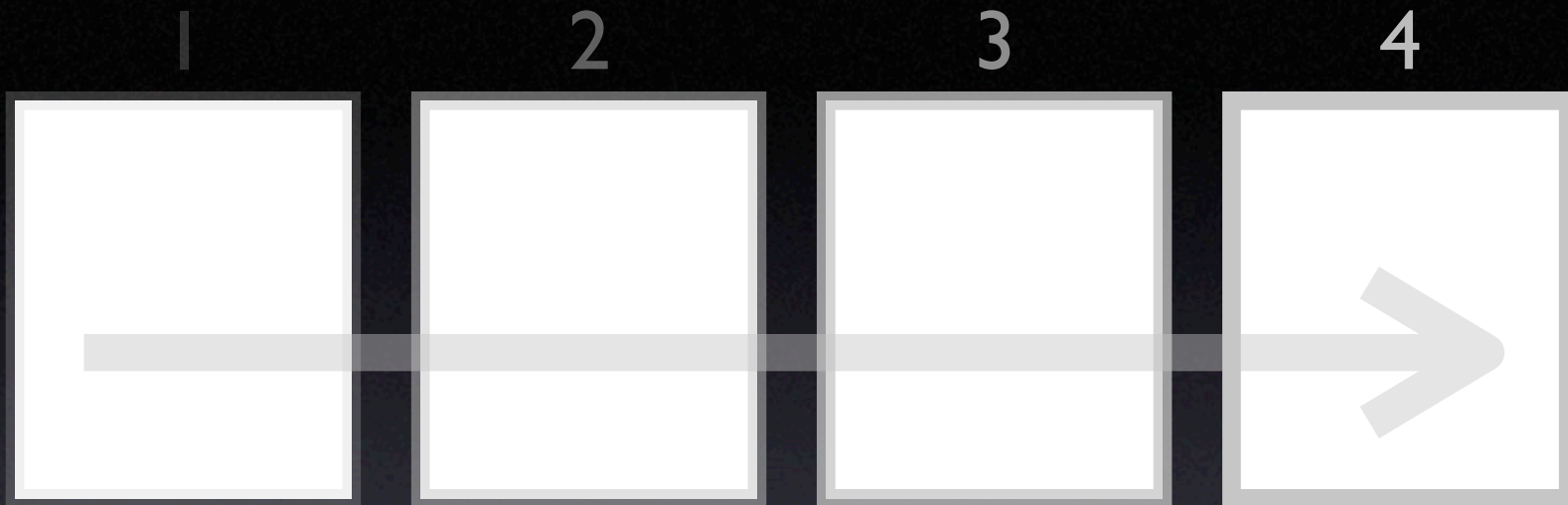
The Apple Mighty Mouse brings a slew of great feat with most new Mac systems it is becoming a comm one for close to a year now, I have found that the us Scroll Ball far outweigh its quirks.

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

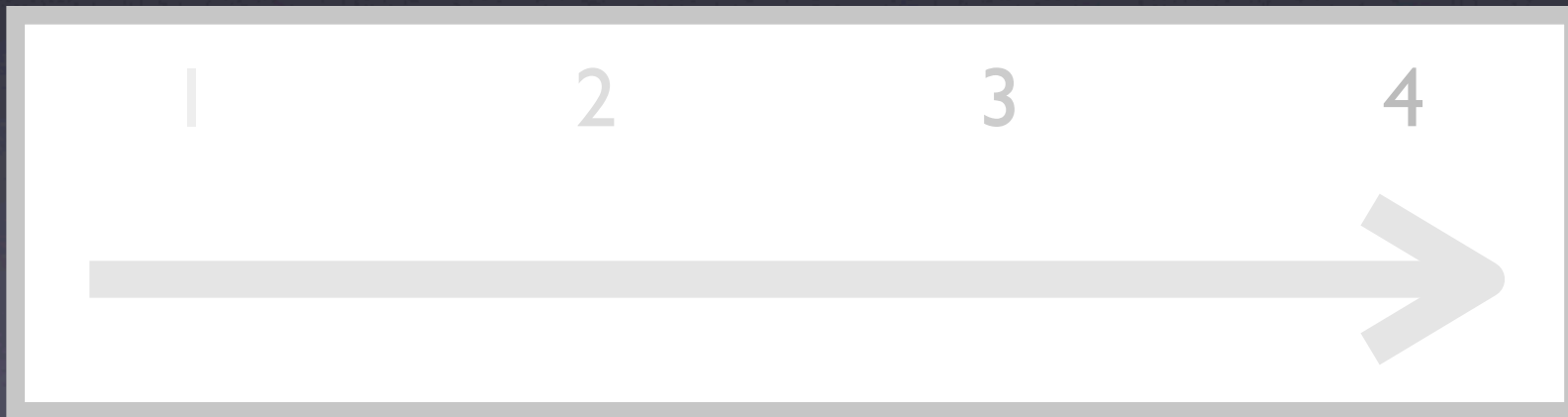
pattern. in page action.



shift. to flow within the page



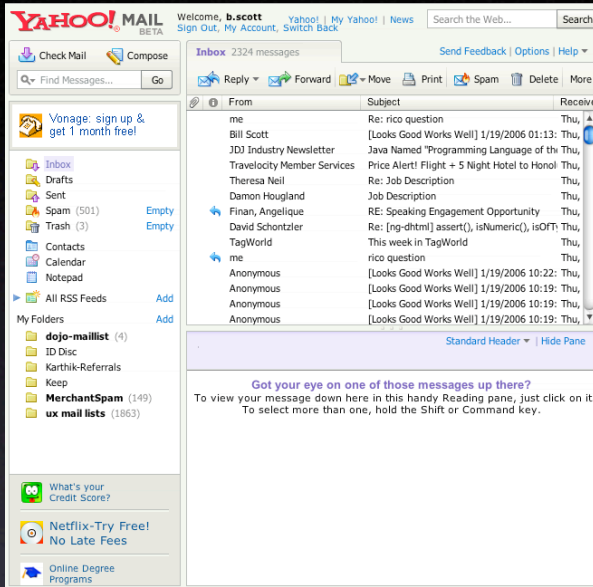
classic flow across pages



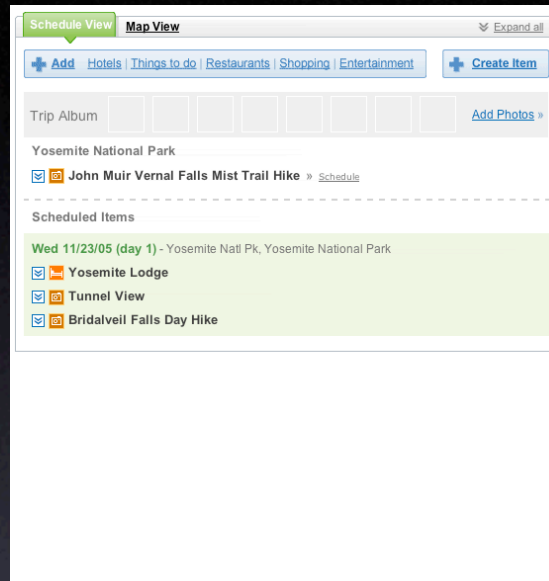
rich flow within page



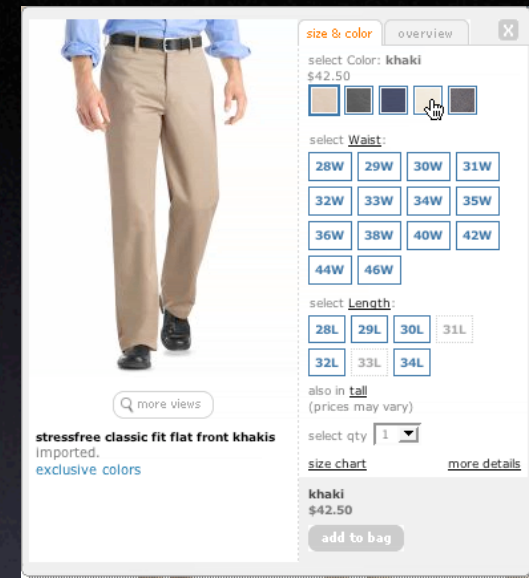
trend. stay on the page.



pattern. endless scrolling.



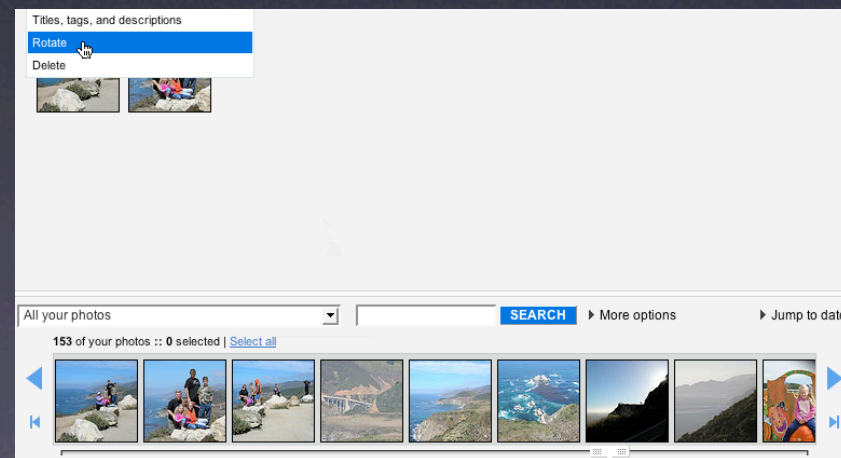
pattern. in-context expand.



pattern. inline assistant.



pattern. hover details.



pattern. lightweight popup + lightbox

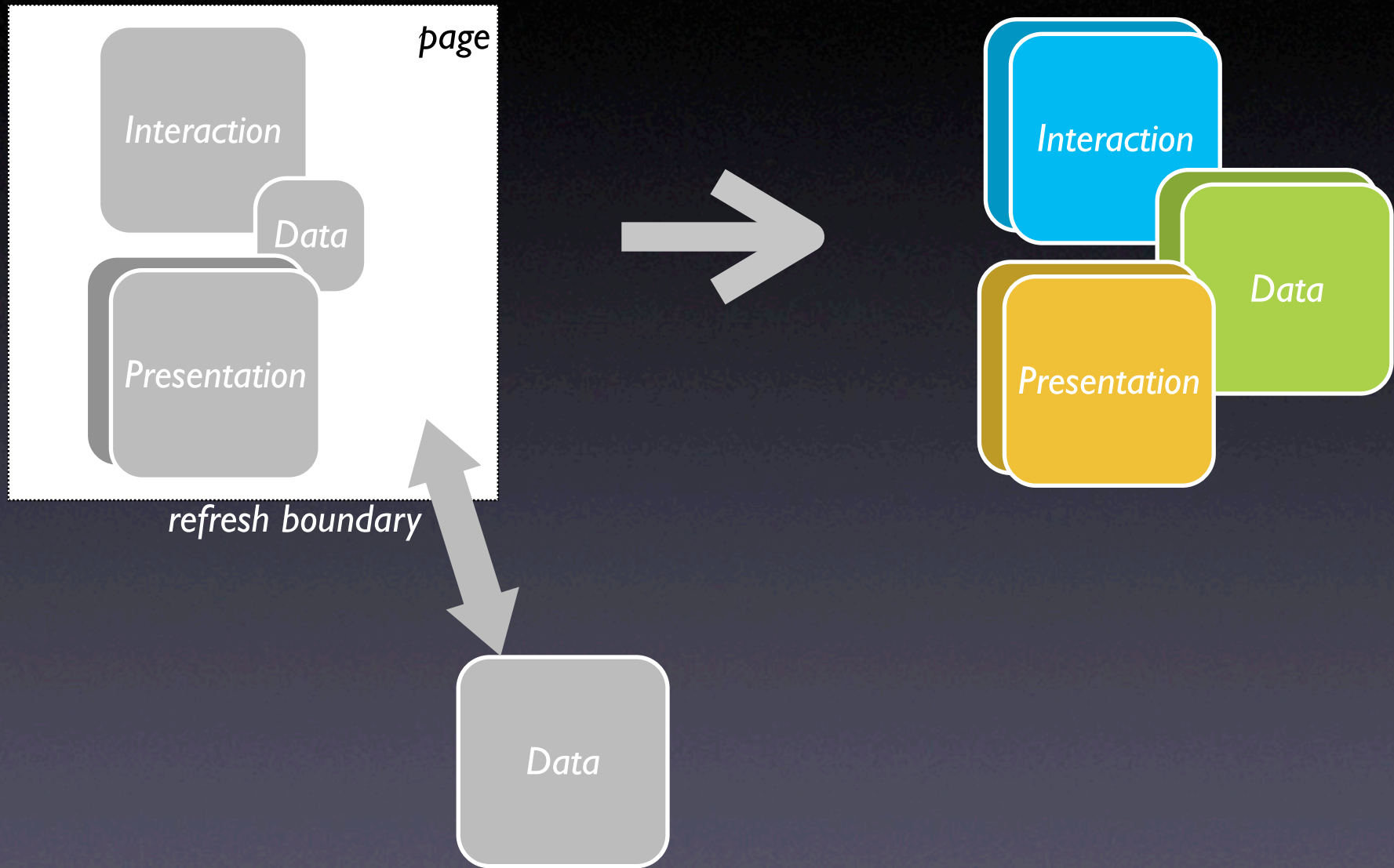


key trend

*Direct, lightweight,
in-page interaction.*



shift. to immediacy.



trend. lively feedback.

Ask Your Question

1. Enter your question
You can ask 5 more questions today.

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

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

You have 1000 characters to work with.


pattern. live suggest.

To: [Show BCC](#)

Cc:

Subject: [Plain Text](#)

Times New Roman | 12 | **B** | *I* | U | | | | | | | |



KAYAK™ Search with us, book with them.™

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Round-trip One-way Multi-city

From **To**

Show Nearby Airports Show Nearby Airports

Leave **Time**

Return **Time**

Travelers

Cabin

Prefer Nonstop

for [hundreds of airlines](#).

pattern. auto complete.



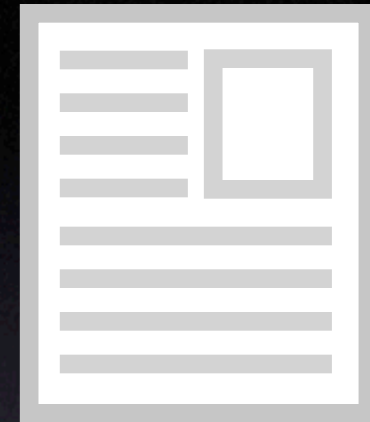
shift. to deeper interaction.



desktop

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

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



web

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

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

principle. invitational.

My Grade:

	A
B-	B+ B B-
Fair	C
	D
write a review	F

pattern. hover invitation.

pattern. drop invitation.

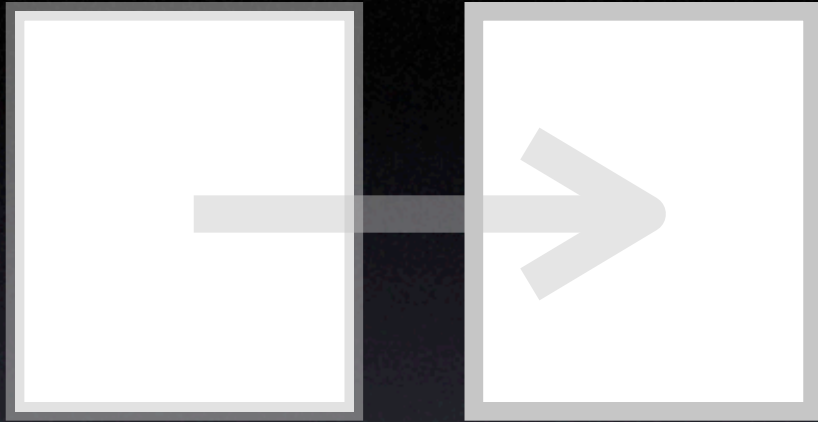
Park near our new home

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

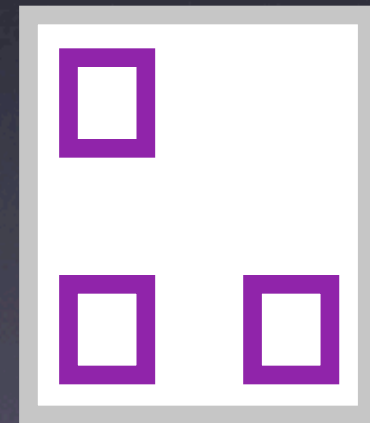
pattern. tooltip invitation + hover invitation + cursor invitation.



shift. to multiple happenings.



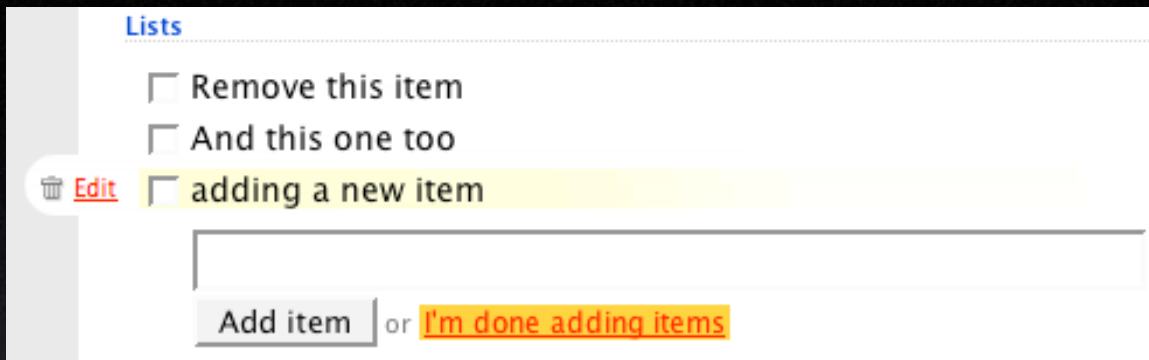
page-based transitions



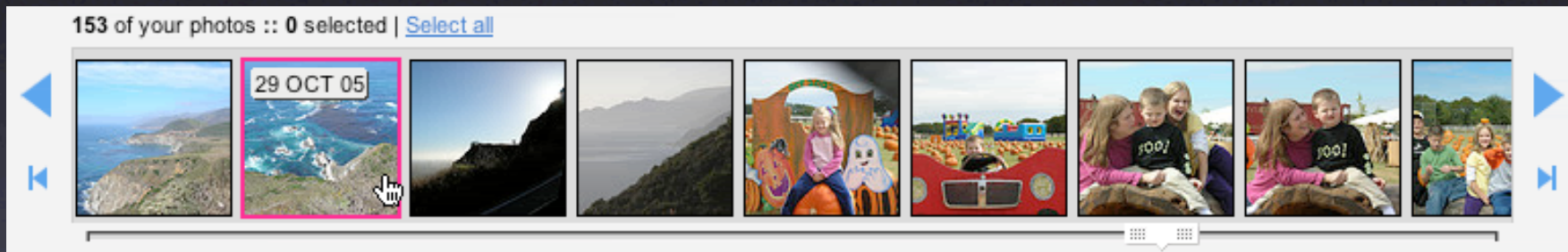
multiple transitions,
single page



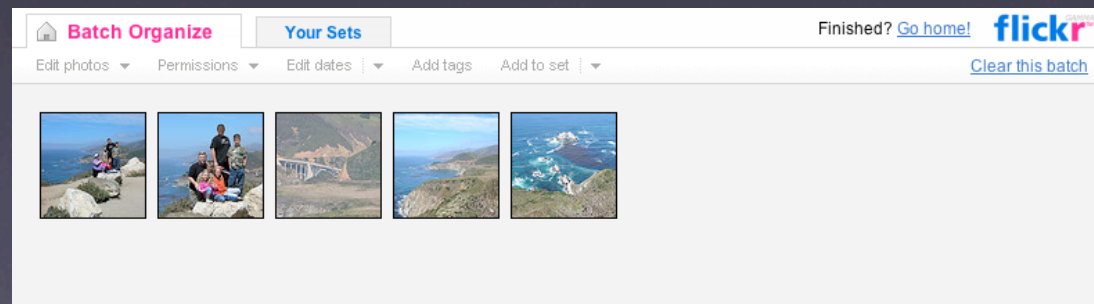
trend. cinematic.



pattern. fade transition + self-healing transition.



pattern. slide + animate.



pattern. spotlight.



key trend

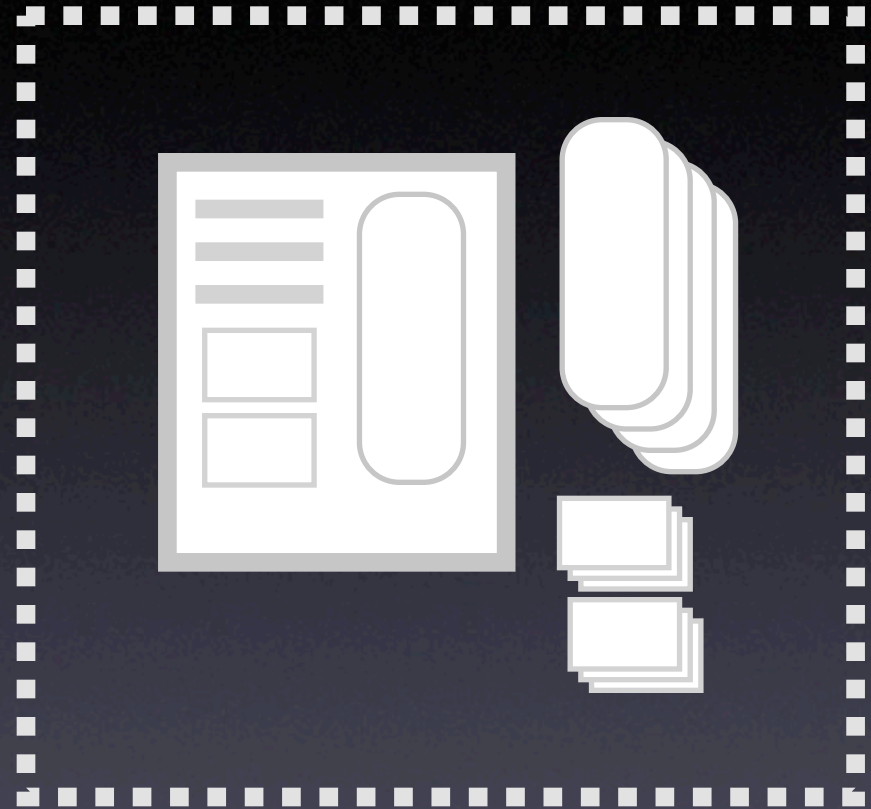
*Invitations beforehand,
transitions during,
and feedback after interaction*



shift. to rich objects.



page



objects

trend. objects.

Schedule View | **Map View** Expand all

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

Yosemite National Park

[Home](#) | [Photo](#) | **John Muir Vernal Falls Mist Trail Hike** | [Schedule](#) | [View](#) | [Delete](#)

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



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

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





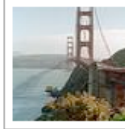
Scheduled Items

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

- [\[Home \]](#) **Yosemite Lodge**
- [\[Photo \]](#) **Tunnel View**
- [\[Photo \]](#) **Bridalveil Falls Day Hike**

pattern. Shareable Object.

Other trips you might like ... [Browse All Public Trips »](#)

				
The Ultimate A... by ajrao1918 Copy this trip	SF Trip by pilak_shah Copy this trip	6 Parks in 8 d... by jacorebb Copy this trip	Yosemite by whiskeywom... Copy this trip	Cali Baby! by ibily78 Copy this trip



The power of sharing

Bloggable, shareable, findable
How to dial-in community
Collections

[Amsterdam Trip Plans on Yahoo! Travel](#)

Yahoo! Shortcut - [About](#)

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

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

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

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

YAHOO! TRAVEL Welcome, **b.scott**
[\[Sign Out\]](#) [\[My Account\]](#) [Travel Home](#) - [My Travel](#) - [Help](#)

TRIP PLANNER [Explore](#) [Browse Trips](#) [Create a Trip](#) [Search](#)

We're giving away two plane tickets a day! [Create a trip for your chance to win.](#)

Public Trips [Search](#)

164 trips found

Yosemite [\(4\)](#) [\(4\)](#)
 10 day trip by [tabicat_2005](#) ([View tabicat_2005's trips](#))
 YOSEMITE NATIONAL PARK
 Trip to Yosemite in the new trailer. Jessica, Jaleh, Tabitha's one week get-a-way!
[Copy and customize](#) (11 people have!)

Yosemite [\(16\)](#) [\(10\)](#)
 By [matt_mlinac](#) ([View matt_mlinac's trips](#))
 YOSEMITE NATIONAL PARK, GROVELAND
 Spring trip to Yosemite
[Copy and customize](#) (9 people have!)

Yosemite [\(1\)](#)
 12 day trip by [wasitova](#) ([View wasitova's trips](#))
 YOSEMITE NATIONAL PARK
 Travel on the way to Yosemite and back
[Copy and customize](#) (3 people have!)

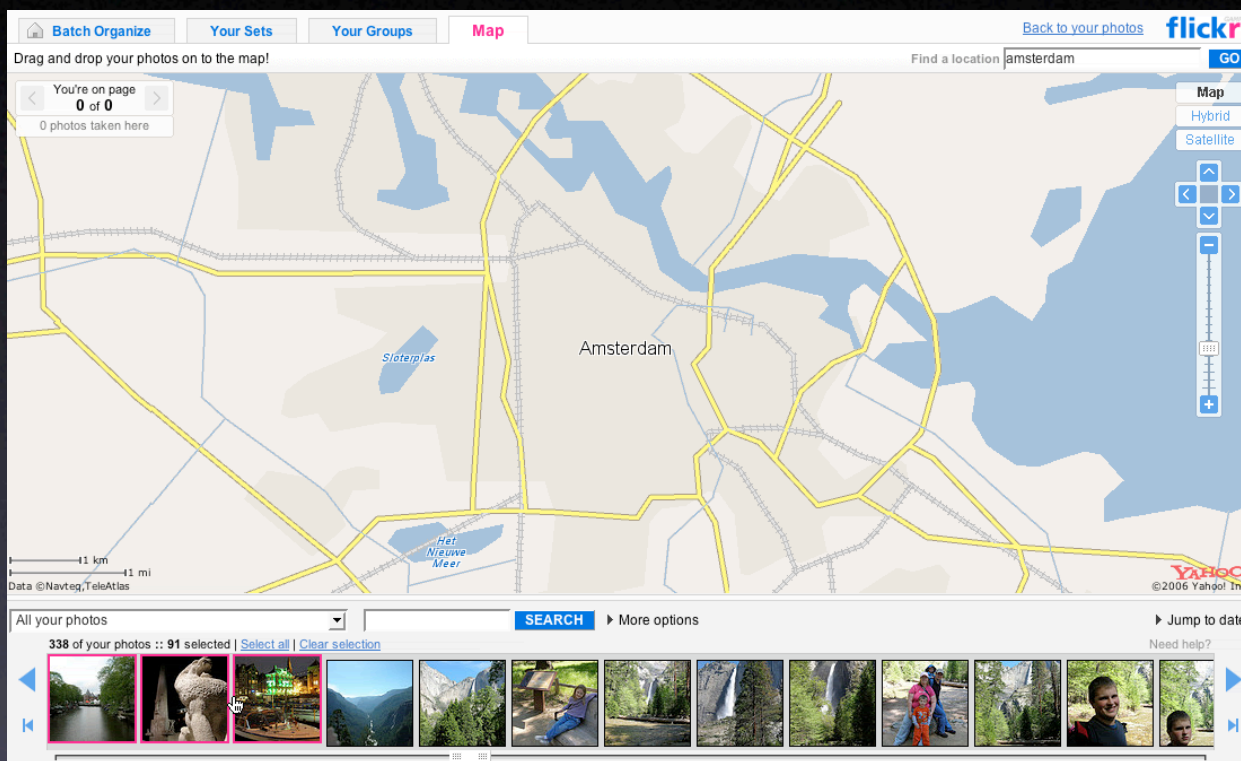


The power of sharing

Bloggable, shareable, findable

How to dial-in community

Collections



Web 2.0 as a platform

Rich objects fit the SOA model

Creates a good separation of concerns

Mashups



key trend

*User's mental model and their
primary goals*



key trends

Direct, lightweight, in-page interaction.

Invitations beforehand, transitions during, and feedback after interaction.

User's mental model and their primary goals.



pattern library.
yahoo! blog.
my blog.
this presentation.

developer.yahoo.com/ypatterns
yuiblog.com
looksgoodworkswell.com
billwscott.com/share/presentations/strategy/

The screenshot shows the top of the Yahoo! User Interface Blog. It features a yellow header with the title "YAHOO! USER INTERFACE BLOG" and a subtitle "News and Articles about Designing and Developing with Yahoo! Libraries." Below the header is a navigation bar with "Blog" and "About" tabs, and a search box. The main content area displays a post titled "Yahoo! Design Pattern Library Released" dated February 13, 2006, by Bill Scott. The post text begins with "I'm excited to announce that today we are releasing the Yahoo! Design Pattern Library to the public under a friendly Creative Commons License." To the right of the main text are sections for "SYNDICATE" with "MY YAHOO!" and "RSS" buttons, and "RECENT POSTS" listing other articles like "Developing a JavaScript Library for Yahoo!" and "Welcome to the Yahoo! User Interface Blog".

The screenshot shows the "Design Pattern Library" page on the Yahoo! Developer Network. The page has a yellow header with the "YAHOO! DEVELOPER NETWORK" logo and a "Design Pattern Library" title. A navigation sidebar on the left is organized into sections: "USER NEEDS TO" (with sub-sections like NAVIGATE, EXPLORE DATA, ORGANIZE DATA, GIVE FEEDBACK, PERFORMANCE ACTION, CUSTOMIZE), "APPLICATION NEEDS TO" (with sub-sections like CALL ATTENTION, IMPROVE READABILITY, GROUP RELATED ITEMS, ORGANIZE SCREEN/PAGE), and "PERFORM ACTION". The main content area starts with a "Welcome" message, followed by "What's a Pattern?" and "Recent Patterns". Below these are several pattern cards, each with a title, a brief description, and a small image of a UI element. Examples include "Auto-Complete", "Breadcrumbs", "Drag and Drop Modules", "Object Pagination", "Navigation Tabs", "Module Tabs", "Results Page", "Search Pagination", "Rating an Object", and "Writing a Review". Each card provides a short explanation of the user need and a link to a more detailed article.

