Chapter 2

Organizing the Content: Information Architecture and Application Structure

At this point, you know what your users want out of your application or site. You're targeting a chosen platform: the Web, the desktop, a mobile device, or some combination. You know which idiom or interface type to use—a form, an e-commerce site, an image viewer, or something else—or you may realize that you need to combine several of them. If you're really on the ball, you've written down some typical scenarios that describe how people might use high-level elements of the application to accomplish their goals. You have a clear idea of what value this application adds to people's lives.

Now what?

You could start making sketches of the interface. Many visual thinkers do that at this stage. If you're the kind of person who likes to think visually and needs to play with sketches while working out the broad strokes of the design, go for it.

But if you're not a visual thinker by nature (and sometimes even if you are), hold off on the interface sketches. They might lock your thinking into the first visual designs you put on paper. You need to stay flexible and creative for a little while, until you work out the overall organization of the application.

It can be helpful to think about an application in terms of its underlying data and tasks. What objects are being shown to the users? How are they categorized and ordered? What do users need to do with them? And now that you're thinking abstractly about them, how many ways can you design a presentation of those things and tasks?

These lines of inquiry may help you think more creatively about the interface you're designing.

Information architecture (IA) is the art of organizing an information space. It encompasses many things: presenting, searching, browsing, labeling, categorizing, sorting, manipulating, and strategically hiding information. Especially if you're working with a new product, this is where you should start.

The Big Picture

Let's look at the very highest level of your application first. From the designer's perspective, your site or application probably serves several functions: a software service—maybe several services—sharing information, selling a product, branding, social communication, or any number of other goals. Your home page or opening screen may need to convey all of these. Via text and imagery, users should be directed to the part of your site or app that accomplishes *their* purposes.

At this level, you'll make decisions about the whole package. What interaction model will it use? The desktop metaphor? The simpler model of a traditional website? Or a richly interactive site that splits the difference? Is it a self-contained device such as a mobile phone or digital video recorder, for which you must design the interactions from scratch? The interaction model establishes consistency throughout the artifact, and it determines how users move through and among the different pieces of functionality. I won't go into more detail at this level, because almost all of the patterns in this book apply at smaller scales.

Now let's look at a smaller unit within an application or site: pages that serve single important functions. In an application, this might be a main screen or a major interactive tool; in a richly interactive website, it might be a single page, such as Gmail's main screen; in a more static website, it might be a group of pages devoted to one process or function.

Any such page will primarily do one of these things:

1. Show one single thing, such as a map, book, video, or game
2. Show a list or set of things
3. Provide tools to create a thing
4. Facilitate a task

Most apps and sites do some combination of these things, of course. A website might show a feature article (1), a list of additional articles (2), with a wiki area for members to create pages (3), and a registration form for new members (4). That's fine. Each of these parts of the site should be designed using patterns and tools to fit that particular organizing principle.

This list mirrors some of the work done by Theresa Neil with application structures in the context of rich Internet applications (RIAs). She defines three types of structures based on the user's primary goal: information, process, and creation.*

This list gives us a framework within which to fit the idioms and patterns we'll talk about in this and other chapters.

* "Rich Internet Screen Design," in *UX Magazine*: *http://www.uxmag.com/design/rich-internet-application-screen-design.*

Show One Single Thing

Is this really what your page does? The whole point of the page's design is to show or play a single piece of content, with no list of other pieces that users could also see, no comments, and no table of contents or anything like that?

Lucky you!

All you really need, then, is to manage the user's interaction with this one thing. The IA is probably straightforward. There might be small-scale tools clustered around the content—scrollers and sliders, sign-in box, global navigation, headers and footers, and so forth—but they are minor and easily designed. Your design might take one of these shapes:

- A long, vertically scrolled page of flowed text (articles, books, and similar long-form content).
- A zoomable interface for very large, fine-grained artifacts, such as maps, images, or information graphics. Map sites such as Google Maps provide some well-known examples.
- The "media player" idiom, including video and audio players.

As you design this interface, consider the following patterns and techniques to support the design:

- Alternative Views, to show the content in more than one way.
- Many Workspaces, in case people want to see more than one place, state, or document at one time.
- Deep-linked State, in Chapter 3. With this, a user can save a certain place or state within the content so that he can come back to it later or send someone else a URL.
- Sharing Widget and other social patterns, in Chapter 9.
- Some of the mobile patterns described in Chapter 10, if one of your design goals is to deliver the content on mobile devices.

Show a List of Things

This is what most of the world's digital artifacts seem to do. Lists are everywhere! The digital world has converged on many common idioms for showing lists, most of which are familiar to you—simple text lists, menus, grids of images, search results, lists of email messages or other communications, tables, trees. There are more, of course.

Lists present rich challenges in information architecture. How long is the list? Is it flat or hierarchical, and if it is a hierarchy, what kind? How is it ordered, and can the user change that ordering dynamically? Should it be filtered or searched? What information or operations are associated with each list item, and when and how should they be shown?

Because lists are so common, a solid grasp of the different ways to present them can benefit any designer. It's the same theme again—by learning and formalizing these techniques, you can expand your own thinking about how to present content in different and interesting ways.

A few patterns for designing an interface around a list are described in this chapter (others are in Chapter 5). You can build either an entire app or site, or a small piece of a larger artifact, around one of these patterns. They set up a structure that other display techniques—text lists, thumbnail lists, and so on—can fit into. Other top-level organizations not listed here might include calendars, full-page menus, and search results.

- Feature, Search, and Browse is the pattern followed by countless websites that show products and written content. Searching and browsing provide two ways for users to find items of interest, while the front page features one item to attract interest.
- Blogs, news sites, email readers, and social sites such as Twitter all use the News Stream pattern to list their content, with the most recent updates at the top.
- Picture Manager is a well-defined interface type for handling photos and other pictorial documents. It can accommodate hierarchies and flat lists, tools to arrange and reorder documents, tools to operate directly on pictures, and so on.

Once you've chosen an overall design for the interface, you might look at other patterns and techniques for displaying lists. These fit into the patterns mentioned earlier; for instance, a Picture Manager might use a Thumbnail Grid, a Pagination, or both to show a list of photos—all within a Two-Panel Selector framework. See Chapter 5 for a thorough discussion.

Provide Tools to Create a Thing

Builders and editors are the great dynastic families of the software world. Microsoft Word, Excel, PowerPoint, and other Office applications, in addition to Adobe Photoshop, Illustrator, In Design, Dreamweaver, and other tools that support designers are all in this category. So are the tools that support software engineers, such as the various code editors and integrated development environments. These have long histories, large user bases, and very well established interaction styles, honed over many years.

Most people are familiar with the idioms used by these tools: text editors, code editors, image editors, editors that create vector graphics, and spreadsheets.

Chapter 8 of the previous edition of this book discusses how to design different aspects of these tools. But at the level of application structure or IA, the following patterns are often found:

- Canvas Plus Palette describes most of these applications. This highly recognizable, well-established pattern for visual editors sets user expectations very strongly.
- Almost all applications of this type provide Many Workspaces—usually windows containing different documents, which enable users to work on them in parallel.

- Alternative Views let users see one document or workspace through different lenses, to view various aspects of the thing they're creating.
- "Blank Slate Invitation" is named and written about in *Designing Web Interfaces* (*http://oreilly.com/catalog/9780596516253/*) by Bill Scott and Theresa Neil (O'Reilly), and is a profoundly useful pattern for builders and editors. It is closely related to the Input Hints pattern in Chapter 8.

Facilitate a Single Task

Maybe your interface's job isn't to show a list of anything or create anything, but simply to get a job done. Signing in, registering, posting, printing, uploading, purchasing, changing a setting—all such tasks fall into this category.

Forms do a lot of work here. Chapter 8 talks about forms at length and lists many controls and patterns to support effective forms. Chapter 6 defines another useful set of patterns that concentrate more on "verbs" than "nouns."

Not much IA needs to be done if the user can do the necessary work in a small, contained area, such as a sign-in box. But when the task gets more complicated than that—if it's long, or branched, or has too many possibilities—part of your job is to work out how the task is structured.

- Much of the time, you'll want to break the task down into smaller steps or groups of steps. For these, a Wizard might work well for users who need to be walked through the task.
- A Settings Editor is a very common type of interface that gives users a way to change the settings or preferences of something—an application, a document, a product, and so on. This isn't a step-by-step task at all. Here, your job is to give users open access to a wide variety of choices and switches and let them change only what they need, when they need it, knowing that they will skip around.

The Patterns

Several of the patterns in this chapter are large-scale, defining the interactions for large sections of applications or sites (or sometimes the entire thing). Some of these, including Picture Manager, Canvas Plus Palette, and Feature, Search, and Browse, are really clusters of other patterns that support each other in well-defined ways—they are "guilds" of smaller-scale patterns.

1. Feature, Search, and Browse
2. News Stream
3. Picture Manager
4. Dashboard

5. Canvas Plus Palette
6. Wizard
7. Settings Editor

The last three patterns are more "meta," in the sense that they can apply to the other patterns in the preceding list. For instance, almost any content, document, or list can be shown in more than one way, and the ability to switch among those Alternative Views can empower users.

8. Alternative Views

Likewise, a user may want to instantiate the interface more than once, to maintain several trains of thought simultaneously—consider the tabs in a browser window, all showing different and unrelated websites. Offer the Many Workspaces pattern to these users.

9. Many Workspaces

Many patterns, here and elsewhere in the book, contribute in varying degrees to the learnability of an interface. Multi-Level Help sets out ways to integrate help into the application, thus supporting learnability for a broad number of users and situations.

10. Multi-Level Help

Feature, Search, and Browse

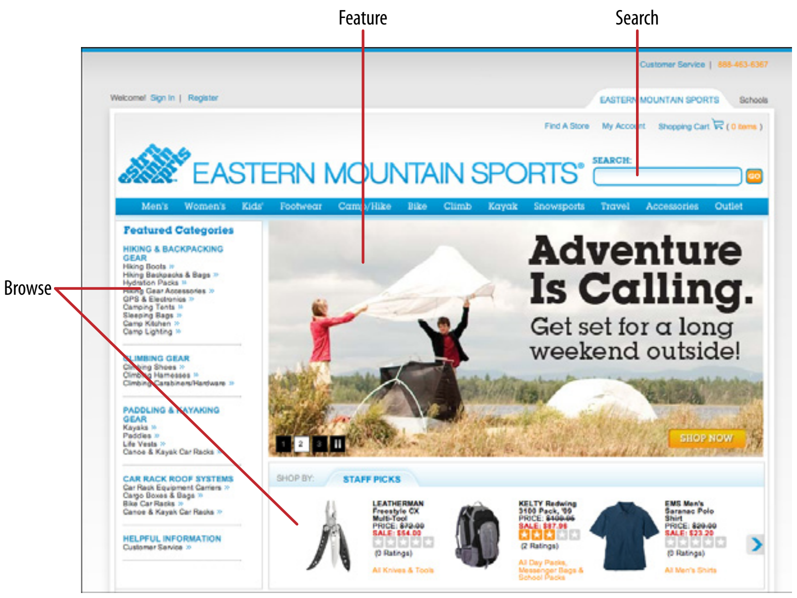

Feature
Search
Browse
EASTERN MOUNTAIN SPORTS
SEARCH:
Men's Women's Kids' Footwear Camp/Hike Bike Climb Kayak Snowsports Travel Accessories Outlet
Featured Categories
Adventure Is Calling.
Get set for a long weekend outside!
SHOP NOW
STAFF PICKS

Figure 2-1. *EMS*

What

Put three elements on the main page of the site or app: a featured article or product, a search box, and a list of items or categories that can be browsed.

Use when

Your site offers users long lists of items—articles, products, videos, and so on—that can be browsed and searched. You want to engage incoming users immediately by giving them something interesting to read or watch.

Why

These three elements are found together on many, many successful sites. Once you are attuned to them, you can find them just about everywhere.

Searching and browsing go hand in hand as two ways to find desired items: some people will know what they're looking for and zero in on the search box, while others will do more open-ended browsing through the lists and categories you show them.

Featured items are how you "hook" the user. They're far more interesting than just category lists and search boxes, especially when you use appealing images and headlines. A user who lands on your page now has something to read or experiment with, without doing any additional work at all—and he may find it more interesting than whatever he originally came for.

How

Place a search box in a prominent location, such as an upper corner, or in a banner across the middle top of the site. Demarcate it well from the rest of the site—use whitespace to set it off, and use a different surrounding background color if necessary.

Try to eliminate all other text fields above the fold (except the sign-in box, if you have one), to make sure users don't confuse those with the search box. People looking for a search box tend to zero in on the first text field they come across. Make sure they find the right one!

Set aside Center Stage (see Chapter 4) for the featured article, product, or video. Very near it, and still above the fold, place an area for browsing the rest of the site's content. Most sites show a list of topics or product categories. These might be links to pages devoted to those categories. Or they might change the current page's content, replacing the feature with a list of items in that category; see the Two-Panel Selector pattern in Chapter 5.

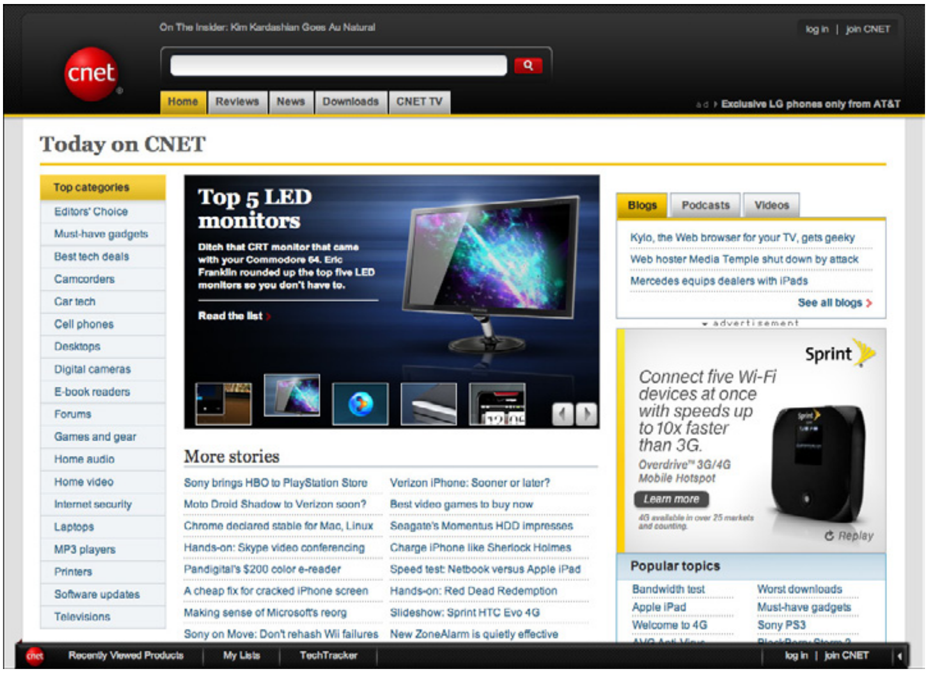
If the category labels open in place to show subcategories, the list behaves like a tree. Some sites, such as Amazon, turn the category labels into menus: when the pointer rolls over the label, a menu of subcategories appears.

Choose the features well. Features are a good way to sell items, advertise specials, and call attention to breaking news. However, they also define what your site is about. The items you choose to feature say a lot about the site's values. Features that talk about altruistic or charitable efforts have a very different appeal from those that advertise specific products. As always, know your users. What will they want to know about? What will capture their attention and hold them at your site?

As the user browses through categories and subcategories, help him "stay found" with the Breadcrumbs pattern (Chapter 3).

Examples

This pattern applies well to websites such as news outlets (CNET, Figure 2-2), publishers (Lulu), knowledge bases (About.com, Figure 2-3), and, of course, e-commerce sites (Amazon, Figure 2-4; and EMS, at the top of the pattern in Figure 2-1).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Ditch that CRT monitor that came with your Commodore 64. Eric Franklin rounded up the top five LED monitors so you don't have to.

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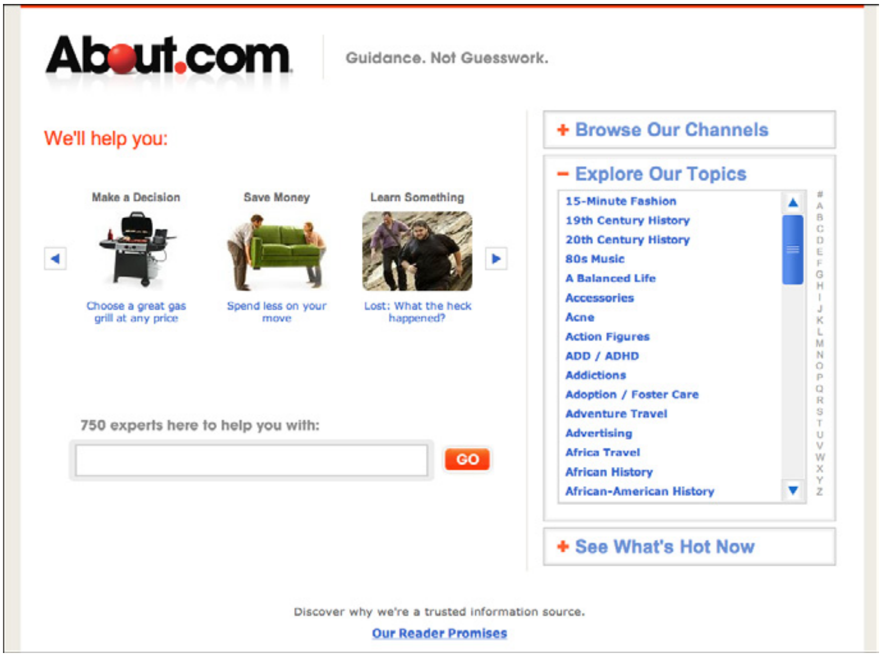
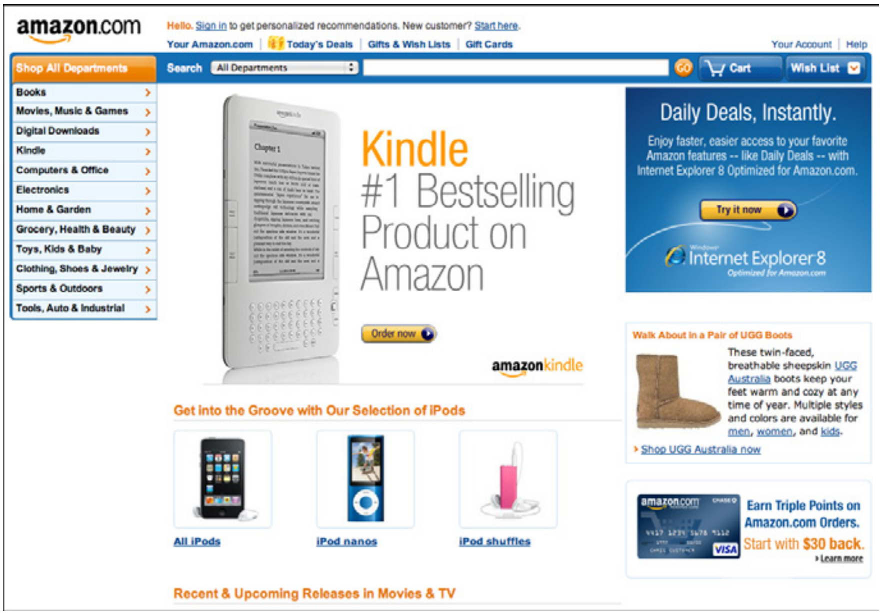
Figure 2-2. *CNET*



Discover why we're a trusted information source.

Figure 2-3. *About.com*



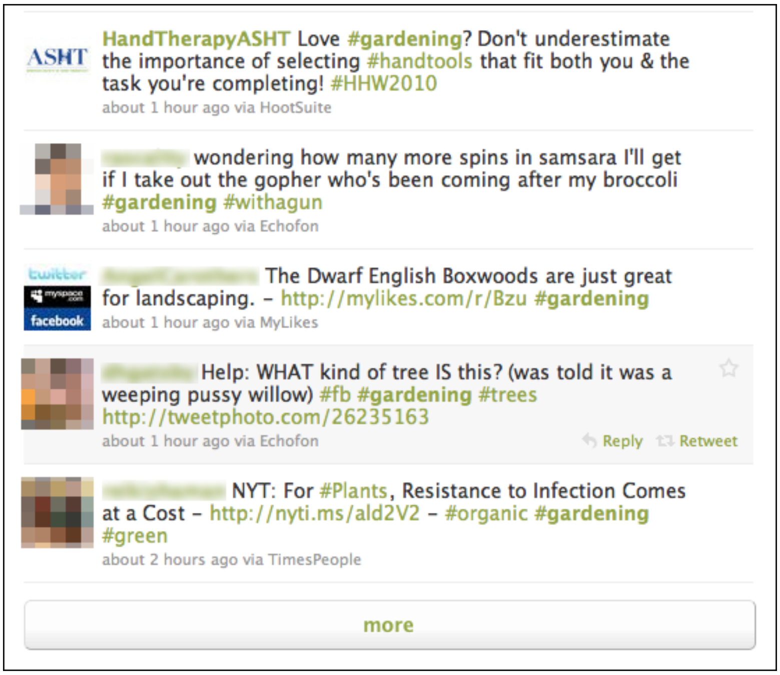
Hello. Sign in to get personalized recommendations. New customer? Start here.

Enjoy faster, easier access to your favorite Amazon features -- like Daily Deals -- with Internet Explorer 8 Optimized for Amazon.com.

These twin-faced, breathable sheepskin UGG Australia boots keep your feet warm and cozy at any time of year. Multiple styles and colors are available for men, women, and kids.

Figure 2-4. *Amazon*

News Stream


HandTherapyASHT Love #gardening? Don't underestimate the importance of selecting #handtools that fit both you & the task you're completing! #HHW2010
about 1 hour ago via HootSuite

[redacted] wondering how many more spins in samsara I'll get if I take out the gopher who's been coming after my broccoli #gardening #withagun
about 1 hour ago via Echofon

[redacted] The Dwarf English Boxwoods are just great for landscaping. – http://mylikes.com/r/Bzu #gardening
about 1 hour ago via MyLikes

[redacted] Help: WHAT kind of tree IS this? (was told it was a weeping pussy willow) #fb #gardening #trees http://tweetphoto.com/26235163
about 1 hour ago via Echofon

[redacted] NYT: For #Plants, Resistance to Infection Comes at a Cost – http://nyti.ms/ald2V2 – #organic #gardening #green
about 2 hours ago via TimesPeople

Figure 2-5. *Twitter*

What

Show time-sensitive items in a reverse chronological list, with the latest items at the top. Update it dynamically, and combine the items from different sources or people into one single stream.

Use when

Your site or app uses one or more communication channels, such as blogs, email, social site updates, or news sites, to deliver timely content to users.

This channel may be personal—a user "owns" it, like an email client or Facebook friends list—or public, such as a website or public Twitter stream.

Why

People can keep up with a news stream easily, since the latest items reliably appear on top with no effort on the part of the user. They can check in often and be assured of seeing what they need to see.

People go to many sites or apps each day to keep up with their friends' activities, engage in conversations, or follow topics or blogs of interest. When multiple "news" sources can be blended in one place, it's easier to keep track of it all.

This pattern supports the Microbreaks behavior pattern in Chapter 1. A glance at a News Stream application can give a user lots of useful information (or entertainment) with very little time or effort.

From the perspective of a publisher, such as a website, having a News Box (Chapter 9) or the equivalent on your main page lets visitors see what's new and noteworthy at your organization. Large organizations in particular may have many initiatives going on that would interest visitors: new products, blog entries, videos, news articles, charity work, and other content.

How

List incoming items in reverse chronological order. If the technology permits, "push" new items onto the top of the list without waiting for the user to request an update, but offer a way for the user to get an immediate update or refresh anyway.

Very busy streams can be split up into manageable substreams by topic, sender, source, search terms, or other factors—you could let the user choose which one(s) to show. Services such as Facebook, FriendFeed, Twitter, and some RSS readers show clickable lists of these substreams to the left or right of the incoming content (thus implementing the Two-Panel Selector pattern). Others, such as Tweetdeck, use Many Workspaces to show multiple parallel panels of incoming content.

Information shown with each item might include:

What
: For short micro-updates, show the whole thing. Otherwise, show a title, a teaser that's a few words or sentences long, and a thumbnail picture if one is available.

Who
: This might be the person who wrote an update, the blog where an article was posted, the author of said article, or the sender of an email. Actual person names humanize the interface, but balance this against recognition and authoritativeness—the names of news outlets, blogs, companies, and so forth are important, too. Use both if that makes sense.

When
: Give a date or timestamp; consider using relative times, such as "Yesterday" and "Eleven minutes ago."

Where
: If an item's source is a website, link to that website. If it comes from one of your organization's blogs, link to that. (But here's another interpretation of "where": can you get geolocation data about the item, and show it on a map?)

When there's more to an item than can be shown easily in the list display, show a "More" link or button. You might design a way to show the entire contents of an item within the News Stream window. The News Stream is a list, so you can choose among Two-Panel Selector, One-Window Drilldown, and List Inlay. Examples abound of each model.

Give the user ways to respond immediately to incoming items. Stars, thumbs-up, liking, and favoriting are available in some systems—these all provide low-effort feedback and "handshaking" among people who don't have time to write out long replies. But allow those long replies to be written, too! By placing controls and text fields immediately next to an item in a News Stream, you encourage responsiveness and interaction. This is usually a good thing in social systems.

Sharing of items, either privately via email or semipublicly via a provided social service, is also common in these interfaces. See the Sharing Widget pattern in Chapter 9.

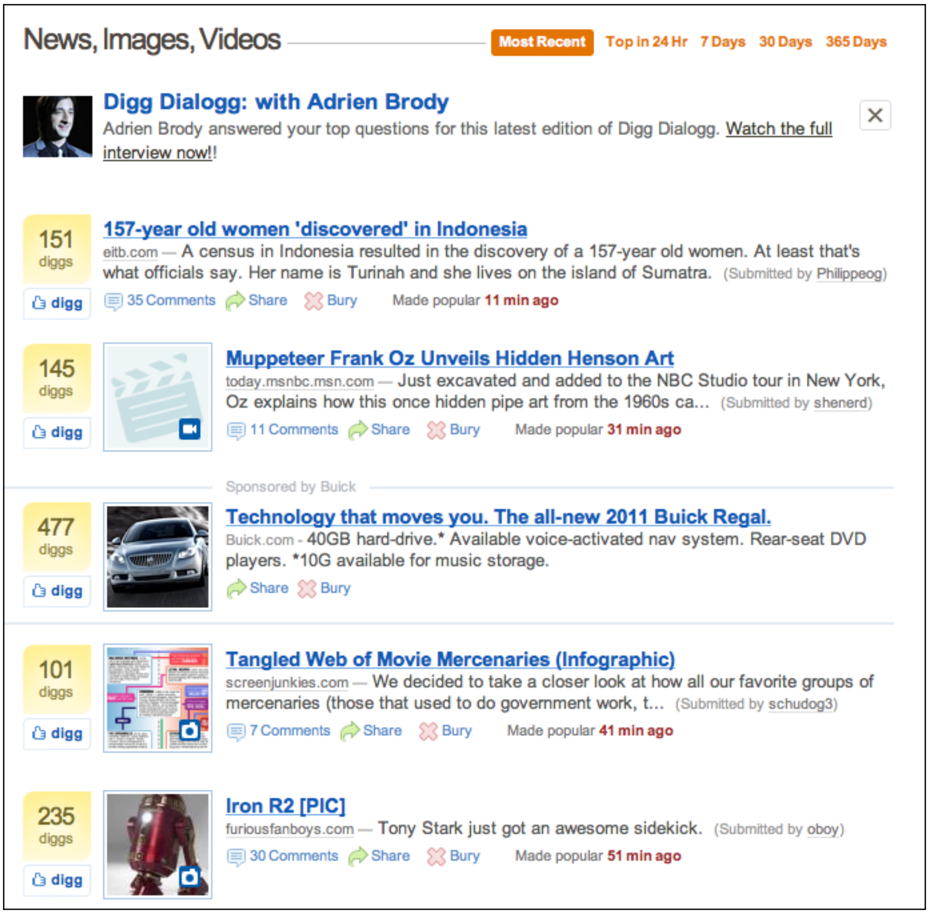
News Stream designs for mobile devices are fairly straightforward as of this writing. Almost all of them devote the full screen to a single list—often a Thumbnail-and-Text List (Chapter 10) with richly formatted text—and users can drill down to an item by simply tapping or clicking it in the list.

Many News Stream services, including Twitter and Facebook, use the Infinite List pattern (see Chapter 10) for both their mobile and full-screen designs. This pattern lets users load a page or two of the most recent updates, and gives the option of loading more to go "backward in time."

Some resources use the term *activity stream* for a very closely related concept: the time-ordered stream of actions (usually social actions) performed by a single entity such as an individual, system, or organization. This is a useful concept, and it doesn't really conflict with the News Stream pattern, which talks about the stream of activities that are *of interest to* an individual or group of users, not *generated by* them. News Streams will usually have multiple diverse sources.

Examples

Digg (Figure 2-6) and Google News (Figure 2-7) are both public News Streams. Their purposes and designs are very different, but they share some of the features talked about in this pattern. Digg shows all incoming items in one large list; Google News splits them into topics, within which the most recent news articles are shown first. (Drilling down into the topic shows a page with a single list.) Both show comparable item information: title, teaser, linked source, and a relative timestamp. They use human names: Digg shows the submitter's name, while Google News shows the article author's name. And on both sites, you can mark items of interest—with a "digg" in one, a star in the other—and share them via email.



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screenjunkies.com — We decided to take a closer look at how all our favorite groups of mercenaries (those that used to do government work, t... (Submitted by schudog3)
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235 diggs · digg
Iron R2 [PIC]
furiousfanboys.com — Tony Stark just got an awesome sidekick. (Submitted by oboy)
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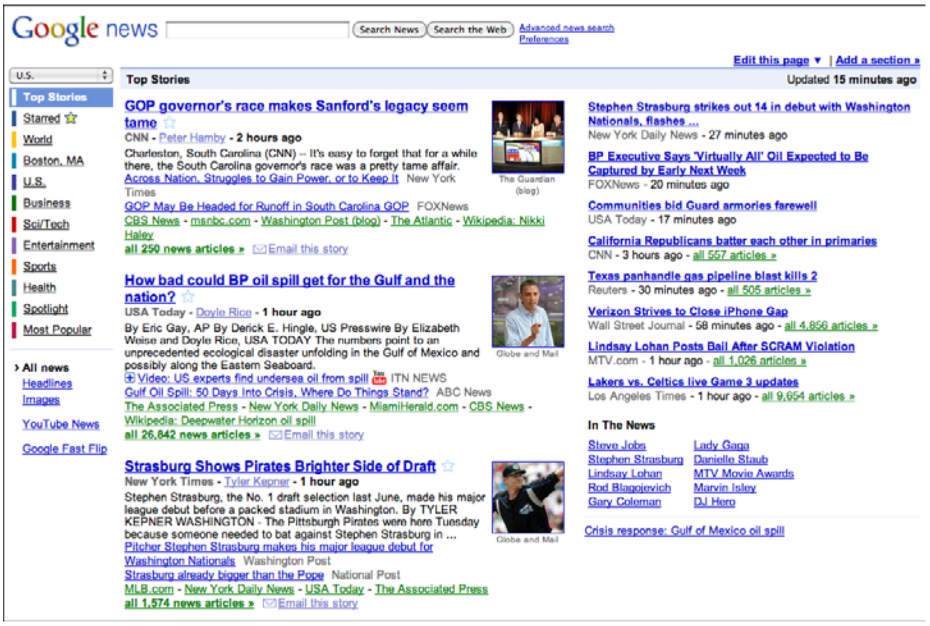
Figure 2-6. *Digg*



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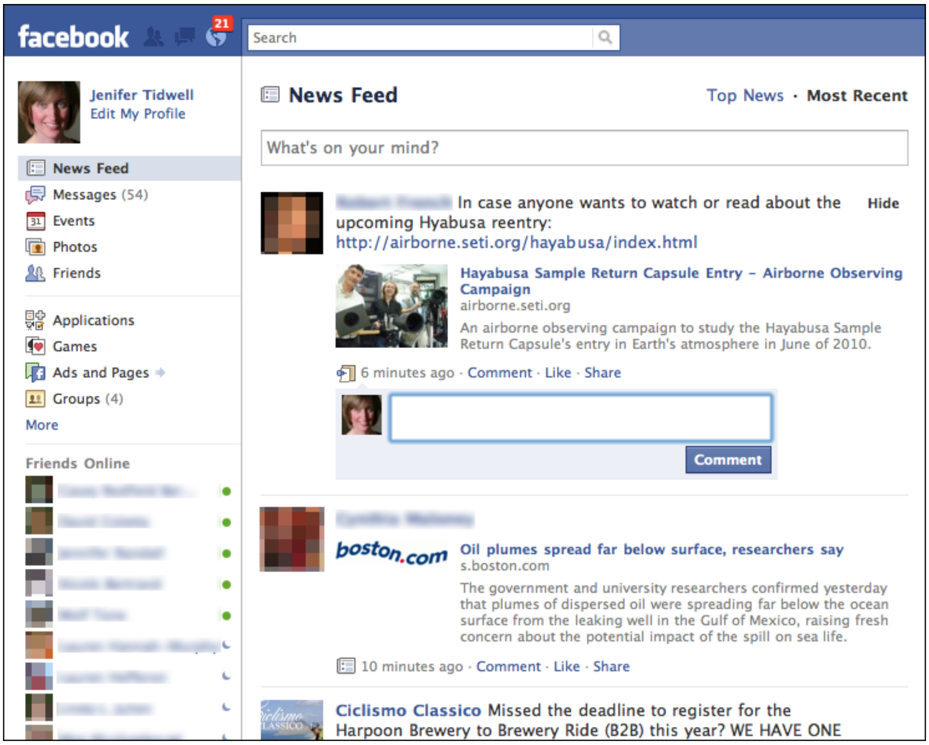
Crisis response: Gulf of Mexico oil spill

Figure 2-7. *Google News*

The previous two examples show public News Streams; the next two show personal News Streams.

Social networking services, news aggregators, and private communications (such as email) provide plenty of examples of personal News Streams. In Figures 2-8 and 2-9 we see Facebook and Google Reader, which is an RSS-based aggregator. They both use a single reverse chronological list of items, each of which shows a linked source, title and teaser (when appropriate), author name, and relative timestamp. Users can "like" items, share them, and follow links to read more.

But note the differences, too. Google Reader lets the user split a potentially huge combined stream into substreams, based on source and topic; these are displayed in a selectable tree list on the left, thus making the window a Two-Panel Selector. Facebook doesn't give the user this option by default, as of this writing. Instead, it automatically (and unpredictably) switches between a filtered "Top Stories" view, and a "Most Recent" view that shows everything. However, Facebook excels at the immediate response. Posting a short comment to a Facebook entry is almost as easy as thinking about it.


facebook 21 Search

Jenifer Tidwell
Edit My Profile

News Feed
Messages (54)
Events
Photos
Friends

Applications
Games
Ads and Pages
Groups (4)
More

Friends Online
[redacted]

News Feed — Top News · Most Recent

What's on your mind?

[redacted] In case anyone wants to watch or read about the upcoming Hyabusa reentry: http://airborne.seti.org/hayabusa/index.html — Hide

Hayabusa Sample Return Capsule Entry – Airborne Observing Campaign
airborne.seti.org
An airborne observing campaign to study the Hayabusa Sample Return Capsule's entry in Earth's atmosphere in June of 2010.

6 minutes ago · Comment · Like · Share

Comment

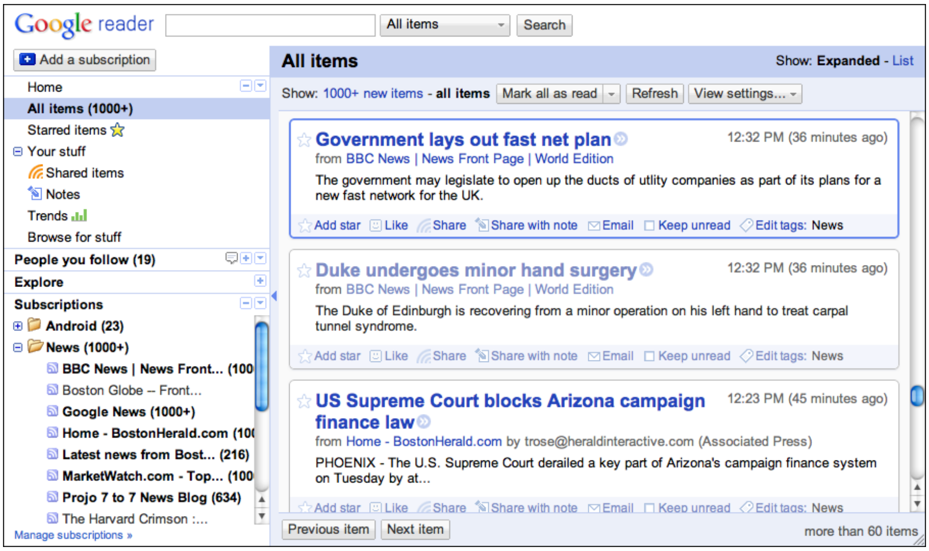
[redacted]

boston.com — Oil plumes spread far below surface, researchers say
s.boston.com
The government and university researchers confirmed yesterday that plumes of dispersed oil were spreading far below the ocean surface from the leaking well in the Gulf of Mexico, raising fresh concern about the potential impact of the spill on sea life.

10 minutes ago · Comment · Like · Share

Ciclismo Classico Missed the deadline to register for the Harpoon Brewery to Brewery Ride (B2B) this year? WE HAVE ONE

Figure 2-8. *Facebook*


Google reader — All items — Search

Add a subscription
Home
All items (1000+)
Starred items
Your stuff
Shared items
Notes
Trends
Browse for stuff
People you follow (19)
Explore
Subscriptions
Android (23)
News (1000+)
BBC News | News Front... (100
Boston Globe -- Front...
Google News (1000+)
Home - BostonHerald.com (10
Latest news from Bost... (216)
MarketWatch.com - Top... (100
Projo 7 to 7 News Blog (634)
The Harvard Crimson :...
Manage subscriptions »

All items — Show: Expanded - List
Show: 1000+ new items - all items — Mark all as read — Refresh — View settings...

Government lays out fast net plan — 12:32 PM (36 minutes ago)
from BBC News | News Front Page | World Edition
The government may legislate to open up the ducts of utlity companies as part of its plans for a new fast network for the UK.
Add star · Like · Share · Share with note · Email · Keep unread · Edit tags: News

Duke undergoes minor hand surgery — 12:32 PM (36 minutes ago)
from BBC News | News Front Page | World Edition
The Duke of Edinburgh is recovering from a minor operation on his left hand to treat carpal tunnel syndrome.
Add star · Like · Share · Share with note · Email · Keep unread · Edit tags: News

US Supreme Court blocks Arizona campaign finance law — 12:23 PM (45 minutes ago)
from Home - BostonHerald.com by trose@heraldinteractive.com (Associated Press)
PHOENIX - The U.S. Supreme Court derailed a key part of Arizona's campaign finance system on Tuesday by at...
Add star · Like · Share · Share with note · Email · Keep unread · Edit tags: News

Previous item — Next item — more than 60 items

Figure 2-9. *Google Reader*

Picture Manager

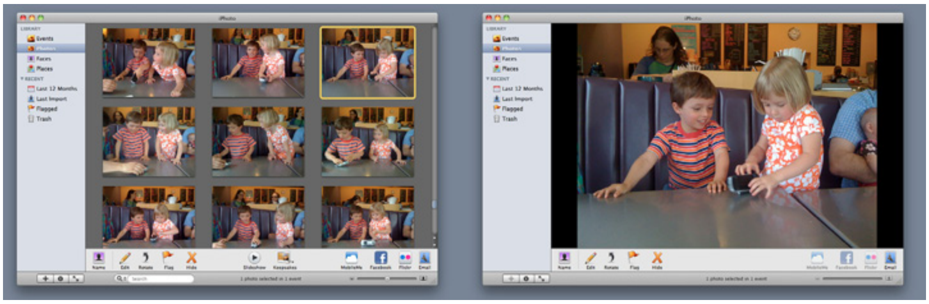


Figure 2-10. *Two views of iPhoto*

What

Use thumbnails, item views, and a browsing interface to create a familiar structure for managing photos, videos, and other pictorial items.

Use when

People use your software to work with lists or collections of pictorial things: photos, drawings, video clips, and so on. The list might be in a web page, or in an application, or both. It might allow editing by the owner of the content, or it might simply show the content to the public for browsing, viewing, and comments.

Why

This is a distinct style of application that many people recognize. It is also a *guild* of patterns—a set of patterns linked together and supporting each other in predictable ways. Once someone sees a Thumbnail Grid of images or videos in the right context, she knows what to expect: browse, click to view, set up slideshows or playlists, and so on.

Patterns and other components that often play parts in this guild include:

- Thumbnail Grid
- One-Window Drilldown
- Two-Panel Selector
- Pyramid
- Tabs and Collapsible Panels
- Button Groups
- Trees or outlines
- Keyboard Only
- Sharing Widget
- Search box
- Social comments and discussion

How

Set up two principal views: a Thumbnail Grid of the items in the list, and a large view of a single item. Users will go back and forth between these. Design a browsing interface and associate it with the Thumbnail Grid to let users explore a large collection easily.

The Thumbnail Grid

Use this pattern to show a sequence of items. Many Picture Managers show a small amount of metadata with each item, such as its filename or author, but do this with care, as it clutters the interface. You might offer a control to adjust the size of the thumbnails. There may also be a way to sort the items by different criteria, such as date, label, or rating, or to filter it and show only the starred items (for instance).

When a user clicks on an item, show it immediately in the single-item view. Applications often let the user traverse the grid with the keyboard—for example, with the arrow keys and space bar. (See the Keyboard Only pattern in Chapter 1.)

If the user owns the items, offer ways to move, reorder, and delete items at this level in the interface. This implies having a multiple-selection interface, such as Shift-select, checkboxes, or lassoing a group of items with the pointer. Cut, copy, and paste should also work in applications.

You can offer slideshow or playlist functionality to all users at the Thumbnail Grid level.

The single-item view

Show a large view of the selected image (or a player, for a video). Display metadata—information about the item—next to it. This view can be next to the Thumbnail Grid if the window is large, or it might replace the area used by the grid. In practice, this means choosing between a Two-Panel Selector and a One-Window Drilldown. See Chapter 5 for these list-related patterns.

If the interface is a website or is otherwise web-connected, you might choose to offer social features at this level. Comments, liking or thumbs-up, and sharing might be here; see the Sharing Widget and other patterns in Chapter 9. Likewise, tagging or labeling can also be done here, either privately or publicly. An "other items you may like" feature is sometimes found in web-based public collections.

Editing features for individual items will live here, also. For instance, a photo manager might offer simple functionality such as cropping, color and brightness adjustment, and red-eye reduction. Metadata properties could be edited here, too. If a full editor is too complex to present here, give the user a way to launch a "real" editor. (Adobe Bridge, for example, lets the user launch Photoshop on a photo.) Use Button Groups to maintain a simple, comprehensible visual grouping of all these features.

Link the item to the previous and next items in the list by providing "previous" and "next" buttons, especially if you use One-Window Drilldown to display the single-item view (which also requires a "back" button). See the Pyramid navigational pattern in Chapter 3.

The browsing interface

The contents of the Thumbnail Grid should be driven by a browsing interface that might be complex, simple, or nearly nonexistent, depending on the nature of the application.

At minimum, most interfaces should offer a search box, either to search an individual user's items or to search all public items (or both).

Private photo and video management interfaces—especially desktop apps such as Picasa and iPhoto—should let the user browse the filesystem for images stored in different directories. If users can group items into albums, sets, projects, or other types of collections, these should be available in a browsing interface, too. Most also permit favoriting or starring of items.

Most apps and sites show the browsing interface above or to the left of the Thumbnail Grid. For highly interactive software, they relate to each other as a Two-Panel Selector: when the user selects a category or folder (or enters a search term), the contents immediately show up in the Thumbnail Grid next to the browsing interface.

Filters are sometimes found here. Adobe Bridge puts filters into its browsing interface; more than 10 properties can be used to slice through a large collection of items, including keywords, modification date, camera type, and ISO.

Websites that host public collections, such as YouTube and Flickr, sometimes use the entire home page as a browsing interface. Sites such as these are faced with an interesting choice: when a signed-in user who "owns" content visits the home page, should she see her own personal collections, or the featured content that the rest of the public sees? Or both?

Examples

Picasa and Adobe Bridge, along with iPhoto (shown in Figure 2-10), are desktop applications for managing personal collections of images. Their browsing interfaces—all Two-Panel Selectors—vary in complexity from iPhoto's very simple design to Adobe Bridge's numerous panels and filters. Picasa (Figure 2-11) and iPhoto use One-Window Drilldown to reach the single-item view, while Adobe Bridge (Figure 2-12) puts all three views together on one page.

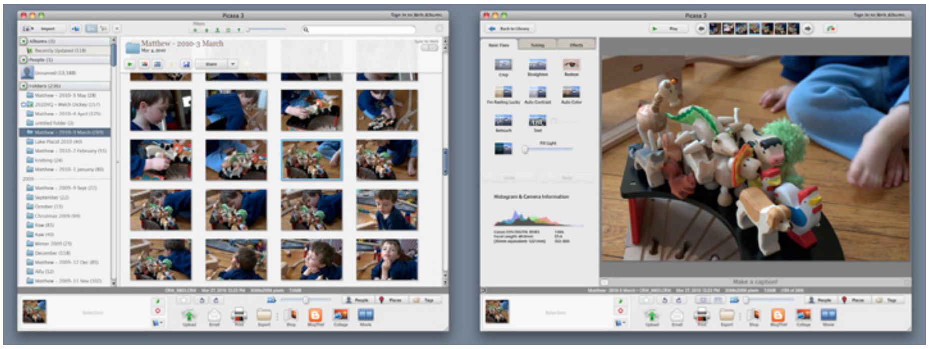
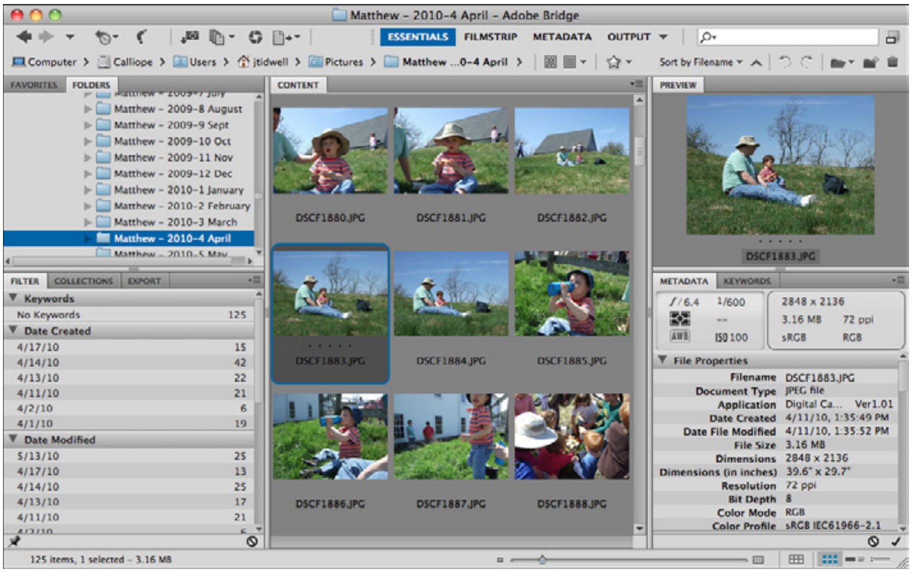


Figure 2-11. *Two views of Picasa*



Matthew – 2009-8 August
Matthew – 2009-9 Sept
Matthew – 2009-10 Oct
Matthew – 2009-11 Nov
Matthew – 2009-12 Dec
Matthew – 2010-1 January
Matthew – 2010-2 February
Matthew – 2010-3 March
Matthew – 2010-4 April

Keywords	
No Keywords	125
Date Created	
4/17/10	15
4/14/10	42
4/13/10	22
4/11/10	21
4/2/10	6
4/1/10	19
Date Modified	
5/13/10	25
4/17/10	13
4/14/10	25
4/13/10	17
4/11/10	21

DSCF1880.JPG DSCF1881.JPG DSCF1882.JPG
DSCF1883.JPG DSCF1884.JPG DSCF1885.JPG
DSCF1886.JPG DSCF1887.JPG DSCF1888.JPG

DSCF1883.JPG

ƒ/6.4 1/600 2848 x 2136
3.16 MB 72 ppi
AWB ISO 100 sRGB RGB

File Properties

Filename	DSCF1883.JPG
Document Type	JPEG file
Application	Digital Ca... Ver1.01
Date Created	4/11/10, 1:35:49 PM
Date File Modified	4/11/10, 1:35:52 PM
File Size	3.16 MB
Dimensions	2848 x 2136
Dimensions (in inches)	39.6" x 29.7"
Resolution	72 ppi
Bit Depth	8
Color Mode	RGB
Color Profile	sRGB IEC61966-2.1

125 items, 1 selected - 3.16 MB

Figure 2-12. *Adobe Bridge, which contains all views in one complex window*

Flickr's design (Figure 2-13) has been mimicked by many other web-based image and video collections. Browsing images at Flickr is different from browsing in a private, desktop-based application—sets, pools, groups, and users' public collections are the means by which one explores the Flickr universe. Social elements are critical to Flickr's vitality, too. But you can still see a Thumbnail Grid, a single-item view reached via One-Window Drilldown, item details, and a Pyramid navigational pattern (previous, next, up).

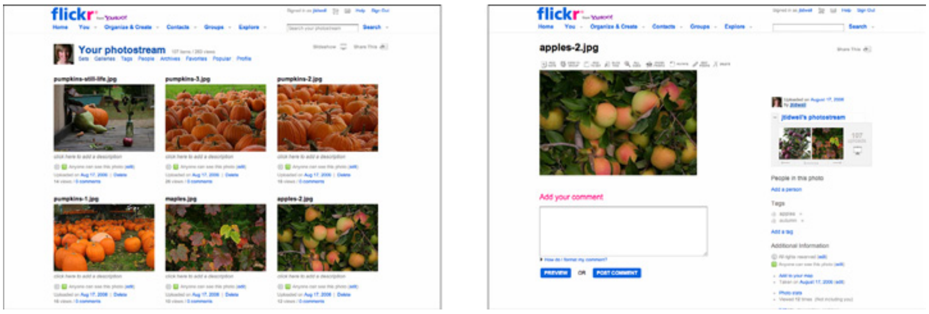


Figure 2-13. *Flickr*

Even video sites fit this pattern. When you view someone's YouTube channel, you can choose to see either a Thumbnail Grid, or a list beside a video player (the default). (Both options are shown in Figure 2-14.) Clicking a thumbnail brings you to the page for that video, where detailed information and discussion are shown. Visitors can browse by looking at playlists, the latest videos added, the most-viewed videos, and the top-rated videos; a search box is also provided, as it is everywhere.

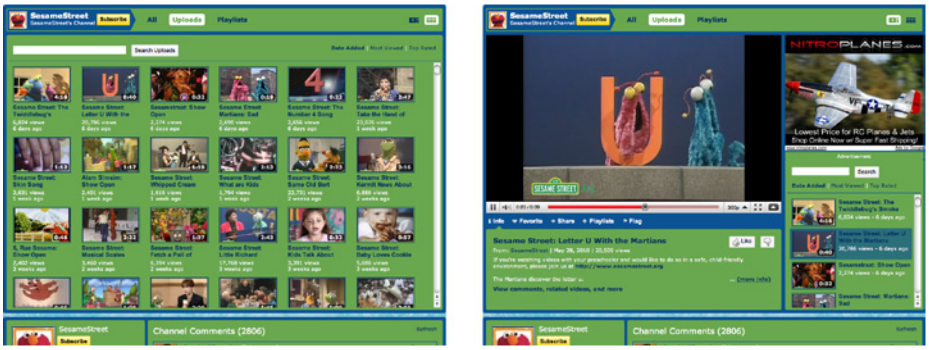


Figure 2-14. *The Sesame Street channel on YouTube*

TED's browsing interface is more complex (see Figure 2-15). Its home page offers a dynamically changeable infographic made up of thumbnails of different sizes. By toggling fields on and off, visitors can narrow down the field of videos and find the ones they want. Rolling over a thumbnail gives item details. Clicking on it brings you to a single-item view, which looks a lot like YouTube's.

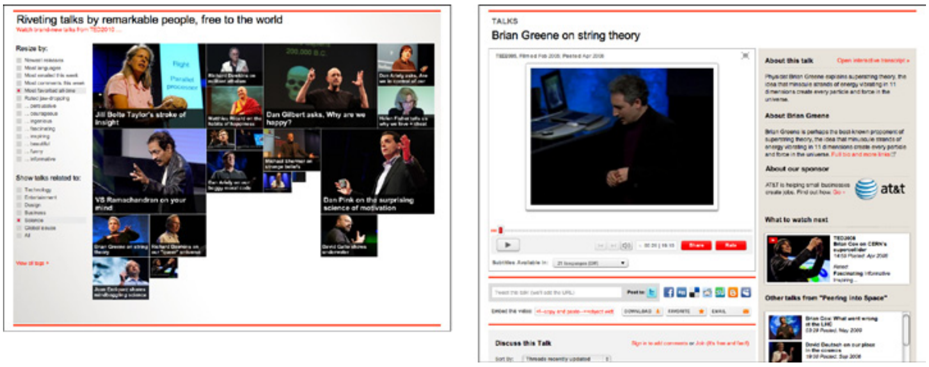
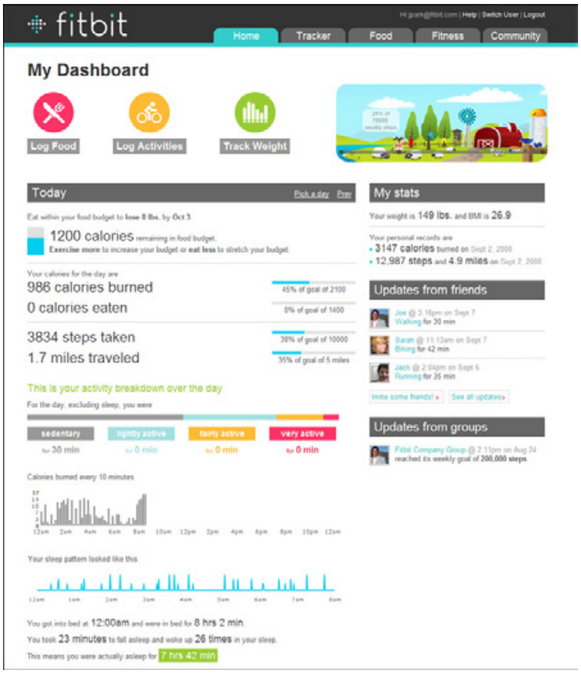

Riveting talks by remarkable people, free to the world
TALKS
Brian Greene on string theory
About this talk
About Brian Greene
About our sponsor
What to watch next
Other talks from "Peering into Space"
Discuss this Talk

Figure 2-15. *TED*

In other libraries

The Image Browser pattern at Welie.com describes some aspects of a Picture Manager: *http://welie.com/patterns/showPattern.php?patternID=image-browsing*

Dashboard



My Dashboard

Today — Pick a day · Prev

Eat within your food budget to lose 8 lbs. by Oct 3

1200 calories remaining in food budget.
Exercise more to increase your budget or eat less to stretch your budget.

Your calories for the day are
986 calories burned — 45% of goal of 2100
0 calories eaten — 0% of goal of 1400

3834 steps taken — 38% of goal of 10000
1.7 miles traveled — 35% of goal of 5 miles

This is your activity breakdown over the day
For the day, excluding sleep, you were
sedentary for 30 min · lightly active for 0 min · fairly active for 0 min · very active for 0 min

Calories burned every 10 minutes

Your sleep pattern looked like this

You got into bed at 12:00am and were in bed for 8 hrs 2 min.
You took 23 minutes to fall asleep and woke up 26 times in your sleep.
This means you were actually asleep for 7 hrs 42 min

My stats
Your weight is 149 lbs. and BMI is 26.9
Your personal records are
- 3147 calories burned on Sept 2, 2008
- 12,987 steps and 4.9 miles on Sept 2, 2008

Updates from friends
Joe @ 3:16pm on Sept 7
Walking for 30 min
Sarah @ 11:13am on Sept 7
Biking for 42 min
Jack @ 2:04pm on Sept 6
Running for 35 min
Invite some friends! · See all updates

Updates from groups
Fitbit Company Group @ 2:11pm on Aug 24
reached its weekly goal of 200,000 steps

Figure 2-16. *Fitbit*

What

Arrange data displays into a single information-dense page, updated regularly. Show users relevant, actionable information, and let them customize the display as necessary.

Use when

Your site or application deals with an incoming flow of information from something—web server data, social chatter, news, airline flights, business intelligence information, or financials, for example. Your users would benefit from continuous monitoring of that information.

Why

This is a familiar and recognizable page style. Dashboards have a long history, both online and in the physical world, and people have well-established expectations about how they work: they show useful information, they update themselves, they usually use graphics to display data, and so on.

A dashboard is also a guild of interlocking patterns and components. Many online dashboards use these in predictable ways:

- Titled Sections
- Tabs and Collapsible Panels
- Movable Panels
- One-Window Drilldown
- Lists and tables of various kinds (see Chapter 5)
- Row Striping
- Information graphics (see Chapter 7)
- Datatips

How

Determine what information users need or want to see. This isn't as simple as it sounds, because you need an editorial eye—you can't just splatter the screen with confusing or unimportant data, or people won't be able to pick out the parts that matter. Remove, or at least deemphasize, information that doesn't help the user.

Use a good visual hierarchy (see Chapter 4) to arrange lists, tables, and information graphics on the page. Try to keep the main information on one page, with little or no scrolling, so people can keep the window on-screen and see everything at a glance. Group related data into Titled Sections, and use tabs only when you're confident that users won't need to see the tab contents side by side.

Use One-Window Drilldown to let users see additional details about the data—they should be able to click on links or graphics to find out more. Datatips work well to show individual data points when the pointer rolls over an information graphic.

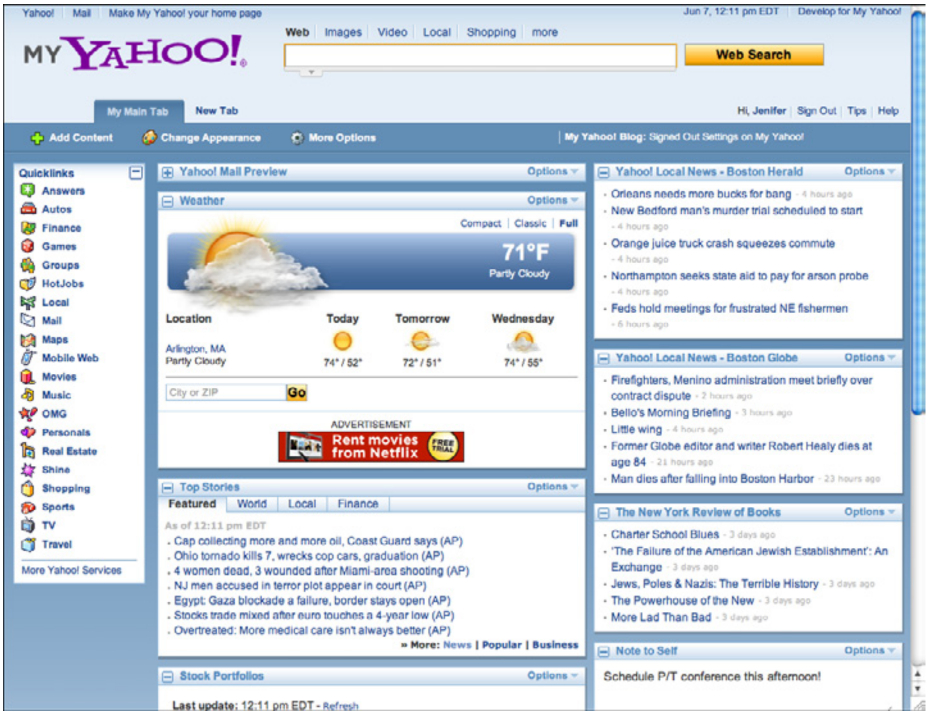
Choose appropriate and well-designed information graphics for the data you need to show. Gauges, dials, pie charts, and 3D bar charts look nice, but they are rarely the best way to show comparative information at a glance—simple line and bar charts express data better, especially time-based data. When numbers and text are more relevant than graphics, use lists and tables. Row Striping is a common pattern for multicolumn data tables.

People will try to get actionable information from the dashboard at a glance, without looking hard at every element on the page. So, when you show text, consider highlighting keywords and numbers so that they stand out from surrounding text.

Should your users be able to customize their dashboard displays? Many dashboards do offer customization, and your users may expect it. One way to customize a dashboard page is to rearrange the sections—iGoogle and My Yahoo! both offer Movable Panels to users, in addition to choosing which gadgets get shown.

Examples

My Yahoo! is a portal-style dashboard, showing weather, news, email, and other personalized information to a signed-in user (see Figure 2-17). This is the kind of window that someone would check frequently throughout the day or week. It can be rearranged via Movable Panels, and a user can decide which sections and widgets to show.



Location	Today	Tomorrow	Wednesday
Arlington, MA Partly Cloudy	74° / 52°	72° / 51°	74° / 55°

As of 12:11 pm EDT
- Cap collecting more and more oil, Coast Guard says (AP)
- Ohio tornado kills 7, wrecks cop cars, graduation (AP)
- 4 women dead, 3 wounded after Miami-area shooting (AP)
- NJ men accused in terror plot appear in court (AP)
- Egypt: Gaza blockade a failure, border stays open (AP)
- Stocks trade mixed after euro touches a 4-year low (AP)
- Overtreated: More medical care isn't always better (AP)

Last update: 12:11 pm EDT - Refresh

- Orleans needs more bucks for bang - 4 hours ago
- New Bedford man's murder trial scheduled to start - 4 hours ago
- Orange juice truck crash squeezes commute - 4 hours ago
- Northampton seeks state aid to pay for arson probe - 4 hours ago
- Feds hold meetings for frustrated NE fishermen - 6 hours ago

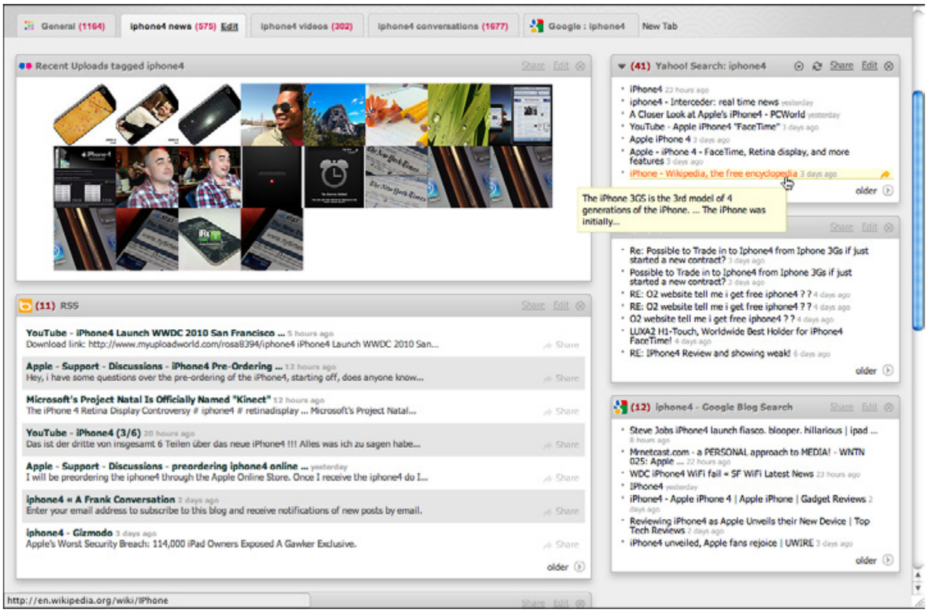
- Firefighters, Menino administration meet briefly over contract dispute - 2 hours ago
- Bello's Morning Briefing - 3 hours ago
- Little wing - 4 hours ago
- Former Globe editor and writer Robert Healy dies at age 84 - 21 hours ago
- Man dies after falling into Boston Harbor - 23 hours ago

- Charter School Blues - 3 days ago
- 'The Failure of the American Jewish Establishment': An Exchange - 3 days ago
- Jews, Poles & Nazis: The Terrible History - 3 days ago
- The Powerhouse of the New - 3 days ago
- More Lad Than Bad - 3 days ago

Schedule P/T conference this afternoon!

Figure 2-17. *My Yahoo!*

Netvibes offers fully customizable dashboards that can be hooked up to a broad-based web search (see Figure 2-18). With this, someone can stay abreast of conversations, pictures, and articles about a fast-moving topic. A tool tip shows the first few words of an article, which can help the user to decide whether to click through or not.


General (1164)
iphone4 news (575) Edit
iphone4 videos (302)
iphone4 conversations (1677)
Google : iphone4
New Tab
Recent Uploads tagged iphone4
Share Edit
(11) RSS
(41) Yahoo! Search: iphone4
(12) iphone4 - Google Blog Search
older

YouTube - iPhone4 Launch WWDC 2010 San Francisco ... 5 hours ago
Download link: http://www.myuploadworld.com/rosa8394/iphone4 iPhone4 Launch WWDC 2010 San...

Apple - Support - Discussions - iPhone4 Pre-Ordering ... 12 hours ago
Hey, i have some questions over the pre-ordering of the iPhone4, starting off, does anyone know...

Microsoft's Project Natal Is Officially Named "Kinect" 12 hours ago
The iPhone 4 Retina Display Controversy # iphone4 # retinadisplay ... Microsoft's Project Natal...

YouTube - iPhone4 (3/6) 20 hours ago
Das ist der dritte von insgesamt 6 Teilen über das neue iPhone4 !!! Alles was ich zu sagen habe...

Apple - Support - Discussions - preordering iphone4 online ... yesterday
I will be preordering the iphone4 through the Apple Online Store. Once I receive the iphone4 do I...

iphone4 « A Frank Conversation 2 days ago
Enter your email address to subscribe to this blog and receive notifications of new posts by email.

iphone4 - Gizmodo 3 days ago
Apple's Worst Security Breach: 114,000 iPad Owners Exposed A Gawker Exclusive.

http://en.wikipedia.org/wiki/IPhone

- iPhone4 23 hours ago
- iphone4 - Interceder: real time news yesterday
- A Closer Look at Apple's iPhone4 - PCWorld yesterday
- YouTube - Apple iPhone4 "FaceTime" 3 days ago
- Apple iPhone 4 3 days ago
- Apple - iPhone 4 - FaceTime, Retina display, and more features 3 days ago
- iPhone - Wikipedia, the free encyclopedia 3 days ago

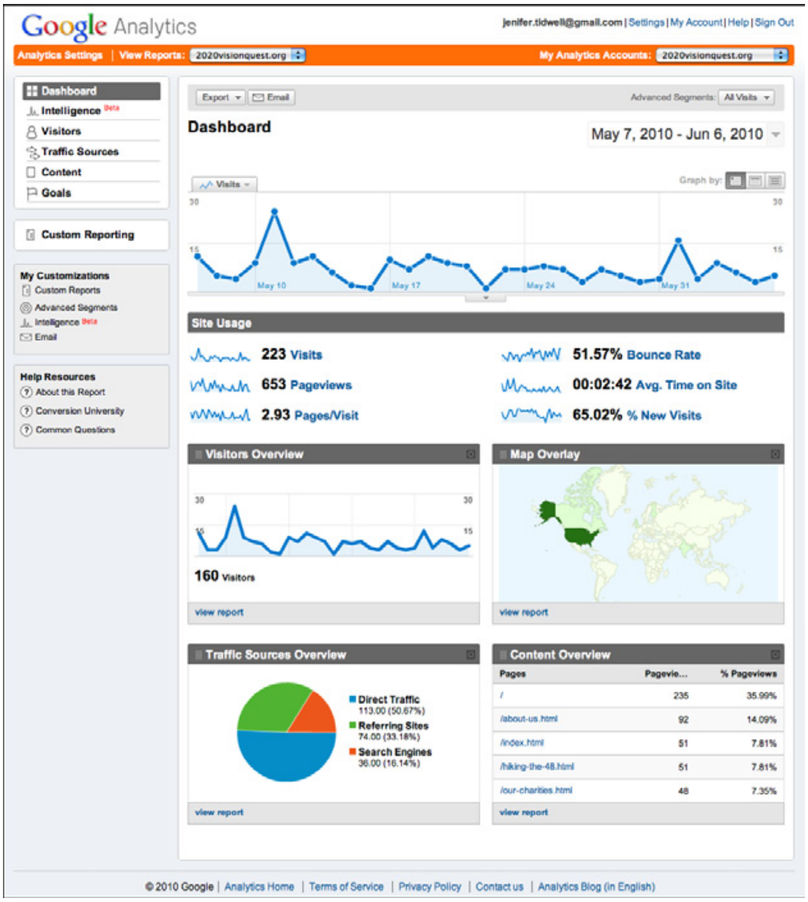
The iPhone 3GS is the 3rd model of 4 generations of the iPhone. ... The iPhone was initially...

- Re: Possible to Trade in to Iphone4 from Iphone 3Gs if just started a new contract? 3 days ago
- Possible to Trade in to Iphone4 from Iphone 3Gs if just started a new contract? 3 days ago
- RE: O2 website tell me i get free iphone4 ? ? 4 days ago
- RE: O2 website tell me i get free iphone4 ? ? 4 days ago
- O2 website tell me i get free iphone4 ? ? 4 days ago
- LUXA2 H1-Touch, Worldwide Best Holder for iPhone4 FaceTime! 4 days ago
- RE: IPhone4 Review and showing weak! 6 days ago

- Steve Jobs iPhone4 launch fiasco. blooper. hillarious | ipad ... 8 hours ago
- Mrnetcast.com - a PERSONAL approach to MEDIA! - WNTN 025: Apple ... 22 hours ago
- WDC iPhone4 WiFi fail « SF WiFi Latest News 23 hours ago
- IPhone4 yesterday
- iPhone4 - Apple iPhone 4 | Apple iPhone | Gadget Reviews 2 days ago
- Reviewing iPhone4 as Apple Unveils their New Device | Top Tech Reviews 2 days ago
- iPhone4 unveiled, Apple fans rejoice | UWIRE 3 days ago

Figure 2-18. *Netvibes*

Google Analytics is more like the Fitbit example in Figure 2-16 at the top of the pattern—it uses information graphics to show a visual snapshot of a system. In Figure 2-19, the system is a website, and the dashboard illustrates log data.



223 Visits
653 Pageviews
2.93 Pages/Visit
51.57% Bounce Rate
00:02:42 Avg. Time on Site
65.02% % New Visits

160 Visitors

Direct Traffic
113.00 (50.67%)
Referring Sites
74.00 (33.18%)
Search Engines
36.00 (16.14%)

Pages	Pagevie...	% Pageviews
/	235	35.99%
/about-us.html	92	14.09%
/index.html	51	7.81%
/hiking-the-48.html	51	7.81%
/our-charities.html	48	7.35%

Figure 2-19. *Google Analytics*

In other libraries

http://quince.infragistics.com/Patterns/Dashboard.aspx

http://patternry.com/p=information-dashboard/

Dashboard is one of the canonical RIA screen layouts described by Bill Scott and Theresa Neil. An article in *UX Magazine* explains these layouts:

http://www.uxmag.com/design/rich-internet-application-screen-design

Finally, you may be interested in Stephen Few's book, *Information Dashboard Design: The Effective Visual Communication of Data* (O'Reilly, *http://oreilly.com/catalog/9780596100162/*).

Canvas Plus Palette

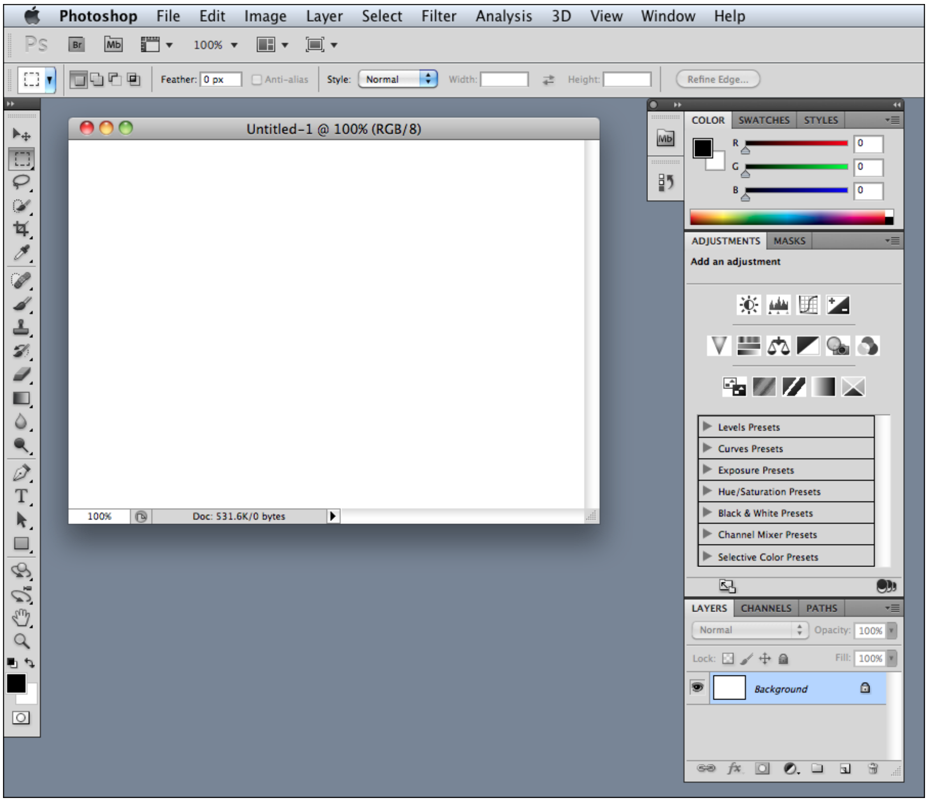


Figure 2-20. *Photoshop CS5*

What

Place an iconic palette next to a blank canvas; the user clicks on the palette buttons to create objects on the canvas.

Use when

You're designing any kind of graphical editor. A typical use case involves creating new objects and arranging them on some virtual space.

Why

This pair of panels—a palette with which to create things, and a canvas on which to put them—is so common that almost every user of desktop software has seen it. It's a natural mapping from familiar physical objects to the virtual on-screen world. And the palette takes advantage of visual recognition: the most common icons (paintbrush, hand, magnifying glass, etc.) are reused over and over again in different applications, with the same meaning each time.

How

Present a large empty area to the user as a canvas. It might be in its own window, as in Photoshop (Figure 2-20), or embedded in a single page with other tools. The user just needs to see the canvas side by side with the palette. Place additional tools—property panels, color swatches, and so on—to the right or bottom of the canvas, in small palette-like windows or panels.

The palette itself should be a grid of iconic buttons. They can have text in them if the icons are too cryptic; some GUI-builder palettes list the names of GUI components alongside their icons, for instance. So does Visio, with its palettes of complex visual constructs tailored for specific domains. But the presence of icons is necessary for users to recognize the palette for what it is.

Place the palette to the left or top of the canvas. It can be divided into subgroups, and you may want to use Module Tabs or Collapsible Panels to present those subgroups.

Most palette buttons should create the pictured object on the canvas. But many builders have successfully integrated other things, such as zoom mode and lassoing, into the palette. This started early; MacPaint mixed its modes into its palette (see Figure 2-24) and people have learned what the arrow, hand, and other icons do.

The gestures used to create items on a palette vary from one application to another. Some use drag-and-drop only; some use a single click on the palette and a single click on the canvas; and some use One-off Modes, Spring-Loaded Modes (see the previous edition of this book for both of these patterns), and other carefully designed gestures. I have always found that usability testing in this area is particularly important, since users' expectations vary greatly.

Examples

The Raven vector editor (Figure 2-21), by Aviary, and Sumo Paint (Figure 2-22) are two web-based graphic editors that follow this pattern faithfully.

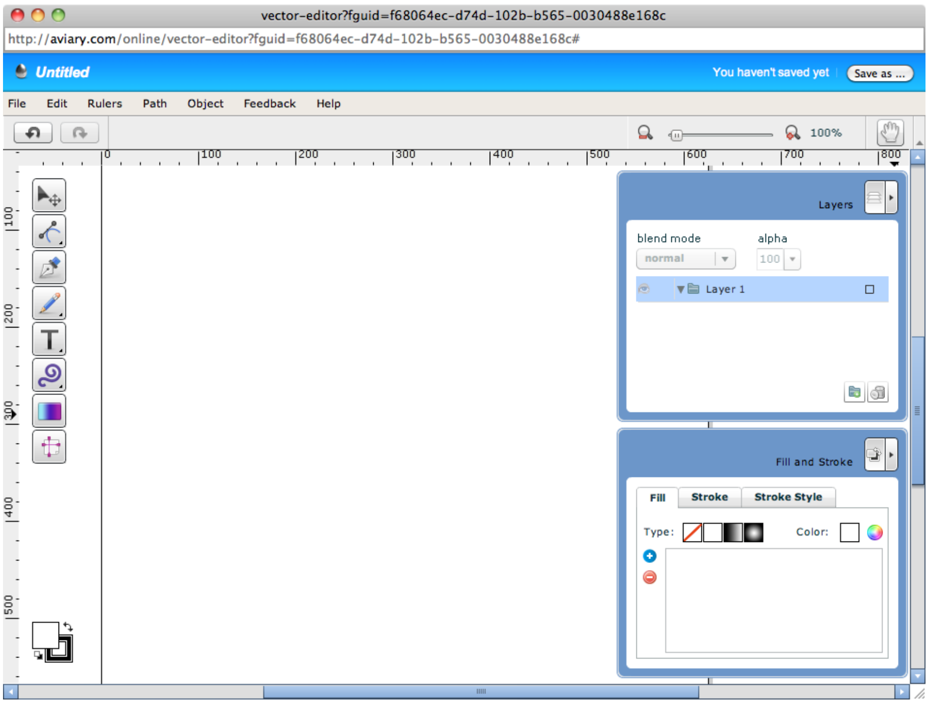

vector-editor?fguid=f68064ec-d74d-102b-b565-0030488e168c
http://aviary.com/online/vector-editor?fguid=f68064ec-d74d-102b-b565-0030488e168c#
Untitled
You haven't saved yet
Save as ...
File Edit Rulers Path Object Feedback Help
100%
Layers
blend mode
alpha
normal
100
Layer 1
Fill and Stroke
Fill
Stroke
Stroke Style
Type:
Color:

Figure 2-21. *Raven*

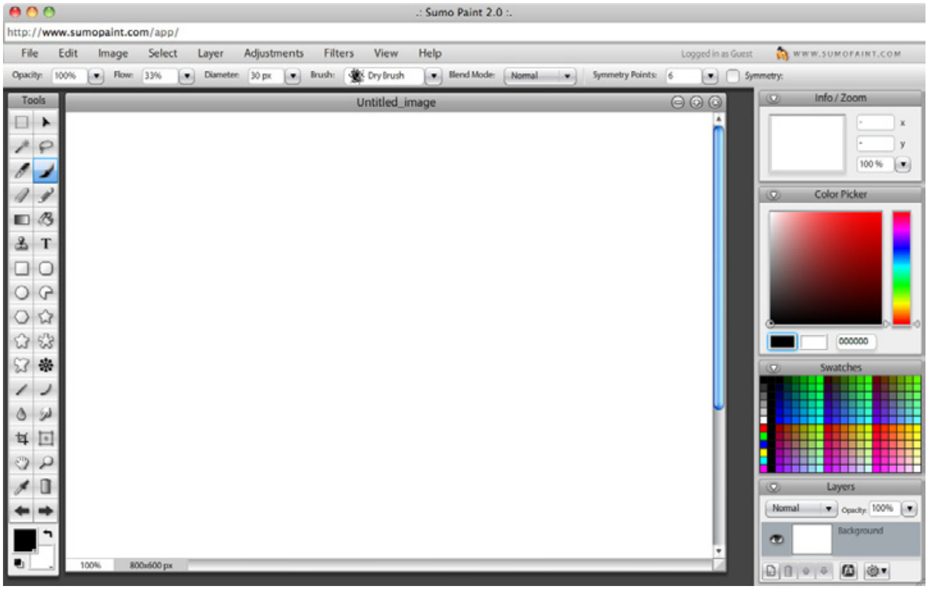


Figure 2-22. *Sumo Paint*

Adobe Flash Builder places its palette of Flex UI components at the lower left, as shown in Figure 2-23. Next to the icons, the palette shows text labels that clarify exactly what kind of component will be created for each palette item. Users of this application are assumed to be skilled enough to know the approximate names of the components they need. (Also shown is a drag operation from the palette to the canvas.)

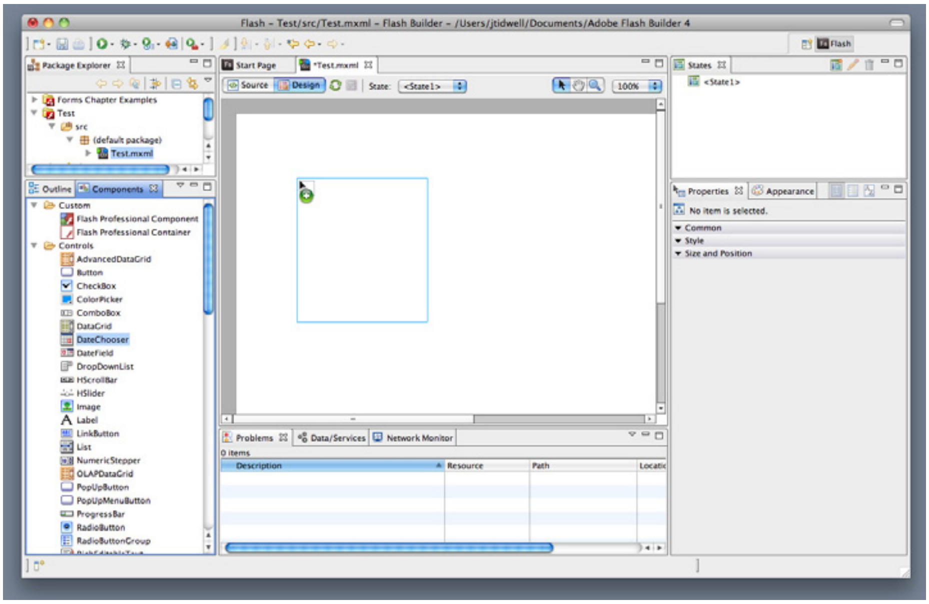


Figure 2-23. *Flash Builder*

Taking a trip back in time, let's look at one of the interfaces that popularized this pattern: MacPaint (see Figure 2-24). The pattern hasn't changed much since 1984—the basic elements are all there, in the same spatial configuration used by contemporary software such as Photoshop. Photoshop and other visual builders, in fact, still use many of MacPaint's icons more than 20 years later.

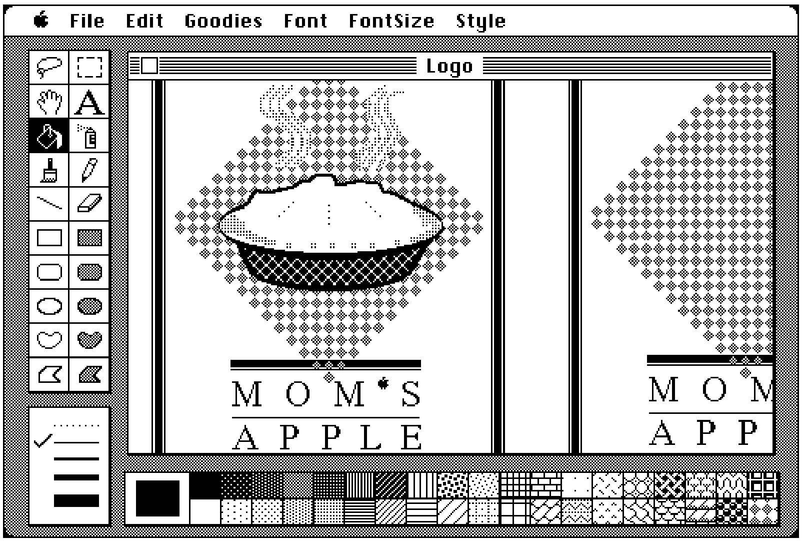


Figure 2-24. *MacPaint, circa 1984*

In other libraries

Palette/Canvas is one of the canonical RIA screen layouts described by Bill Scott and Theresa Neil. An article in *UX Magazine* explains these layouts:

http://www.uxmag.com/design/rich-internet-application-screen-design

Wizard

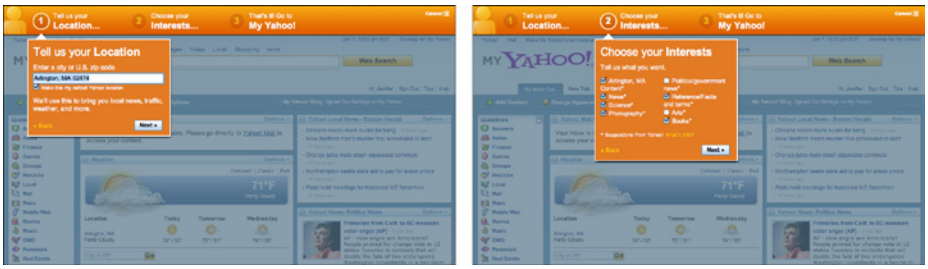

1 Tell us your Location...
2 Choose your Interests...
3 That's it! Go to My Yahoo!
Tell us your Location
Next »
Choose your Interests
Next »
71°F

Figure 2-25. *The first two steps of the My Yahoo! setup Wizard*

What

Lead the user through the interface step by step to do tasks in a prescribed order.

Use when

You are designing a UI for a task that is long or complicated, and that will usually be novel for users—not something that they do often or want much fine-grained control over (such as the installation of a software package). You're reasonably certain that the designer of the UI will know more than the user does about how best to get the task done.

Tasks that seem well suited for this approach tend to be either branched or very long and tedious—they consist of a series of user-made decisions that affect downstream choices.

The catch is that the user *must* be willing to surrender control over what happens when. In many contexts, that works out fine, since making decisions is an unwelcome burden for people doing certain things: "Don't make me think, just tell me what to do next." Think about moving through an unfamiliar airport—it's often easier to follow a series of signs than it is to figure out the airport's overall structure. You don't get to learn much about how the airport is designed, but you don't care about that.

But in other contexts, it backfires. Expert users often find Wizards frustratingly rigid and limiting. This is particularly true for software that supports creative processes such as writing, art, or coding. It's also true for users who actually *do* want to learn the software; Wizards don't show users what their actions really do, or what application state gets changed as choices are made. That can be infuriating to some people. Know your users well!

Why

Divide and conquer. By splitting up the task into a sequence of chunks, each of which can be dealt with in a discrete "mental space" by the user, you effectively simplify the task. You have put together a preplanned road map through the task, thus sparing the user the effort of figuring out the task's structure—all he needs to do is address each step in turn, trusting that if he follows the instructions, things will turn out OK.

But the very need for a Wizard indicates that a task may be too complicated. If you can simplify a task to the point where a short form or a few button clicks can do the trick instead, that's a better solution. (Keep in mind, too, that Wizards are considered a bit patronizing in some Asian cultures.)

How

"Chunking" the task

Break up the operations constituting the task into a series of chunks, or groups of operations. You may need to present these groups in a strict sequence, or not; sometimes there is value in breaking up a task into steps 1, 2, 3, and 4 just for convenience.

A thematic breakdown for an online purchase may include screens for product selection, payment information, a billing address, and a shipping address. The presentation order doesn't much matter because later choices don't depend on earlier choices. Putting related choices together just simplifies things for people filling out those forms.

You may decide to split up the task at decision points so that choices made by the user can change the downstream steps dynamically. In a software installation Wizard, for example, the user may choose to install optional packages that require yet more choices; if she chooses not to do a custom installation, those steps are skipped. Dynamic UIs are good at presenting branched tasks such as this, because the user never has to see anything that's irrelevant to the choices she made.

In either case, the hard part of designing this kind of UI is striking a balance between the sizes of the chunks and the number of them. It's silly to have a 2-step Wizard, and a 15-step Wizard is tedious. On the other hand, each chunk shouldn't be overwhelmingly large, or you've lost some benefits of this pattern.

Physical structure

Wizards that present each step in a separate page, usually navigated with Back and Next buttons, are the most obvious and well-known implementation of this pattern. They're not always the right choice, though, because now each step is an isolated UI space that shows no context—the user can't see what went before or what comes next. But an advantage of such Wizards is that they can devote each page to that step completely, including illustrations and explanations.

If you do this, allow the user to move back and forth at will through the task sequence. Offer a way for the user to step backward, or to otherwise change her mind about an earlier choice. Additionally, many UIs show a selectable map or overview of all the steps, getting some of the benefits of a Two-Panel Selector. (In contrast to that pattern, a Wizards implies a prescribed order—even if it's merely suggested—as opposed to completely random access.)

If you instead choose to keep all the steps on one page, you could use one of several patterns from Chapter 4:

- Titled Sections, with prominent numbers in the titles. This is most useful for tasks that aren't heavily branched, since all steps can be visible at once.
- Responsive Enabling, in which all the steps are present on the page, but each one remains disabled until the user has finished the previous step.

- Responsive Disclosure, in which you wait to show a step on the UI until the user finishes the previous one. Personally, I think this is the most elegant way to implement a short Wizard. It's dynamic, compact, and easy to use.

Good Defaults (from Chapter 8) are useful no matter how you arrange the steps. If the user is willing to turn over control of the process to you, odds are good she's also willing to let you pick reasonable defaults for choices she may not care much about, such as the location of a software installation.

Examples

The My Yahoo! example in Figure 2-25 illustrates many good features of a contemporary Wizard. It uses a "lightbox" technique to focus attention on the modal dialogs; it lays out a clear Sequence Map (Chapter 3) of steps to show the user what will happen; it's short, easy to use, and visually interesting; and it has a Cancel button in the upper right, as an Escape Hatch from the whole thing.

Mint's add-a-bank dialog (see Figure 2-26) doesn't use a numbered sequence of steps, nor does it use a permanent Next button. But it still has the quintessential Wizard quality of leading the user through a relatively complex series of steps, one screen at a time. Also, the list of steps on the lefthand side (which can't be clicked) gives the user an overview of what to expect.

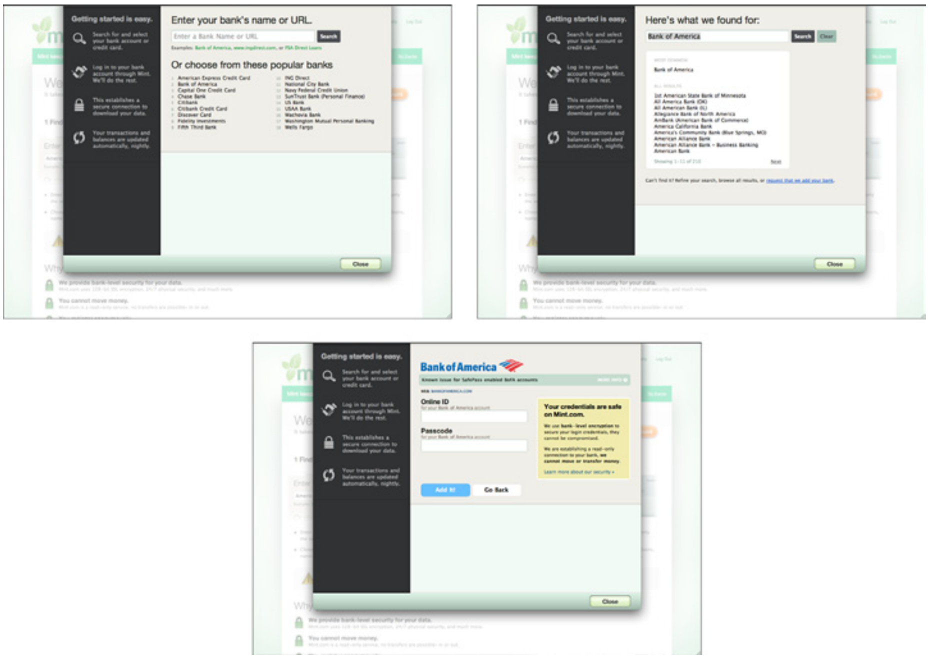
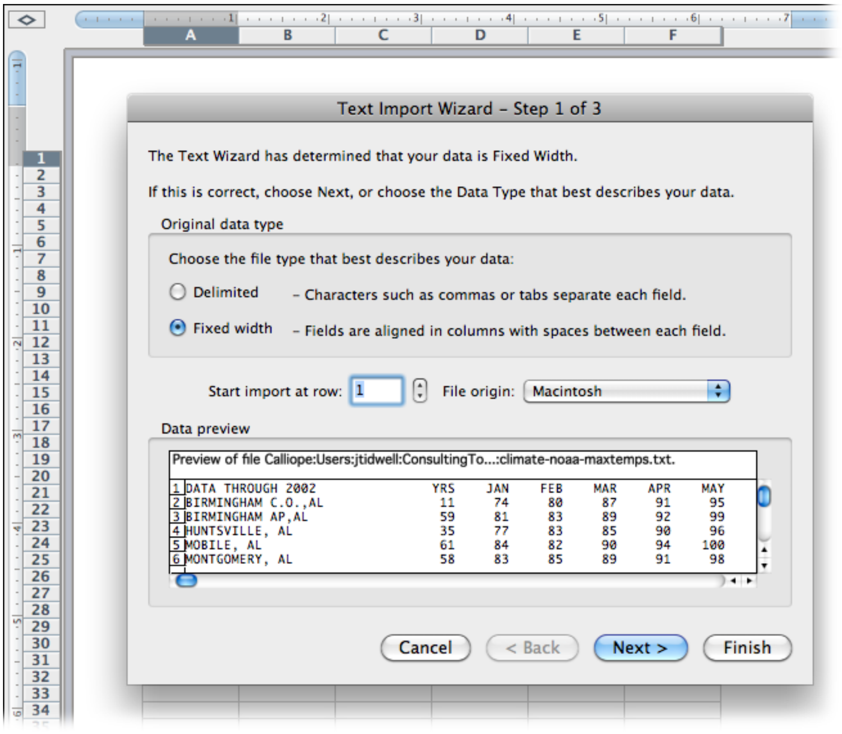

Getting started is easy.
Search for and select your bank account or credit card.
Log in to your bank account through Mint. We'll do the rest.
This establishes a secure connection to download your data.
Your transactions and balances are updated automatically, nightly.
Enter your bank's name or URL.
Search
Or choose from these popular banks
Here's what we found for:
Bank of America
Clear
Close
Online ID
Passcode
Your credentials are safe on Mint.com.
Add it!
Go Back

Figure 2-26. *Mint's add-a-bank Wizard*

The Microsoft Office designers have done away with many of its Wizards, but a few remain—and for good reason. Importing data into Excel is a potentially bewildering task. The Import Wizard (see Figure 2-27) is an old-school, traditional application Wizard with Back/Next buttons, branching, and no sequence map. But it works. Each screen lets you focus on the step at hand, without worrying about what comes next.



Text Import Wizard – Step 1 of 3

The Text Wizard has determined that your data is Fixed Width.

If this is correct, choose Next, or choose the Data Type that best describes your data.

Original data type

Choose the file type that best describes your data:

Delimited – Characters such as commas or tabs separate each field.

[✓ Fixed width] – Fields are aligned in columns with spaces between each field.

Start import at row: 1 File origin: Macintosh

Data preview

Preview of file Calliope:Users:jtidwell:ConsultingTo...:climate-noaa-maxtemps.txt.

```
1 DATA THROUGH 2002                 YRS    JAN    FEB    MAR    APR    MAY
2 BIRMINGHAM C.O.,AL                 11     74     80     87     91     95
3 BIRMINGHAM AP,AL                   59     81     83     89     92     99
4 HUNTSVILLE, AL                     35     77     83     85     90     96
5 MOBILE, AL                         61     84     82     90     94    100
6 MONTGOMERY, AL                     58     83     85     89     91     98
```

Figure 2-27. *Excel data import Wizard*

In other libraries

http://ui-patterns.com/patterns/Wizard

http://www.welie.com/patterns/showPattern.php?patternID=wizard

http://patternry.com/p=one-page-wizard/

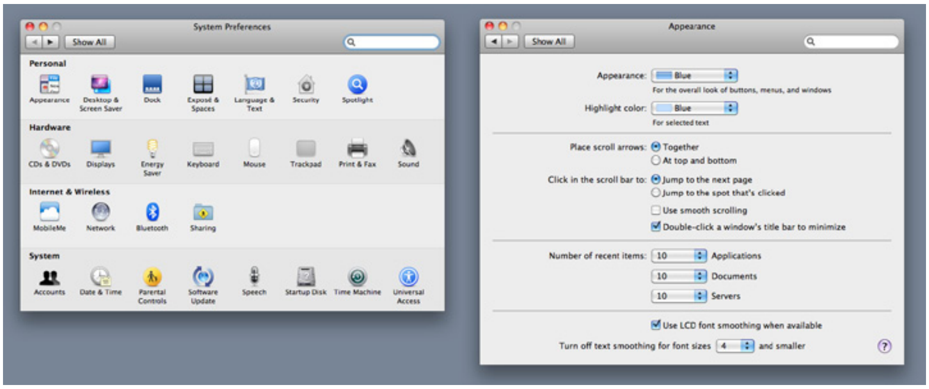
http://patternry.com/p=multiple-page-wizard/

http://quince.infragistics.com/Patterns/Wizard.aspx

Wizard is one of the canonical RIA screen layouts described by Bill Scott and Theresa Neil. An article in *UX Magazine* explains these layouts:

http://www.uxmag.com/design/rich-internet-application-screen-design

Settings Editor



Appearance: Blue
For the overall look of buttons, menus, and windows
Highlight color: Blue
For selected text

Place scroll arrows: [✓ Together] At top and bottom
Click in the scroll bar to: [✓ Jump to the next page] Jump to the spot that's clicked
☐ Use smooth scrolling
☑ Double-click a window's title bar to minimize

Number of recent items: 10 Applications
10 Documents
10 Servers

☑ Use LCD font smoothing when available
Turn off text smoothing for font sizes 4 and smaller

Figure 2-28. *Mac OS system preferences*

What

Provide an easy-to-find, self-contained page or window where users can change settings, preferences, or properties. Divide the content into separate tabs or pages, if you need to manage large numbers of settings.

Use when

You are designing any of the following applications or tools, or something similar:

- An application that has app-wide preferences.
- An operating system, mobile device, or platform that has system-wide preferences.
- A site or app for which a user must sign in—users will need to edit their accounts and profiles.
- An open-ended tool to create documents or other complex work products. Users may need to change a document's properties, an object within a document, or another item.
- A *product configurator*, which allows people to customize a product online. (This is really a different pattern, however, with slightly different requirements and constraints. See the Product Configurator pattern at *http://www.welie.com/patterns/showPattern.php?patternID=product-configurator*.)

Why

Though both use forms, a Settings Editor is distinct from a Wizard, and it has very particular requirements. A user must be able to find and edit a desired property without being forced to walk through a prescribed sequence of steps—random access is important.

To aid findability, the properties should be grouped into categories that are well labeled and make immediate sense.

Another important aspect of Settings Editor design is that people will use it for viewing existing settings, not just changing them. The design needs to communicate the values of those settings at a glance.

Experienced users have strong expectations for preference editors, account settings, and user profiles being in familiar places and behaving in familiar ways. Break these expectations at your own peril!

How

First, make it findable. Most platforms, both mobile and desktop, have a standard place to find application-wide preferences—follow the conventions, and don't try to be overly clever. Likewise, websites where people sign in usually put links to account settings and profiles where the username is shown, often in the upper-right or -left corner.

Second, group the properties into pages, and give those pages names that make it easy to guess what's on them. (Sometimes all the properties or settings fit on one page, but not often.) Card-sorting exercises with representative users can help you figure out the categories and their names. An outrageously large number of properties may require a three- or four-level hierarchy of groups, but be careful that users don't get frustrated at having to click 53 times to reach commonly needed properties.

Third, decide how to present these pages. Tabs, Two-Panel Selector, and One-Window Drilldown (Chapter 5) with an extensive page "menu" on the top page seem to be the most common layouts for Settings Editors.

The design of the forms themselves deserves an entire chapter. See Chapter 8 for patterns and techniques used in forms.

Finally, should you immediately apply changes that the user makes, or offer Save and Cancel buttons? That may depend on the type of settings you're working with. Platform-wide settings seem to be applied immediately when changed; settings on websites mostly use Save buttons; and application settings and preferences can go either way. It may not be a huge usability issue in any case. Follow an established convention if there is one, or see what the underlying technology requires; test it with users if you still have open questions.

Examples

Windows 7 offers the "outrageously large number of properties" that require a deep hierarchy of pages. The screenshots in Figure 2-29 illustrate the journey from the top of the Settings Editor down to the page that lets you change the desktop theme. (There's one more level, too—if you want to change the desktop icons or some other obscure thing, you need to launch a dialog from a link on the last screen.)

The designers mitigated some of the problems with a deep hierarchy, however. For instance, they put a list of shortcuts on the top-level page; these are probably the items users look for most often. They put a search box on the top and clickable Breadcrumbs beside it. And by putting lists of items on the top two levels, they show users which items fall into which categories.

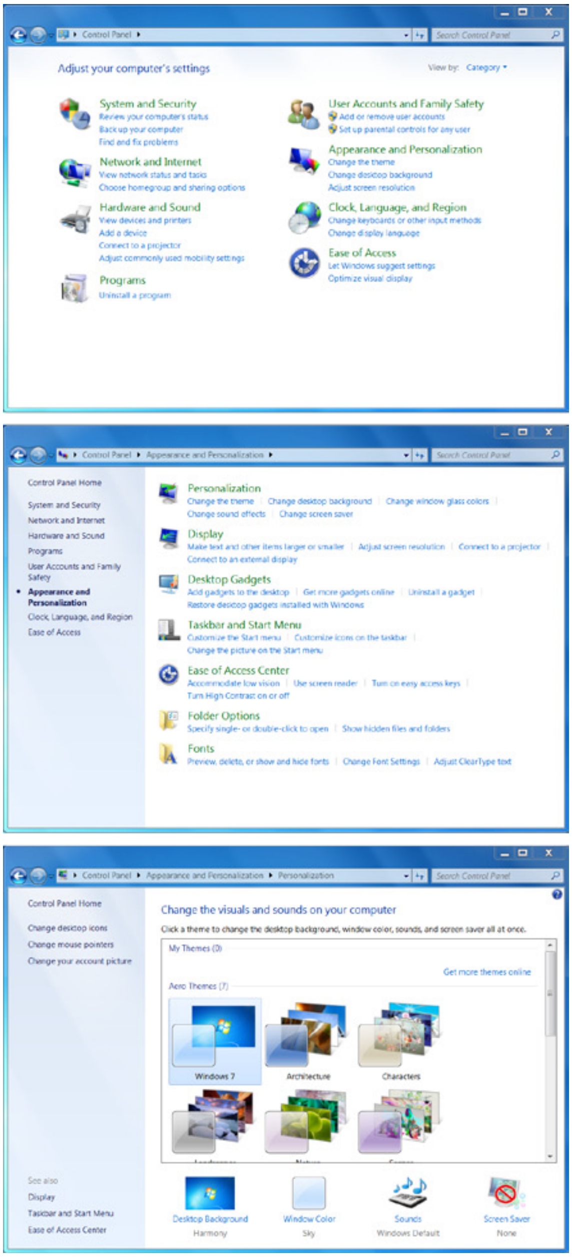
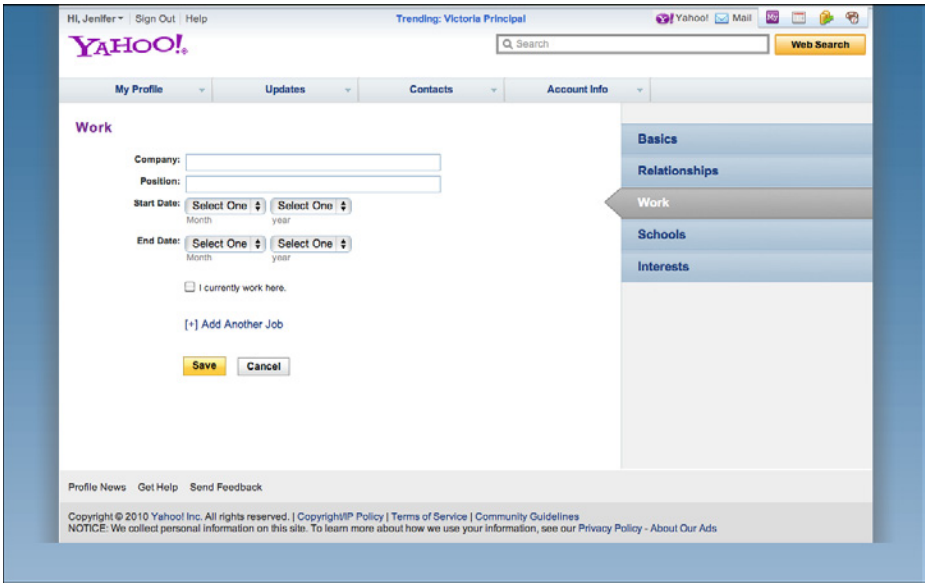

Control Panel
Search Control Panel
Adjust your computer's settings
View by: Category
System and Security
Review your computer's status
Back up your computer
Find and fix problems
Network and Internet
View network status and tasks
Choose homegroup and sharing options
Hardware and Sound
View devices and printers
Add a device
Connect to a projector
Adjust commonly used mobility settings
Programs
Uninstall a program
User Accounts and Family Safety
Add or remove user accounts
Set up parental controls for any user
Appearance and Personalization
Change the theme
Change desktop background
Adjust screen resolution
Clock, Language, and Region
Change keyboards or other input methods
Change display language
Ease of Access
Let Windows suggest settings
Optimize visual display
Control Panel › Appearance and Personalization
Control Panel Home
System and Security
Network and Internet
Hardware and Sound
Programs
User Accounts and Family Safety
Appearance and Personalization
Clock, Language, and Region
Ease of Access
Personalization
Change the theme | Change desktop background | Change window glass colors | Change sound effects | Change screen saver
Display
Make text and other items larger or smaller | Adjust screen resolution | Connect to a projector | Connect to an external display
Desktop Gadgets
Add gadgets to the desktop | Get more gadgets online | Uninstall a gadget | Restore desktop gadgets installed with Windows
Taskbar and Start Menu
Customize the Start menu | Customize icons on the taskbar | Change the picture on the Start menu
Ease of Access Center
Accommodate low vision | Use screen reader | Turn on easy access keys | Turn High Contrast on or off
Folder Options
Specify single- or double-click to open | Show hidden files and folders
Fonts
Preview, delete, or show and hide fonts | Change Font Settings | Adjust ClearType text
Control Panel › Appearance and Personalization › Personalization
Control Panel Home
Change desktop icons
Change mouse pointers
Change your account picture
Change the visuals and sounds on your computer
Click a theme to change the desktop background, window color, sounds, and screen saver all at once.
My Themes (0)
Get more themes online
Aero Themes (7)
Windows 7
Architecture
Characters
See also
Display
Taskbar and Start Menu
Ease of Access Center
Desktop Background
Harmony
Window Color
Sky
Sounds
Windows Default
Screen Saver
None

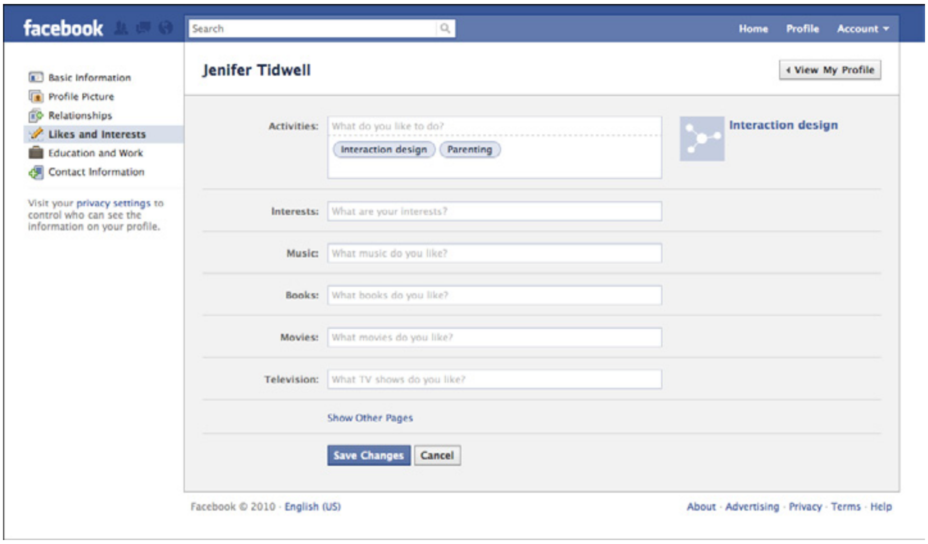
Figure 2-29. *Windows 7 settings editor*

Yahoo! (Figure 2-30) and Facebook (Figure 2-31) both use tabs to present the pages of their profile editors. The Yahoo! example is actually two-level; see the tabs across the top.



Copyright © 2010 Yahoo! Inc. All rights reserved. | Copyright/IP Policy | Terms of Service | Community Guidelines
NOTICE: We collect personal information on this site. To learn more about how we use your information, see our Privacy Policy - About Our Ads

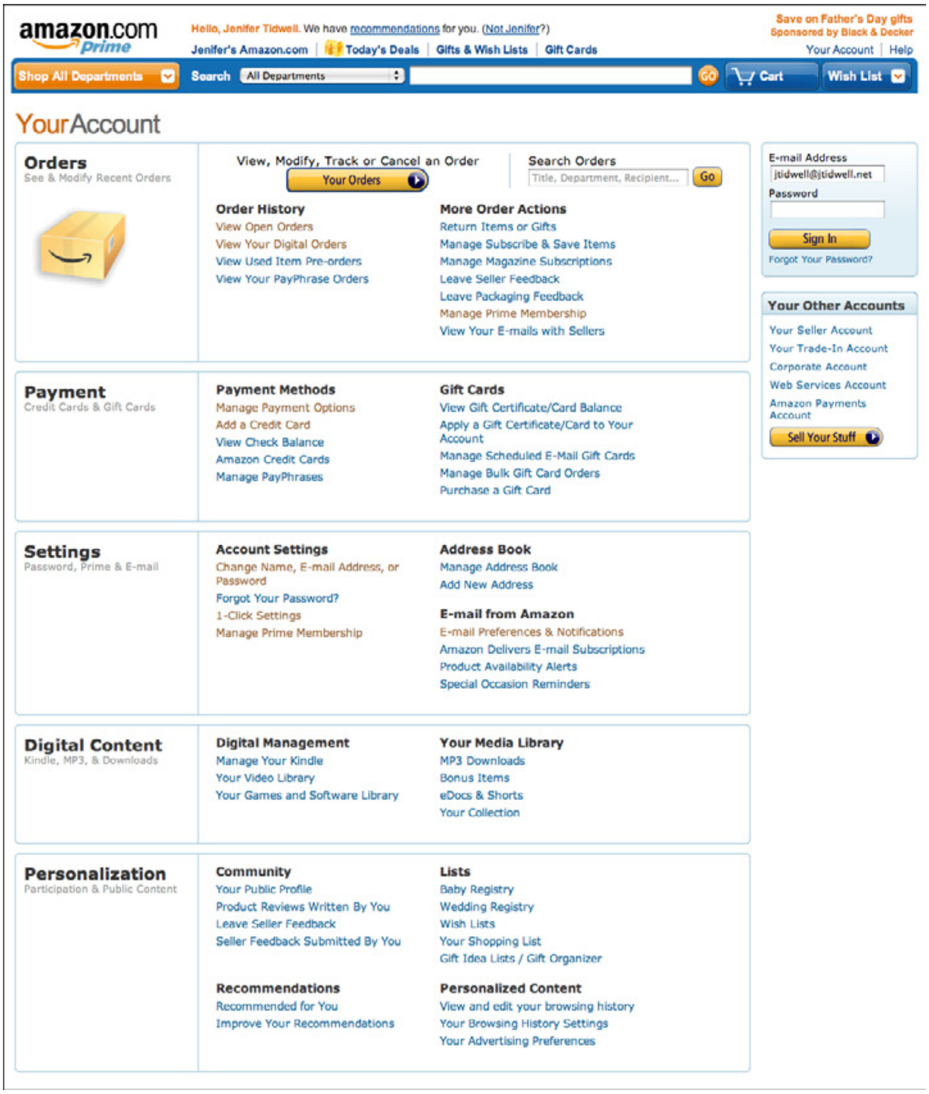
Figure 2-30. *Yahoo! profile settings*



Visit your privacy settings to control who can see the information on your profile.

Figure 2-31. *Facebook profile settings*

Amazon has one single link for all account-related information: "Your Account" (see Figure 2-32). This Menu Page (Chapter 3) lists account settings alongside order information, credit card management, digital content, and even community and wish-list activity. The clean, tight page organization is terrific—if I have any questions about what's going on with my relationship to Amazon, I know I can find it somewhere on this page. (Contrast this to Facebook, which habitually obscures certain profile information behind complicated design.)



Hello, Jenifer Tidwell. We have recommendations for you. (Not Jenifer?)

Save on Father's Day gifts
Sponsored by Black & Decker

Your Account

Orders
See & Modify Recent Orders

View, Modify, Track or Cancel an Order

Search Orders
Title, Department, Recipient...

Order History
View Open Orders
View Your Digital Orders
View Used Item Pre-orders
View Your PayPhrase Orders

More Order Actions
Return Items or Gifts
Manage Subscribe & Save Items
Manage Magazine Subscriptions
Leave Seller Feedback
Leave Packaging Feedback
Manage Prime Membership
View Your E-mails with Sellers

Payment
Credit Cards & Gift Cards

Payment Methods
Manage Payment Options
Add a Credit Card
View Check Balance
Amazon Credit Cards
Manage PayPhrases

Gift Cards
View Gift Certificate/Card Balance
Apply a Gift Certificate/Card to Your Account
Manage Scheduled E-Mail Gift Cards
Manage Bulk Gift Card Orders
Purchase a Gift Card

Settings
Password, Prime & E-mail

Account Settings
Change Name, E-mail Address, or Password
Forgot Your Password?
1-Click Settings
Manage Prime Membership

Address Book
Manage Address Book
Add New Address

E-mail from Amazon
E-mail Preferences & Notifications
Amazon Delivers E-mail Subscriptions
Product Availability Alerts
Special Occasion Reminders

Digital Content
Kindle, MP3, & Downloads

Digital Management
Manage Your Kindle
Your Video Library
Your Games and Software Library

Your Media Library
MP3 Downloads
Bonus Items
eDocs & Shorts
Your Collection

Personalization
Participation & Public Content

Community
Your Public Profile
Product Reviews Written By You
Leave Seller Feedback
Seller Feedback Submitted By You

Lists
Baby Registry
Wedding Registry
Wish Lists
Your Shopping List
Gift Idea Lists / Gift Organizer

Recommendations
Recommended for You
Improve Your Recommendations

Personalized Content
View and edit your browsing history
Your Browsing History Settings
Your Advertising Preferences

E-mail Address
jtidwell@jtidwell.net
Password
Forgot Your Password?

Your Other Accounts
Your Seller Account
Your Trade-In Account
Corporate Account
Web Services Account
Amazon Payments Account

Figure 2-32. *Amazon account settings*

Alternative Views

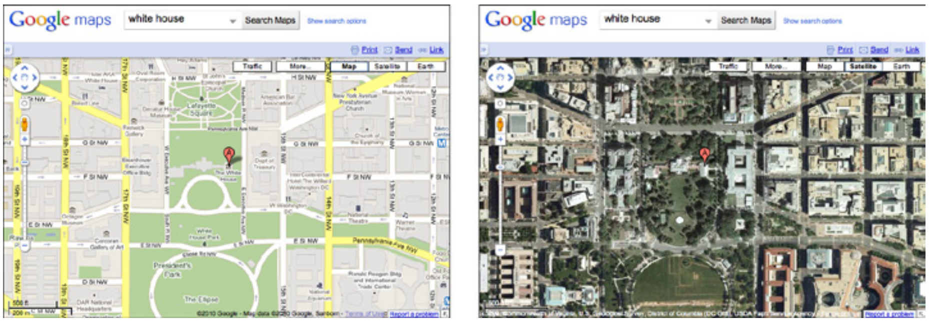


Figure 2-33. *Google Maps*

What

Let the user choose among alternative views that are substantially different from the default view.

Use when

You're building something that views or edits a complex document, list, website, map, or other content. Maybe you already provide some customizability—font size, language, sort order, zoom level, and so forth—but those lightweight changes don't go far enough to accommodate all the things people typically do with it.

You may face design requirements that directly conflict with each other. You can't find a way to show both feature set A and feature set B at the same time, so you need to design both separately and let the user choose between them.

Why

Try as you might, you can't always accommodate all possible usage scenarios in a single design. For instance, printing is typically problematic for websites because the information display requirements differ—navigation and interactive gizmos should be removed, for instance, and the remaining content reformatted to fit the printer paper.

There are several other reasons for Alternative Views:

- Users have preferences with regard to speed, visual style, and other factors.
- A user might need to temporarily view data through a different "lens" or perspective in order to gain insight into a problem. Consider a map user switching between views of street information and topographic information (see Figure 2-33 at the top of the pattern).

- If a user is editing a slideshow or website, for instance, he may do most of his editing while using a "structural" view of the document, containing editing handles, markers for invisible content, layout guides, private notes, and so on. But sometimes he will want to see the work as an end user would see it.

How

Choose a few usage scenarios that cannot easily be served by the application's or site's normal mode of operation. Design specialized views for those scenarios, and present them as alternatives within the same window or screen.

In these alternative views, some information might be added and some might be taken away, but the core content should remain more or less the same. A common way to switch views is to change the rendering of a list; file finders in both Windows and Mac OS let users switch from lists to Thumbnail Grids to Tree Tables to Cascading Lists to Carousels, for instance.

If you need to strip down the interface—for use by a printer or screen reader, for instance—consider removing secondary content, shrinking or eliminating images, and cutting out all navigation but the most basic.

Put a "switch" for the mode somewhere on the main interface. It doesn't have to be prominent; PowerPoint and Word used to put their mode buttons in the lower-left corner, which is an easily overlooked spot on any interface. Most applications represent the alternative views with iconic buttons. Make sure it's easy to switch back to the default view, too. As the user switches back and forth, preserve all of the application's current state—selections, the user's location in the document, uncommitted changes, undo/redo operations, and so on—because losing them will surprise the user.

Applications that "remember" their users often retain the user's alternative-view choice from one use to the next. In other words, if a user decides to switch to an alternative view, the application will just use that view by default next time. Websites can do this by using cookies; desktop applications can keep track of preferences per user; an app on a mobile device can simply remember what view it used the last time it was invoked. Web pages may have the option of implementing Alternative Views as alternative CSS pages. This is how some sites switch between ordinary pages and print-only pages, for example.

Examples

In Figures 2-34 and 2-35, two graphic editors, Microsoft PowerPoint and Adobe Illustrator, show different views of a work product. In the slideshow, the user normally edits one slide at a time, along with its notes, but sometimes the user needs to see all the slides laid out on a virtual table. (Not shown is a third view, in which PowerPoint takes over the screen and actually plays the slideshow.) In the website example, Illustrator shows an "outline" view of the graphic objects in the document—most useful if you have a lot of complex and layered objects—and the normal, fully rendered view of the artwork. The outline view speeds up work considerably.

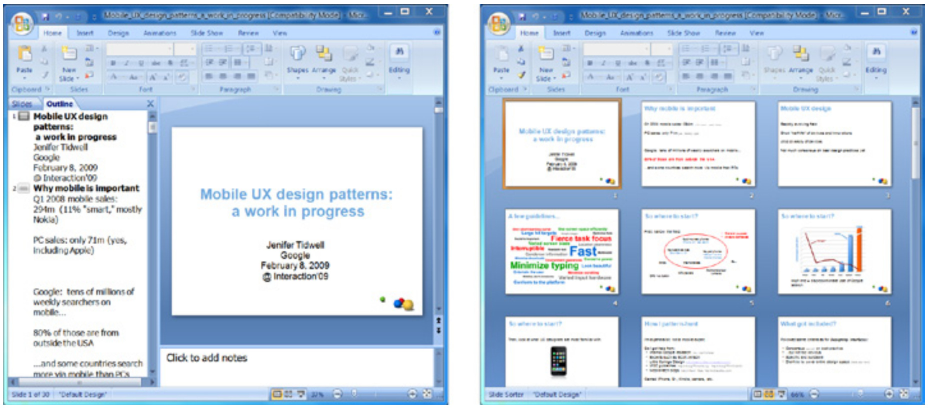

Slides
Outline
Mobile UX design patterns:
a work in progress
Jenifer Tidwell
Google
February 8, 2009
@ Interaction'09
Why mobile is important
Q1 2008 mobile sales: 294m (11% "smart," mostly Nokia)
PC sales: only 71m (yes, including Apple)
Google: tens of millions of weekly searchers on mobile...
80% of those are from outside the USA
...and some countries search more via mobile than PCs
Click to add notes
Slide 1 of 30
"Default Design"
Slide Sorter

Figure 2-34. *PowerPoint alternative views*

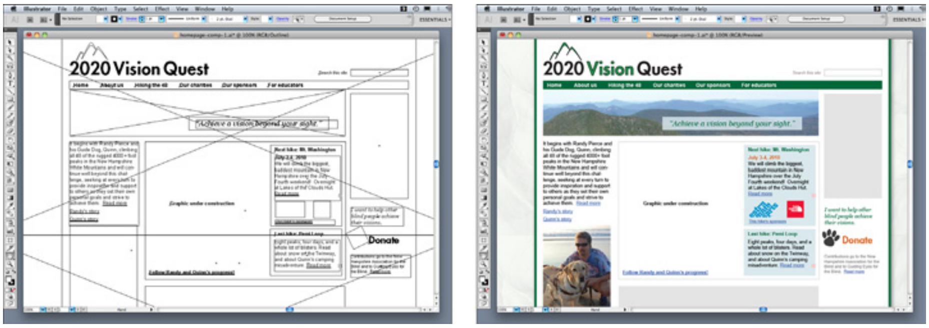
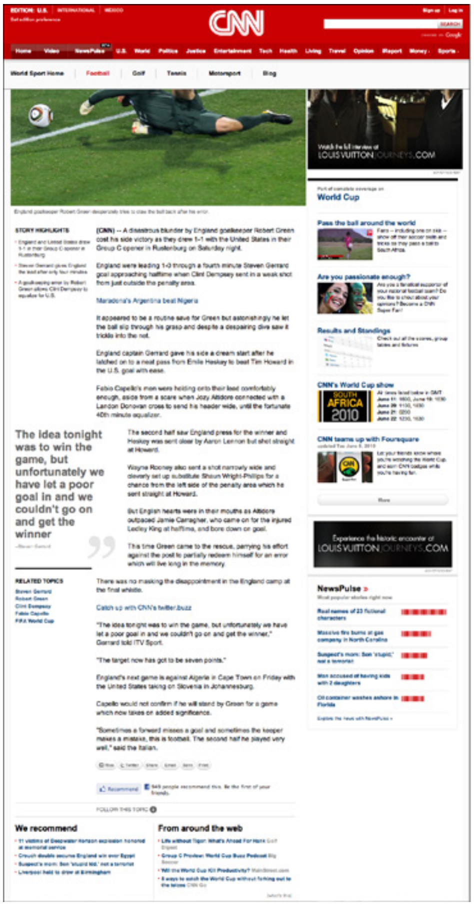

2020 Vision Quest
Home
About us
Hiking the 48
Our charities
Our sponsors
For educators
"Achieve a vision beyond your sight."
Graphic under construction
Donate
Follow Randy and Quinn's progress!

Figure 2-35. *Illustrator alternative views*

News sites and blogs often show lots of "extras" in the margins around an article, many of which are animated or interactive. But some sites considerately provide a print view—a version of the article that has none of that extra stuff. The formatting is simple, and the branding is minimal. The example in Figure 2-36 is from CNN.



England goalkeeper Robert Green desperately tries to claw the ball back after his error.

STORY HIGHLIGHTS

- England and United States draw 1-1 in their Group C opener in Rustenburg
- Steven Gerrard gives England the lead after only four minutes
- A goalkeeping error by Robert Green allows Clint Dempsey to equalize for U.S.

(CNN) -- A disastrous blunder by England goalkeeper Robert Green cost his side victory as they drew 1-1 with the United States in their Group C opener in Rustenburg on Saturday night.

England were leading 1-0 through a fourth minute Steven Gerrard goal approaching halftime when Clint Dempsey sent in a weak shot from just outside the penalty area.

Maradona's Argentina beat Nigeria

It appeared to be a routine save for Green but astonishingly he let the ball slip through his grasp and despite a despairing dive saw it trickle into the net.

England captain Gerrard gave his side a dream start after he latched on to a neat pass from Emile Heskey to beat Tim Howard in the U.S. goal with ease.

Fabio Capello's men were holding onto their lead comfortably enough, aside from a scare when Jozy Altidore connected with a Landon Donovan cross to send his header wide, until the fortunate 40th minute equalizer.

The idea tonight was to win the game, but unfortunately we have let a poor goal in and we couldn't go on and get the winner
—Steven Gerrard

The second half saw England press for the winner and Heskey was sent clear by Aaron Lennon but shot straight at Howard.

Wayne Rooney also sent a shot narrowly wide and cleverly set up substitute Shaun Wright-Phillips for a chance from the left side of the penalty area which he sent straight at Howard.

But English hearts were in their mouths as Altidore outpaced Jamie Carragher, who came on for the injured Ledley King at halftime, and bore down on goal.

This time Green came to the rescue, parrying his effort against the post to partially redeem himself for an error which will live long in the memory.

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"The target now has got to be seven points."

England's next game is against Algeria in Cape Town on Friday with the United States taking on Slovenia in Johannesburg.

Capello would not confirm if he will stand by Green for a game which now takes on added significance.

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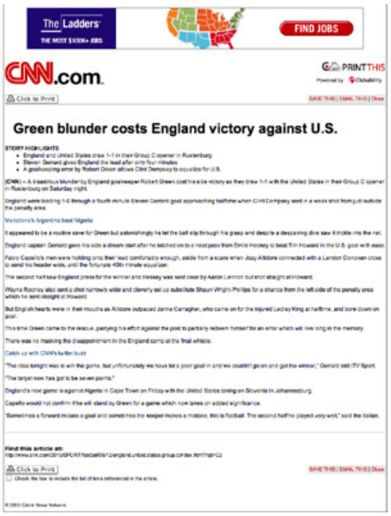

Green blunder costs England victory against U.S.

STORY HIGHLIGHTS

- England and United States draw 1-1 in their Group C opener in Rustenburg
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"Sometimes a forward misses a goal and sometimes the keeper makes a mistake, this is football. The second half he played very well," said the Italian.

Find this article at:
http://www.cnn.com/2010/SPORT/football/06/12/england.united.states.group.c/index.html?hpt=C2

Check the box to include the list of links referenced in the article.

© 2008 Cable News Network

Figure 2-36. *CNN web and print views of an article*

In other libraries

http://quince.infragistics.com/Patterns/Alternative%20Views.aspx

Many Workspaces

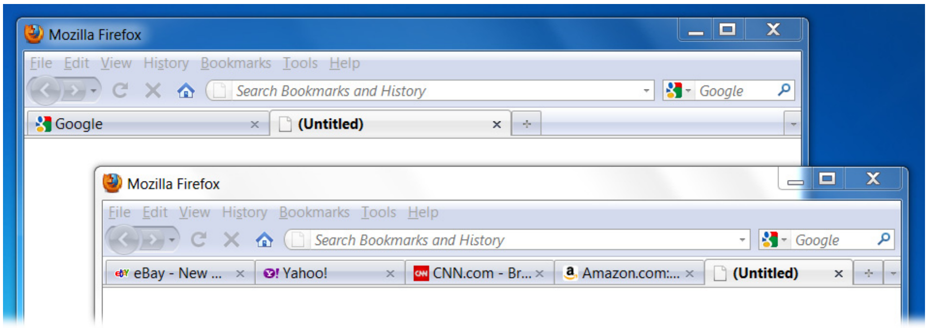

Mozilla Firefox
File Edit View History Bookmarks Tools Help
Search Bookmarks and History
Google
Google
(Untitled)
Mozilla Firefox
File Edit View History Bookmarks Tools Help
Search Bookmarks and History
Google
eBay - New ...
Yahoo!
CNN.com - Br...
Amazon.com:...
(Untitled)

Figure 2-37. *Firefox windows and tabs*

What

Use multiple top-level tabs, tab groups, and windows so that users can view more than one page, project, file, or context at a time. Let users place these workspaces side by side if possible.

Use when

You're building an application that views or edits any type of content—websites, documents, images, or entire projects that include many files.

Designers of conventional websites don't generally need to think about this. All the common browsers supply perfectly good implementations of this pattern, using tabs and browser windows (as shown in Figure 2-37 at the top of the pattern).

Applications whose central organizing structure is a personal News Stream may not need Many Workspaces, either. Email clients, personal Facebook pages, and so forth only show the one News Stream that matters to the user; multiple windows don't add much value. That being said, email clients often let a user launch multiple email messages in different windows. Some Twitter applications can show several filtered streams side by side—they might show a search-based feed, then a feed from a custom list, then a feed of popular retweets, for instance. (See the TweetDeck example in Figure 2-38.)

Why

People multitask. They go off on tangents, abandon trains of thought, stop working on task A to switch to task B, and eventually come back to something they left hanging. One way or the other, they will multitask, so you might as well support it directly with a well-designed interface for doing so.

Side-by-side comparisons between two or more items can help people learn and gain insight. Let users pull up pages or documents next to each other without having to laboriously switch context from one to another.

This pattern directly supports some Chapter 1 patterns, such as Prospective Memory (a user may leave a window open as a self-reminder to finish something) and Safe Exploration (because there's no cost in opening up an additional workspace while leaving the original one where it is).

How

Choose one or more ways to show multiple workspaces. Many well-known applications use the following:

- Tabs
- Separate operating-system windows
- Columns or panels within a window
- Split windows, with the ability to adjust the splitters interactively

If you deal with fairly simple content in each workspace—such as text files, lists, or News Streams—split windows or panels work fine. More complex content might warrant entire tab pages or windows of their own so that a user can see a larger area at once.

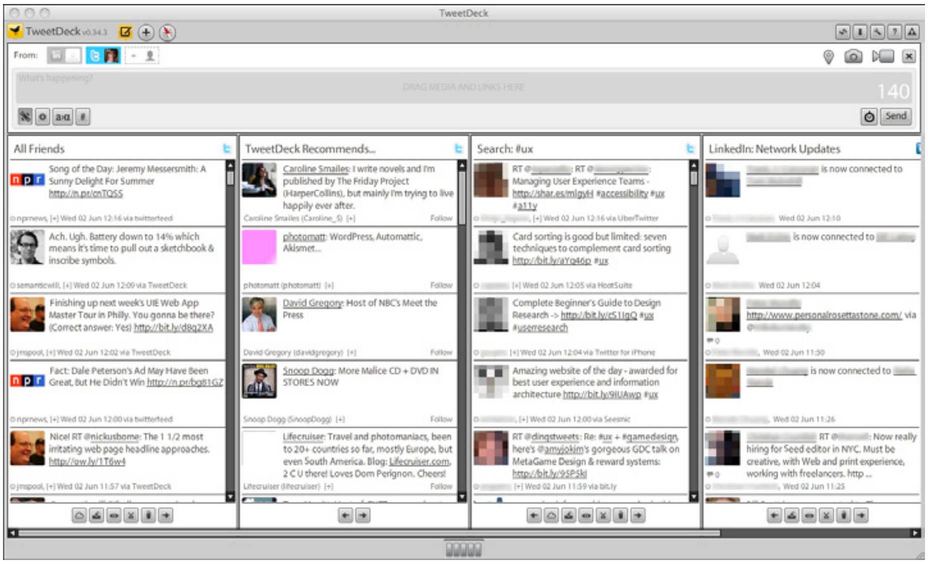
The most complicated cases that I've seen involve development environments for entire coding projects. When a project is open, a user might be looking at several code files, stylesheets, command windows (where compilers and other tools get run), output or logfiles, or even visual editors. This means that many, many windows or panels can be open at once.

(And then, perhaps, the user might temporarily switch to another project, with another set of open files and editors! Some development environments can support that.)

When users close some web browsers, such as Chrome, the set of workspaces (all open web pages, in tabs and windows) gets automatically saved for later use. Then when the user restarts the browser, her entire set of previously opened web pages is restored, almost as she left it. This is especially nice when the browser or machine has crashed. Consider designing in this feature, as it would be a kindness to your users.

Examples

TweetDeck is a News Stream–type application that can show many streams at once: filtered Twitter feeds, non-Twitter sources, and so on. The example in Figure 2-38 shows several typical TweetDeck columns. This maintains the spirit of a News Stream by keeping all the updates visible at once; had these columns been in different tabs or windows, a user wouldn't be able to see all the updates as they happen.



All Friends

Song of the Day: Jeremy Messersmith: A Sunny Delight For Summer http://n.pr/cnTQSS
nprnews, [+] Wed 02 Jun 12:16 via twitterfeed

Ach. Ugh. Battery down to 14% which means it's time to pull out a sketchbook & inscribe symbols.
semanticwill, [+] Wed 02 Jun 12:09 via TweetDeck

Finishing up next week's UIE Web App Master Tour in Philly. You gonna be there? (Correct answer: Yes) http://bit.ly/d8q2XA
jmspool, [+] Wed 02 Jun 12:02 via TweetDeck

Fact: Dale Peterson's Ad May Have Been Great, But He Didn't Win http://n.pr/bg81GZ
nprnews, [+] Wed 02 Jun 12:00 via twitterfeed

Nice! RT @nickusborne: The 1 1/2 most irritating web page headline approaches. http://ow.ly/1T6w4
jmspool, [+] Wed 02 Jun 11:57 via TweetDeck

TweetDeck Recommends...

Caroline Smailes: I write novels and I'm published by The Friday Project (HarperCollins), but mainly I'm trying to live happily ever after.
Caroline Smailes (Caroline_S) [+] Follow

photomatt: WordPress, Automattic, Akismet...
photomatt (photomatt) [+] Follow

David Gregory: Host of NBC's Meet the Press
David Gregory (davidgregory) [+] Follow

Snoop Dogg: More Malice CD + DVD IN STORES NOW
Snoop Dogg (SnoopDogg) [+] Follow

Lifecruiser: Travel and photomaniacs, been to 20+ countries so far, mostly Europe, but even South America. Blog: Lifecruiser.com, 2 C U there! Loves Dom Perignon. Cheers!
Lifecruiser (lifecruiser) [+] Follow

Search: #ux

RT @[redacted]: RT @[redacted]: Managing User Experience Teams - http://shar.es/mlgyH #accessibility #ux #a11y
[redacted], [+] Wed 02 Jun 12:16 via UberTwitter

Card sorting is good but limited: seven techniques to complement card sorting http://bit.ly/aYq46p #ux
[redacted] [+] Wed 02 Jun 12:05 via HootSuite

Complete Beginner's Guide to Design Research -> http://bit.ly/cS1IgQ #ux #userresearch
[redacted] [+] Wed 02 Jun 12:04 via Twitter for iPhone

Amazing website of the day - awarded for best user experience and information architecture http://bit.ly/9lUAwp #ux
[redacted], [+] Wed 02 Jun 12:00 via Seesmic

RT @dingstweets: Re: #ux + #gamedesign, here's @amyjokim's gorgeous GDC talk on MetaGame Design & reward systems: http://bit.ly/9SP5kl
[redacted] [+] Wed 02 Jun 11:59 via bit.ly

LinkedIn: Network Updates

[redacted] is now connected to [redacted]
[redacted] Wed 02 Jun 12:10

[redacted] is now connected to [redacted]
[redacted] Wed 02 Jun 12:04

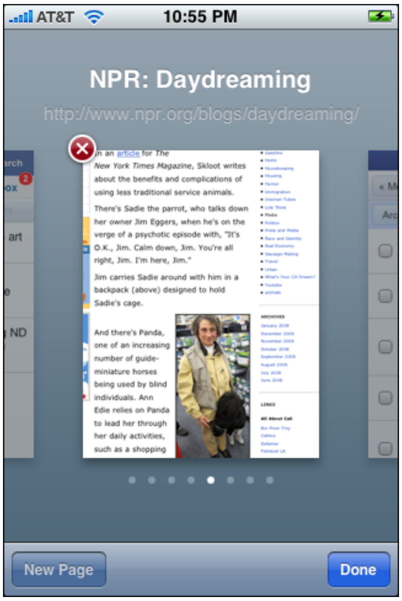
[redacted] http://www.personalrosettastone.com/ via @[redacted]
0
[redacted], Wed 02 Jun 11:50

[redacted] is now connected to [redacted]
[redacted], Wed 02 Jun 11:26

[redacted] RT @[redacted]: Now really hiring for Seed editor in NYC. Must be creative, with Web and print experience, working with freelancers. http ...
0
[redacted], Wed 02 Jun 11:25

Figure 2-38. *TweetDeck*

On tiny mobile screens, you don't have room to show anything side by side. Safari on the iPhone has solved this problem by letting the user open up to eight websites at a time, then using a Carousel to shuffle between them (see Figure 2-39). A user swipes to the right and left to reach the other windows.



In an article for The New York Times Magazine, Skloot writes about the benefits and complications of using less traditional service animals.

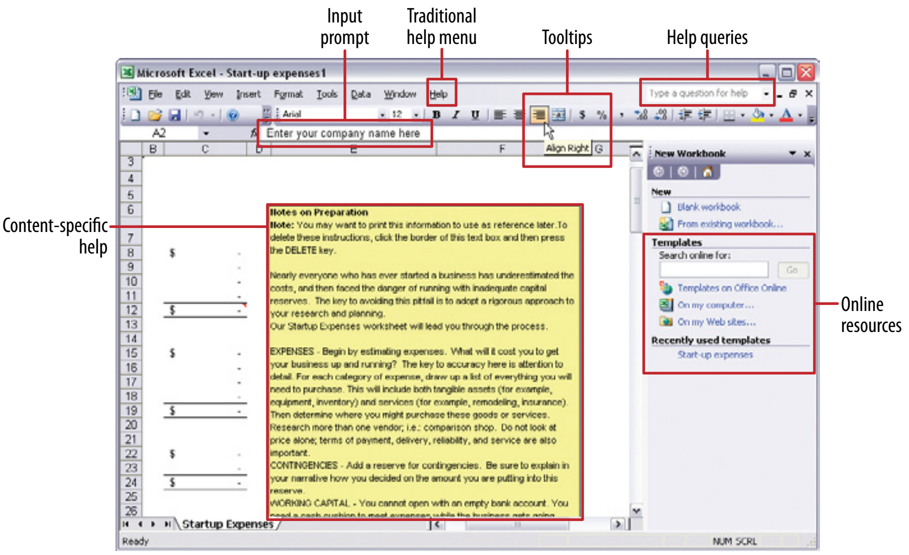
There's Sadie the parrot, who talks down her owner Jim Eggers, when he's on the verge of a psychotic episode with, "It's O.K., Jim. Calm down, Jim. You're all right, Jim. I'm here, Jim."

Jim carries Sadie around with him in a backpack (above) designed to hold Sadie's cage.

And there's Panda, one of an increasing number of guide-miniature horses being used by blind individuals. Ann Edie relies on Panda to lead her through her daily activities, such as a shopping

Figure 2-39. *Safari's browser windows on the iPhone*

Multi-Level Help



Notes on Preparation
Note: You may want to print this information to use as reference later. To delete these instructions, click the border of this text box and then press the DELETE key.

Nearly everyone who has ever started a business has underestimated the costs, and then faced the danger of running with inadequate capital reserves. The key to avoiding this pitfall is to adopt a rigorous approach to your research and planning.
Our Startup Expenses worksheet will lead you through the process.

EXPENSES - Begin by estimating expenses. What will it cost you to get your business up and running? The key to accuracy here is attention to detail. For each category of expense, draw up a list of everything you will need to purchase. This will include both tangible assets (for example, equipment, inventory) and services (for example, remodeling, insurance). Then determine where you might purchase these goods or services. Research more than one vendor; i.e.: comparison shop. Do not look at price alone; terms of payment, delivery, reliability, and service are also important.
CONTINGENCIES - Add a reserve for contingencies. Be sure to explain in your narrative how you decided on the amount you are putting into this reserve.
WORKING CAPITAL - You cannot open with an empty bank account. You

Figure 2-40. *Many types of help in Excel*

What

Use a mixture of lightweight and heavyweight help techniques to support users with varying needs.

Use when

You're designing a complex application. Some users may need a full-fledged help system, but you know most users won't take the time to use it. You want to support the impatient or occasional user too, to the extent you can. In particular, you might need to tailor your design for intermediate-to-expert users—but how will you help beginners become experts?

Why

Users of almost any software artifact need varying levels of support for the tasks they're trying to accomplish. Someone approaching it for the first time ever (or the first time in a while) needs different support than someone who uses it frequently. Even among first-time users, enormous differences exist in commitment level and learning styles. Some people want to read a tutorial, some won't; most find tool tips helpful, but a few find them irritating.

Help texts that are provided on many levels at once—even when they don't look like traditional "help systems"—reach everyone who needs them. Many good help techniques put the help texts within easy reach, but not directly in the user's face all the time, so users don't get irritated. However, the techniques need to be familiar to your users. If they don't notice or open a Collapsible Panel, for instance, they'll never see what's inside it.

How

Create help on several levels, including some (but not necessarily all) of the help types in the following list. Think of it as a continuum: each requires more effort from the user than the previous one, but can supply more detailed and nuanced information.

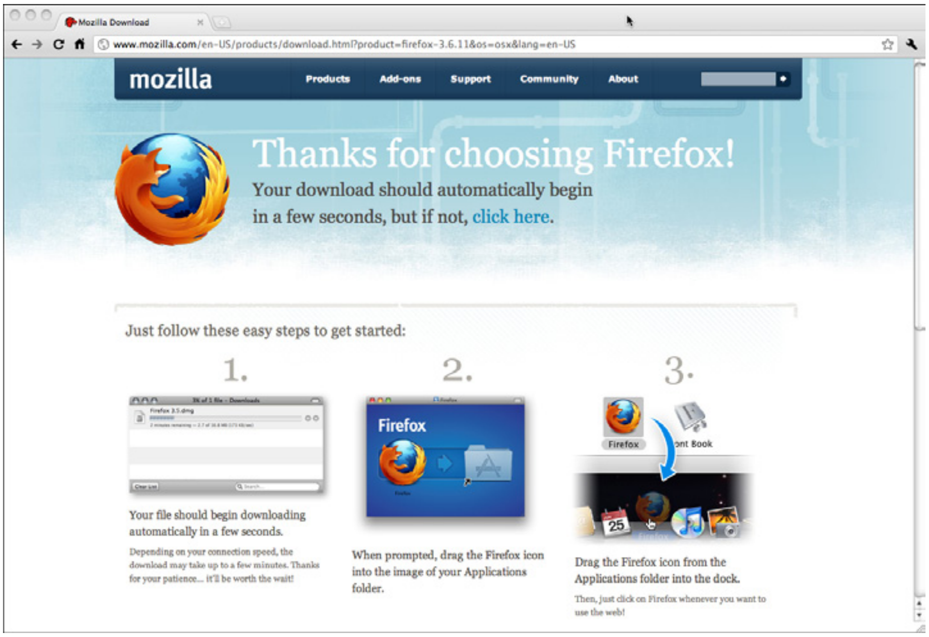
- Captions and instructions directly on the page, including patterns such as Input Hints and Input Prompt (both found in Chapter 8). Be careful not to go overboard with them. If done with brevity, frequent users won't mind them, but don't use entire paragraphs of text—few users will read them.
- Tool tips. Use them to show very brief, one- or two-line descriptions of interface features that aren't self-evident. For icon-only features, tool tips are critical; users can take even nonsensical icons in stride if a rollover says what the icon does! (Not that I'd recommend poor icon design, of course.) Tool tips' disadvantages are that they hide whatever's under them and that some users don't like them popping up all the time. A short time delay for the mouse hover—for example, one or two seconds—removes the irritation factor for most people.
- Hover Tools (Chapter 6). These can display slightly longer descriptions, shown dynamically as the user selects or rolls over certain interface elements. Set aside areas on the page itself for this, rather than using a tiny tool tip.
- Longer help texts contained inside Collapsible Panels (see Chapter 4).
- Introductory material, such as static introductory screens, guided tours, and videos. When a new user starts the application or service for the first time, these materials can immediately orient him toward his first steps (see the Instant Gratification pattern in Chapter 1). Users might also be interested in links to help resources. Offer a toggle switch to turn off the introduction—users will eventually stop finding it useful—and offer a way back to it elsewhere in the interface, in case a user wants to go back and read it later.
- Help shown in a separate window, often in HTML via browsers, but sometimes in WinHelp or Mac Help. The help resource is often an online manual—an entire book—reached via menu items on a Help menu, or from Help buttons on dialog boxes and HTML pages.
- "Live" technical support, usually via email, the Web, Twitter, or telephone.

- Informal community support. This applies only to the most heavily used and invested software—the likes of Photoshop, Linux, Mac OS X, or MATLAB—but users may consider it a highly valuable resource. Use social networking resources for these, or more traditional online forums.

Examples

Firefox is “merely” a web browser, and a free one at that, but its help systems are stellar. Help is offered at most of the levels described in the preceding list, so both beginners and experts are well supported. All of the following examples come from Firefox so that you can see the range of help that can be offered for one product.

When you visit Firefox’s site in order to download the browser, you are greeted by an outline of the install process and a very clear call to action, as shown in Figure 2-41.


Mozilla Download
www.mozilla.com/en-US/products/download.html?product=firefox-3.6.11&os=osx&lang=en-US
mozilla
Products
Add-ons
Support
Community
About
Firefox
Firefox
ont Book

Thanks for choosing Firefox!

Your download should automatically begin in a few seconds, but if not, click here.

Just follow these easy steps to get started:

1.

Your file should begin downloading automatically in a few seconds.

Depending on your connection speed, the download may take up to a few minutes. Thanks for your patience... it'll be worth the wait!

2.

When prompted, drag the Firefox icon into the image of your Applications folder.

3.

Drag the Firefox icon from the Applications folder into the dock.

Then, just click on Firefox whenever you want to use the web!

Figure 2-41. *Firefox download page*

When you launch it for the first time, you see an introductory screen that may intrigue the user: easy ways to customize the Firefox look, connections to social media, and links to help resources (see Figure 2-42). The page also confirms for the user that the install was successful; if the user needs to do anything more, such as get security updates, the introductory page will say so.

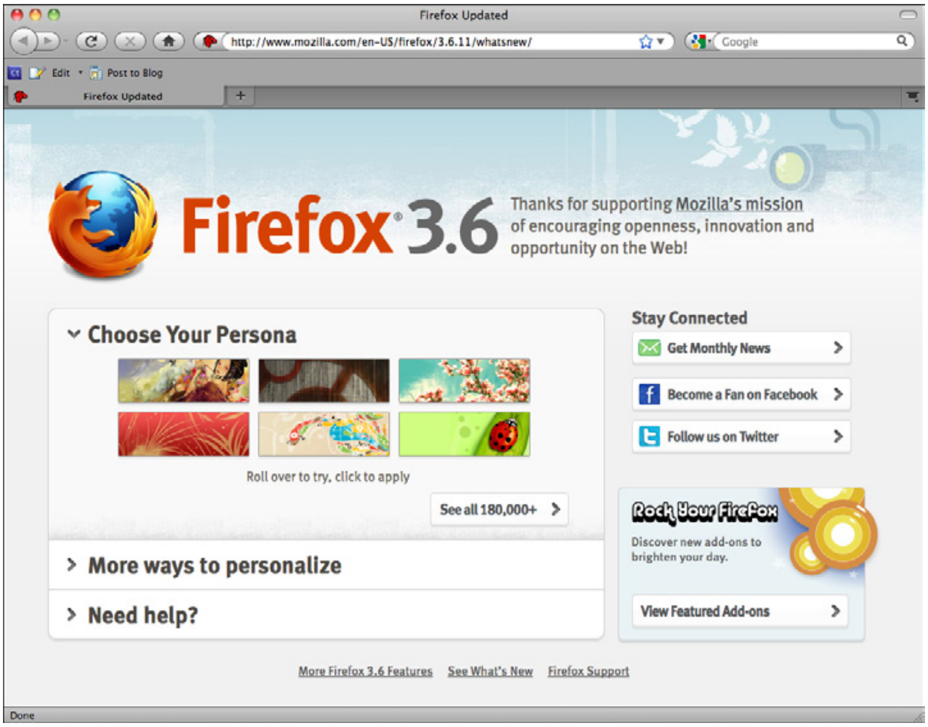


Figure 2-42. *Firefox startup page*

Each tool on the browser window has a tool tip (see Figure 2-43). The basic buttons—back, next, reload, home—will be familiar to almost all users, but the more obscure items may need to be explained.

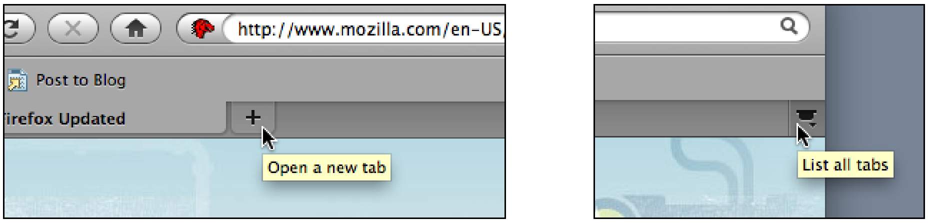


Figure 2-43. *Firefox tool tips*

The main text fields use Input Prompts to describe themselves (see Figure 2-44). This is a more appropriate choice than Input Hints (which would be displayed beside the text fields) because it keeps the window clean and uncluttered. Furthermore, not much knowledge is lost when a user starts typing into the text field, erasing the prompt. See the pattern descriptions for Input Hints and Input Prompt in Chapter 8.

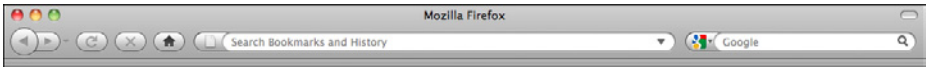


Figure 2-44. *Firefox input prompts*

Some dialogs attempt to describe themselves, as shown in Figure 2-45.

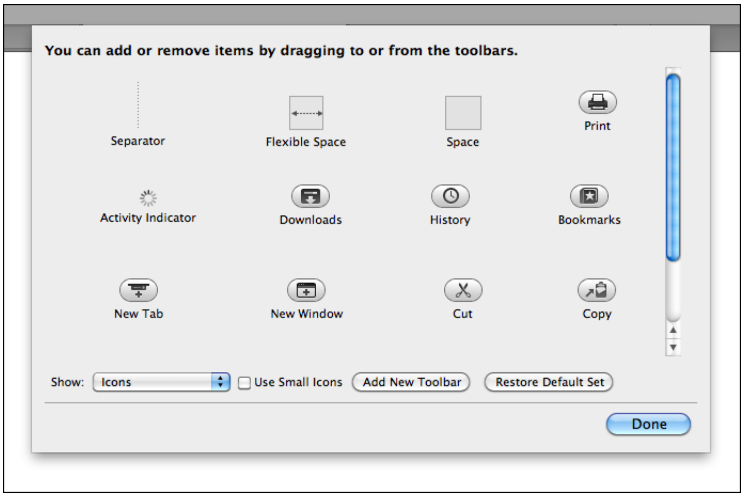
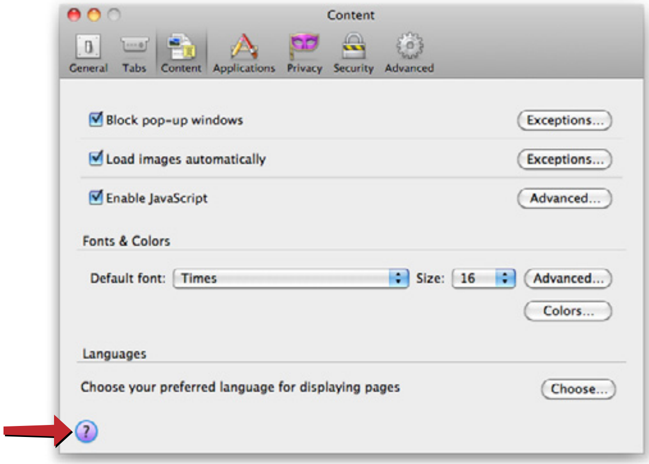

You can add or remove items by dragging to or from the toolbars.

Figure 2-45. *Firefox toolbars dialog*

Other dialogs offer links to the formal help system; an appropriate help page is displayed in a browser window when the user clicks the round purple button in the lower-left corner (see Figures 2-46 and 2-47).



☑ Block pop-up windows — Exceptions...
☑ Load images automatically — Exceptions...
☑ Enable JavaScript — Advanced...

Fonts & Colors

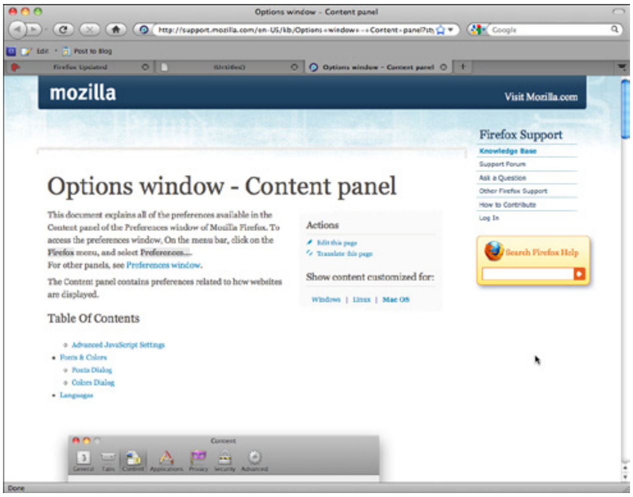
Default font: Times — Size: 16 — Advanced...

Colors...

Languages

Choose your preferred language for displaying pages — Choose...

Figure 2-46. *Firefox preferences dialog*



Options window - Content panel

This document explains all of the preferences available in the Content panel of the Preferences window of Mozilla Firefox. To access the preferences window, On the menu bar, click on the Firefox menu, and select Preferences....
For other panels, see Preferences window.

The Content panel contains preferences related to how websites are displayed.

Show content customized for: Windows | Linux | Mac OS

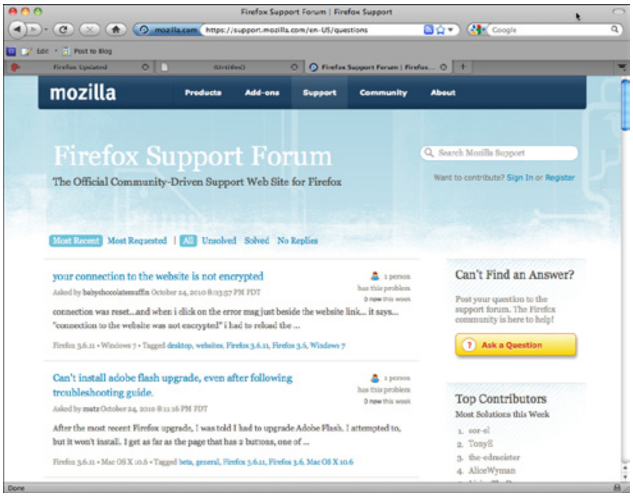
Table Of Contents

- Advanced JavaScript Settings
- Fonts & Colors
  - Fonts Dialog
  - Colors Dialog
- Languages

Figure 2-47. *Firefox preferences dialog help page*

Finally, if all other sources of help are exhausted, a user can turn to the wider user community for advice. We've now moved beyond the realm of software design per se, but this is still product design—the user experience extends beyond the bits installed on users' computers. It includes the interactions they have with the organization, its employees or other representatives, and its website (see Figure 2-48).

Community building like this happens only for products in which users become deeply invested, perhaps because they use the product every day at work or at home—as is the case with Firefox—or because they have some emotional attachment to it.



Firefox Support Forum

The Official Community-Driven Support Web Site for Firefox

Want to contribute? Sign In or Register

your connection to the website is not encrypted
Asked by babychocolatemuffin October 24, 2010 8:03:57 PM PDT
connection was reset...and when i click on the error msg just beside the website link... it says... "connection to the website was not encrypted" i had to reload the ...
Firefox 3.6.11 • Windows 7 • Tagged desktop, websites, Firefox 3.6.11, Firefox 3.6, Windows 7
1 person has this problem
0 new this week

Can't install adobe flash upgrade, even after following troubleshooting guide.
Asked by matz October 24, 2010 8:11:16 PM PDT
After the most recent Firefox upgrade, I was told I had to upgrade Adobe Flash. I attempted to, but it won't install. I get as far as the page that has 2 buttons, one of ...
Firefox 3.6.11 • Mac OS X 10.6 • Tagged beta, general, Firefox 3.6.11, Firefox 3.6, Mac OS X 10.6
1 person has this problem
0 new this week

Can't Find an Answer?
Post your question to the support forum. The Firefox community is here to help!

Top Contributors
Most Solutions this Week
1. cor-el
2. TonyE
3. the-edmeister
4. AliceWyman

Figure 2-48. *Firefox support forums*

Chapter 3

Getting Around: Navigation, Signposts, and Wayfinding

The patterns in this chapter deal with the problem of navigation. How do users know where they are now, where to go next, and how to get there from here?

I call navigation a "problem" because navigating around a website or application is like commuting. You have to do it to get where you need to go, but it's dull, it's sometimes infuriating, and the time and energy you spend on it just seems wasted. Couldn't you be doing something better with your time, such as playing a game or getting some actual work done?

The best kind of commuting is none at all. Having everything you need right at your fingertips without having to travel somewhere is pretty convenient. Likewise, keeping most tools "within reach" on an interface is handy, especially for intermediate-to-expert users (i.e., people who have already learned where everything is). Sometimes you do need to put lesser-used tools on separate screens, where they don't clutter things up; sometimes you need to group content onto different pages so that the interface makes sense. All this is fine, as long as the "distances" that a user must travel remain short.

So, less is better. Let's talk terminology for a minute and come back to this concept.

Staying Found

Let's say you've built a large website or application that you've had to break up into sections, subsections, specialized tools, pages, windows, wizards, and so forth. How do you help users navigate?

Signposts are features that help users figure out their immediate surroundings. Common signposts include page and window titles, web page logos and other branding devices, tabs, and selection indicators. Patterns and techniques such as good global and local navigation links, Sequence Map, Breadcrumbs, and Annotated Scrollbar—all described in this chapter—tell users where they currently are, and often where they can go with only one more jump. They help a user to stay "found" and to plan his next steps.

Wayfinding is what people do as they find their way toward their goal. The term is pretty self-explanatory. But how people actually do it is quite a research subject—specialists from cognitive science, environmental design, and website design have studied it. These common-sense features help users with wayfinding:

Good signage
: Clear, unambiguous labels anticipate what you're looking for and tell you where to go; signs are where you expect them to be, and you're never left standing at a decision point without guidance. You can check this by walking through the artifact you're designing and following the paths of all the major use cases. Make sure that each point where a user must decide where to go next is signed or labeled appropriately. Use strong "calls to action" on the first pages that a user sees.

Environmental clues
: You'd look for restrooms in the back of a restaurant, for instance, or a gate where a walkway intersects a fence. Likewise, you would look for an "X" close button at the top right of a modal dialog and logos in the upper-left corner of a web page. Keep in mind that these clues are often culturally determined, and someone new to the culture (e.g., someone who's never used a given operating system before) will not be aware of them.

Maps
: Sometimes people go from sign to sign or link to link without ever really knowing where they're going in a larger frame of reference. (If you've ever found your way through a strange airport, that's probably what you did.) But some people might prefer to have a mental picture of the whole space, especially if they're there often. Also, in badly signed or densely built spaces, such as urban neighborhoods, maps may be the only navigational aids people have.

In this chapter, the Clear Entry Points pattern is an example of careful signage combined with environmental clues—the links should be designed to stand out on the page. A Sequence Map, obviously, is a map; you can use Overview Plus Detail (Chapter 7) to show maps for virtual spaces, too. Modal Panel sort of qualifies as an environmental clue, since the ways out of a modal panel take you right back to where you just were.

I've compared virtual spaces to physical ones here. But virtual spaces have the unique ability to provide a navigational trump card, one that physical spaces can't (yet) provide: the Escape Hatch. Wherever you are, click on that link, and you're back to a familiar page. It's like carrying a wormhole with you. Or a pair of ruby slippers.

The Cost of Navigation

When you walk into an unfamiliar room, you look around. In a fraction of a second, you take in the shape of the room, the furnishings, the light, the ways out, and other clues; very quickly, you make some assumptions about what this room is and how it relates to why you walked in. Then you need to do what you came in to do. Where? How? You might be able to answer immediately—or not. Or maybe you're just distracted by other interesting things in the room.

Similarly, bringing up a web page or opening a window incurs a cognitive cost. Again, you need to figure out this new space: you take in its shape, its layout, its contents, its exits, and how to do what you came to do. All of this takes energy and time. The "context switch" forces you to refocus your attention and adjust to your new surroundings.

Even if you're already familiar with the window (or room) you just went into, it still incurs a cost. Not a large cost, but it adds up—especially when you figure in the actual time it takes to display a window or load a page.

This is true whether you're dealing with web pages, application windows, dialog boxes, or device screens. The decisions that users make about where to go are similar—labels still need to be read or icons decoded, and the users will still make leaps of faith by clicking on links or buttons they're not sure about.

Furthermore, loading time affects people's decisions. If a user clicks through to a page that takes too long to load—or fails to load altogether—he may be discouraged, and may just close the page before he finds what he came for. (So, how many viewers is that sidebar video player costing you?) Also, if a site's pages take a chronically long time to load, users will be less likely to explore that site.

There's a reason that companies like Google work very hard to keep page loads as fast as possible: latency costs viewers.

Keep Distances Short

Knowing that there's a cost associated with jumping from page to page, you can understand now why it's important to keep the number of those jumps down. When a common task requires many page jumps, try to reduce it to one or two.

But the real efficiency gains come from the structure of the application. One of the nastiest things a designer can do is force a user to go into multiple levels of subpages, dialogs, and so forth every time he needs to accomplish a simple and everyday task. (Worse is to lead him there, tell him he can't accomplish it because of some missing precondition, and send him back to square one.)

Can you design your application so that the most common 80% of use cases can be done in one page, without any context switches? (Or perhaps only one?)

This is hard to do with some kinds of applications. Is a certain tool too big to put on your main page? Try shrinking it: eliminate controls, shorten labels, turn words into pictures, or use specialized form controls that save space. Is it too distracting when combined with everything else on the main page? Again, try shrinking it, isolating it with whitespace, or putting it in an out-of-the-way spot. Can you use progressive disclosure to gradually show more content on the same page? Can you use Module Tabs or an Accordion to hide some content by default?

Sometimes it's appropriate to bury functionality inside pages that take more than one jump to get to, such as that extra 20% of tasks left over from the 80% you made easily available. It could also be that on your application, simplicity of presentation is more important than saving one or two jumps. You could put little-used functionality behind an extra "door" (also using the 80/20 rule). As always, experiment with different designs, and usability-test them if you have any doubts.

Navigational Models

What is the *navigational model* for your site or app? In other words, how do the different screens (or pages, or spaces) link to each other, and how do users move between them?

First, some more terminology.

Global navigation is what's found on every main screen. It usually takes the form of menus, tabs, and/or sidebars, and this is how users move around the formal navigational structure of the site. (In an earlier version of this book, global navigation was defined as a pattern. But by now, it's so common and well understood that it really doesn't need to be called out as such anymore.)

Utility navigation, also found on every main screen, contains links and tools related to noncontent aspects of the site or application: sign-in, help, print, Settings Editors (see Chapter 2), language tools, and so on.

Associative and *inline navigation* embed links in or near the actual content. As the user reads or interacts with the site, these links present options that might be immediately relevant to the user. They tie content together thematically.

Now let's look at a few models found in typical sites and apps:

Hub and spoke

Most often found on mobile devices, this architecture (Figure 3-1) lists all the major parts of the site or app on the home screen, or "hub." The user clicks or taps through to them, does what she needs to do, and comes back to the hub to go somewhere else. The "spoke" screens focus tightly on their jobs, making careful use of space—they may not have room to list all the other major screens. The iPhone home screen is a good example; the Menu Page pattern found on some websites is another.

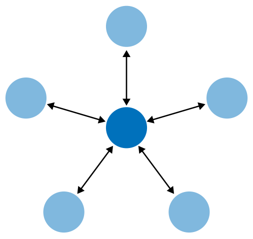


Figure 3-1. *Hub and spoke*

Fully connected

Many websites follow this model. There's a home page or screen, but it and every other page link to all the others—they each have a global navigation feature, such as a top menu. The global navigation may be a single level (as shown in Figure 3-2, with only five pages), or it might be deep and complex, with multiple levels and deeply buried content. As long as the user can reach any page from any other with a single jump, it's fully connected.

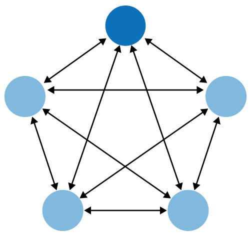


Figure 3-2. *Fully connected*

Multi-level

This is also common among websites (see Figure 3-3). The main pages are fully connected with each other, but the subpages are only connected among themselves (and usually to the other main pages, via global navigation). You've seen this on sites that have subpages listed only in sidebars or subtabs—users see these on menus that only show up after they've clicked the link for the main page or category. It takes two or more jumps to get from one arbitrary subpage to another. Using drop-down menus, the Fat Menus pattern, or the Sitemap Footer pattern with a multi-level site converts it to a fully connected one, which is preferable.

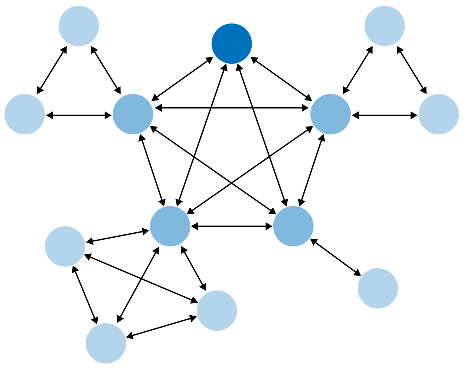


Figure 3-3. *Multi-level*

Stepwise

Slideshows, process flows, and Wizards (see Chapter 2) lead the user step by step through the screens in a prescribed sequence (see Figure 3-4). Back/Next links are prominent on the page.

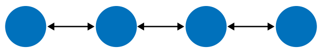


Figure 3-4. *Stepwise*

Pyramid

A variant on the stepwise model, a pyramid uses a hub page or menu page to list an entire sequence of items or subpages in one place (see Figure 3-5). The user picks out any item, jumps to it, and then has the option to use Back/Next links to step through other items in order. He can go back to the hub page anytime. See the Pyramid pattern in this chapter for more.

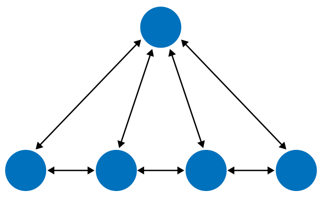


Figure 3-5. *Pyramid*

Pan-and-zoom

Some artifacts are best represented as single large spaces, not many small ones. Maps, large images, large text documents, information graphics, and representations of time-based media (such as sound and video) fall into this category. Chapter 7 discusses these in more detail. Panning and zooming are still navigation—so offer controls for panning (moving horizontally or vertically), zooming in and out, and resetting to a known position and state. Figure 3-6 shows an example of pan-and-zoom.

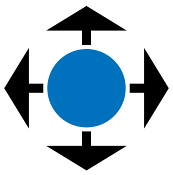


Figure 3-6. *Pan-and-zoom*

Flat navigation

Some types of applications need little or no navigation at all. Consider Canvas Plus Palette applications such as Photoshop, or other complex apps such as Excel—these offer tons of tools and functions that are easily reached via menus, toolbars, and palettes. Tools that don't act immediately upon the work may be accessible via Modal Panels or step-by-step progressions. These types of applications seem to be qualitatively different from the other navigation styles listed here: the user always knows where he is, but he may not easily find the tools he needs because of the sheer number of features available at one time.

Modal panel

This brings a user to a screen with no navigation options other than acknowledging its message, completing its form, or clicking the panel away (Figure 3-7). Modal panels often show up layered on top of a full screen or page, and are used for small, focused tasks that require the user's full attention. See the Modal Panel pattern for more discussion.

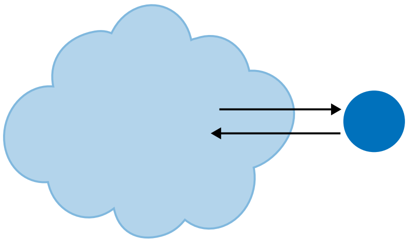


Figure 3-7. *Modal panel*

Clear entry points

How does a user know where to start in a complex site or app? The Clear Entry Points pattern shows him where to go first (see Figure 3-8). For first-time and infrequent users, it removes some of the burden of learning the site.

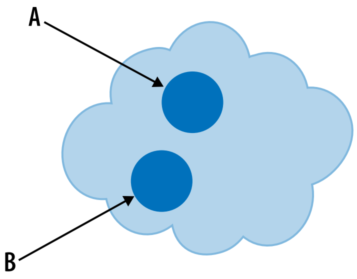


Figure 3-8. *Clear entry points*

Bookmarks

Bookmarks (Figure 3-9), permalinks, deep links, and Deep-linked State are all ways for a user to conveniently navigate to a point of his choice, anytime he wants, even if it's deep inside a navigational structure. These give him a way to avoid traversing many links to get to a desired page or state.

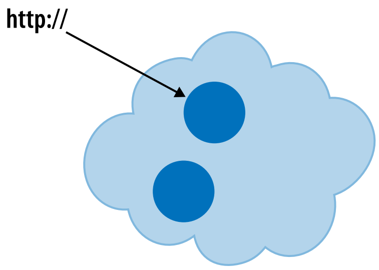


Figure 3-9. *Bookmarks*

Escape hatch

When a user is hopelessly entangled in an app, reaches an error state, or gets deep-linked into a page that he has no context for understanding, he needs an escape hatch (Figure 3-10), a well-labeled link to get back to a known place. See the Escape Hatch pattern.

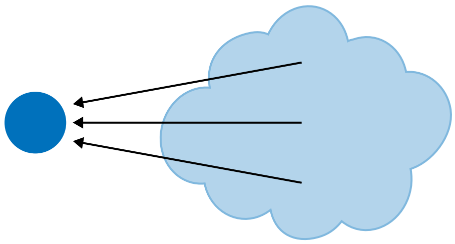


Figure 3-10. *Escape hatch*

There are three things to notice about these navigational models. The first is that they're mix-and-match—an app or site might combine several of these, especially Modal Panel, Clear Entry Points, bookmarks, and Escape Hatch, which are very local and don't affect the site-wide navigation strategy.

The second thing is that some of these mechanisms actually restrict a user's navigation options. Most of the time, open access and short jumps are good things. But when a user is in the middle of a full-screen slideshow, she doesn't want to see a complicated global navigation menu! She would rather just focus on the slideshow itself, so Back/Next controls and an Escape Hatch are all that's necessary. The presence of full navigation options is not without cost: it takes up space, clutters the screen, incurs cognitive load, and signals to the user that leaving the page doesn't matter.

Third, all these mechanisms and patterns can be rendered on-screen in different ways. A complex site or app might use tabs, or menus, or a sidebar tree view to show the global navigation on each page—that's something you don't need to decide until you start laying out the page. Likewise, a modal panel might be done with a lightbox or an actual modal dialog—but you can postpone that until you know what needs to be modal and what doesn't.

Visual design can come later in the design progression, after the information architecture and navigational models.

Design Conventions for Websites

It's a fine thing to separate the navigational model from its visual design. Doing so can help you think more flexibly and deliberately about how to design the pages themselves. But websites have certain conventions regarding visual placement of navigational features, and it's probably unwise to ignore them.

Global navigation is almost always shown at the top or left of a web page, sometimes both. Rarely, it can be found on the right—this placement can cause problems with page size and horizontal scrolling, unless the designer uses a Liquid Layout (see Chapter 4).

Two relatively new approaches to global navigation are found in the Fat Menus and Sitemap Footer patterns. In these, the whole structure of a hierarchical site is laid out for the user to see, at the cost of screen space in the header or footer. As explained earlier, these patterns turn a multi-level navigational model into a fully connected one.

When a site's visitors are typically signed-in members, that site may offer a set of utility navigation links in its upper-right corner. Users tend to look there for tools related to their presence on the site: account settings, user profile, logout, help, and so on. See the Sign-in Tools pattern for more.

A common form of *associative navigation*—when links are embedded in or near the content itself, linking items together thematically—is a "Related Articles" section or panel. News sites and blogs use this a lot: when a user reads an article, a sidebar or footer shows other articles that talk about similar topics or are written by the same author.

Tags, both user-defined and system-defined, can help support associative navigation and related articles or links. Tag clouds support topical findability on some sites, especially where the number of articles is very large and the topics fine-grained. (On smaller sites and blogs, they don't work as well.) A more common navigational technique is to list an article's tags at the end; each tag is a link leading to a whole set of articles that share that tag.

When a site takes advantage of social media, even more navigation options come into play. The front of a site may have a News Box, which links users to the items posted most recently. Content Leaderboards show the most frequently shared or commented pieces, while Recent Chatter directs users to ongoing conversations. And Social Links and Sharing Widgets connect users directly to social media services. See Chapter 9 for these patterns.

The Patterns

To recap, this chapter talks about several aspects of navigation: overall structure or model, knowing where you are, figuring out where you're going, and getting there efficiently.

The first set of patterns address the navigational model, and are more or less independent of screen layout:

1. Clear Entry Points
2. Menu Page
3. Pyramid
4. Modal Panel
5. Deep-linked State
6. Escape Hatch

Combining layout and model on conventional websites, we get these patterns:

7. Fat Menus
8. Sitemap Footer
9. Sign-in Tools

The next few patterns work well as "You are here" signposts (as can a well-designed global navigation). Sequence Map, Breadcrumbs, and Annotated Scrollbar also serve as interactive maps of the content. Annotated Scrollbar is intended more for pan-and-zoom models than for multiple interconnected pages.

10. Sequence Map
11. Breadcrumbs
12. Annotated Scrollbar

Animated Transition helps users stay oriented as they move from one place to another. It's a visual trick, nothing more, but it's very effective at preserving a user's sense of where he is and what's happening.

13. Animated Transition

Clear Entry Points

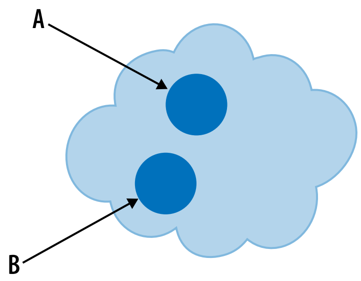


Figure 3-11. *Clear Entry Points schematic*

What

Present only a few main entry points into the interface; make them task-oriented and descriptive. Use clear calls to action.

Use when

You're designing a site or app that has a lot of first-time or infrequent users. Most of these users would be best served by reading a certain piece of introductory text, doing an initial task, or choosing from a very small number of frequently used options.

However, if the purpose is clear to basically everyone who starts it, and if most users might be irritated by one more navigation step than is necessary (like applications designed for intermediate-to-expert users), this may not be the best design choice.

Why

Some applications and websites, when opened, present the user with what looks like a morass of information and structure: lots of tiled panels, unfamiliar terms and phrases, irrelevant ads, or toolbars that just sit there disabled. They don't give the hesitant user any clear guidance on what to do first. "OK, here I am. Now what?"

For the sake of these users, list a few options for getting started. If those options match a user's expectations, he can confidently choose one and begin working—this contributes to immediate gratification. If not, at least he knows now what the site or app actually does, because you've defined the important tasks or categories up front. You've made the application more self-explanatory.

How

When the site is visited or the application started, present these entry points as "doors" into the main content. From these starting points, guide the user gently and unambiguously into the application until he has enough of a context to continue by himself.

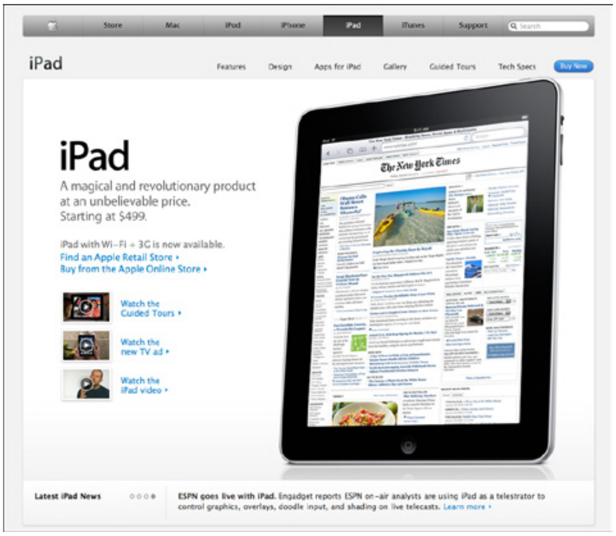
Collectively, these entry points should cover most of the reasons most users would be there. There might only be one or two entry points, or many; it depends on what fits your design. But you should phrase them with language first-time users can understand—this is not the place for application-specific tool names.

Visually, you should show these entry points with emphasis proportional to their importance.

On the home page or starting page, most sites will additionally list other navigation links—global navigation, utility navigation, and so on—and these should be smaller and less prominent than the Clear Entry Points. They're more specialized, and don't necessarily lead you directly into the heart of the site, any more than a garage door leads you directly into the living room. The Clear Entry Points should serve as the "front doors."

Examples

The top of Apple's main iPad page (Figure 3-12) needs to do only a few things: identify itself, make the iPad look inviting, and direct the user toward resources for buying one or learning more. The global navigation recedes visually, compared to the strong, well-defined entry points. On the rest of the page, more text and links make the page denser, but this is all the user sees above the fold.



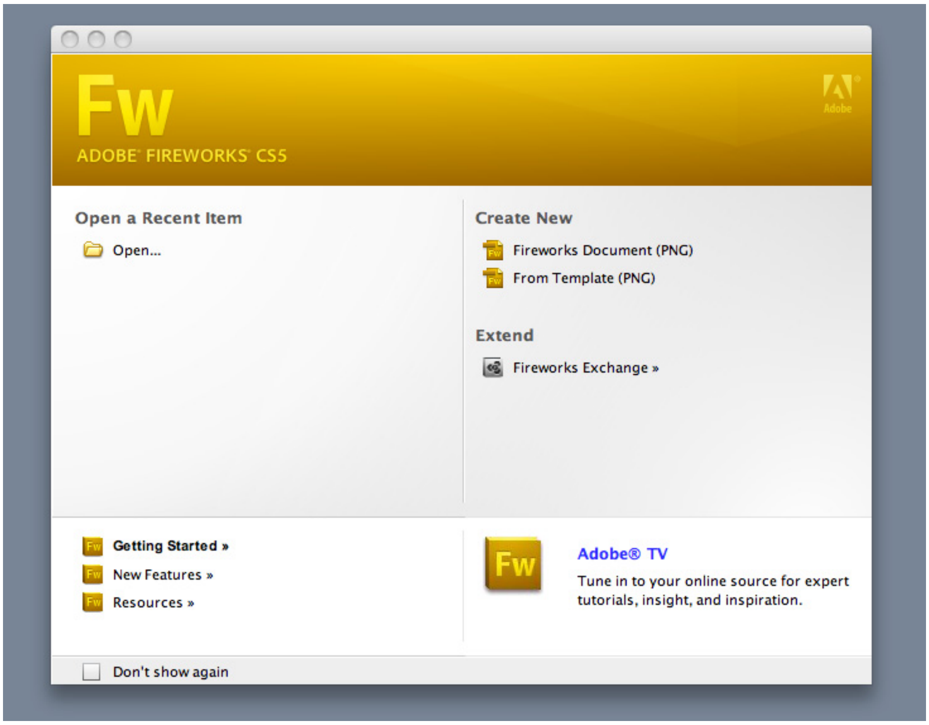
A magical and revolutionary product at an unbelievable price. Starting at $499.

iPad with Wi-Fi + 3G is now available.

ESPN goes live with iPad. Engadget reports ESPN on-air analysts are using iPad as a telestrator to control graphics, overlays, doodle input, and shading on live telecasts. Learn more ›

Figure 3-12. *iPad page on Apple's site*

Fireworks and other applications show a startup dialog when the application is started (see Figure 3-13). This orients a new or infrequent user to the possibilities for action; creating something new, opening an existing document, or reading help resources are the most common items to be found here. (Appropriately, this startup dialog has a checkbox that lets the user turn it off for future startups. Expert users may not want to bother with such a dialog, since it adds one more step—and no value—to the process of getting started on their work.)



Tune in to your online source for expert tutorials, insight, and inspiration.

Figure 3-13. *Fireworks startup dialog*

In other libraries

http://quince.infragistics.com/Patterns/Clear%20Entry%20Points.aspx

Menu Page

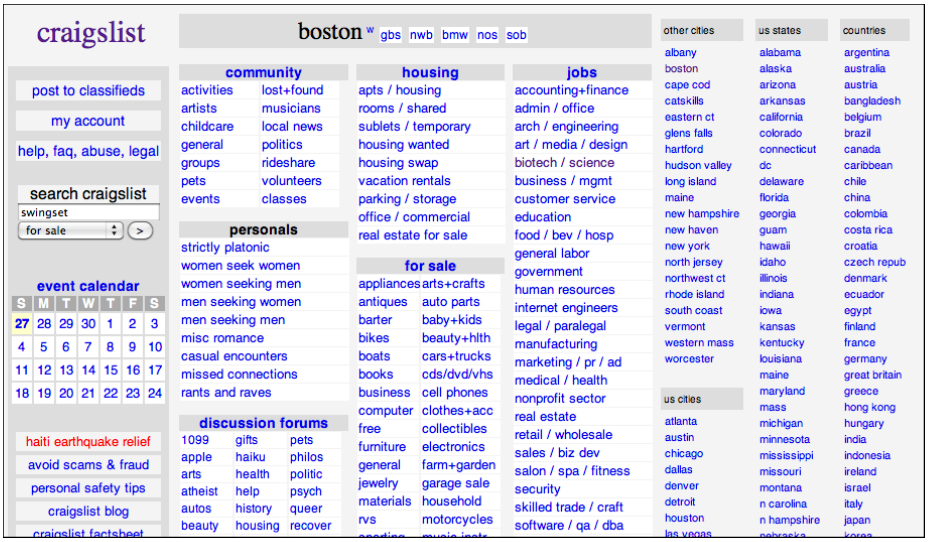

craigslist
post to classifieds
my account
help, faq, abuse, legal
search craigslist
swingset
for sale
event calendar
S M T W T F S
27 28 29 30 1 2 3
4 5 6 7 8 9 10
11 12 13 14 15 16 17
18 19 20 21 22 23 24
haiti earthquake relief
avoid scams & fraud
personal safety tips
craigslist blog
craigslist factsheet
boston w gbs nwb bmw nos sob
community
activities lost+found artists musicians childcare local news general politics groups rideshare pets volunteers events classes
personals
strictly platonic
women seek women
women seeking men
men seeking women
men seeking men
misc romance
casual encounters
missed connections
rants and raves
discussion forums
1099 gifts pets apple haiku philos arts health politic atheist help psych autos history queer beauty housing recover
housing
apts / housing
rooms / shared
sublets / temporary
housing wanted
housing swap
vacation rentals
parking / storage
office / commercial
real estate for sale
for sale
appliances arts+crafts antiques auto parts barter baby+kids bikes beauty+hlth boats cars+trucks books cds/dvd/vhs business cell phones computer clothes+acc free collectibles furniture electronics general farm+garden jewelry garage sale materials household rvs motorcycles
jobs
accounting+finance
admin / office
arch / engineering
art / media / design
biotech / science
business / mgmt
customer service
education
food / bev / hosp
general labor
government
human resources
internet engineers
legal / paralegal
manufacturing
marketing / pr / ad
medical / health
nonprofit sector
real estate
retail / wholesale
sales / biz dev
salon / spa / fitness
security
skilled trade / craft
software / qa / dba
other cities
albany boston cape cod catskills eastern ct glens falls hartford hudson valley long island maine new hampshire new haven new york north jersey northwest ct rhode island south coast vermont western mass worcester
us cities
atlanta austin chicago dallas denver detroit houston las vegas
us states
alabama alaska arizona arkansas california colorado connecticut dc delaware florida georgia guam hawaii idaho illinois indiana iowa kansas kentucky louisiana maine maryland mass michigan minnesota mississippi missouri montana n carolina n hampshire nebraska
countries
argentina australia austria bangladesh belgium brazil canada caribbean chile china colombia costa rica croatia czech repub denmark ecuador egypt finland france germany great britain greece hong kong hungary india indonesia ireland israel italy japan korea

Figure 3-14. *Craigslist*

What

Fill the page with a list of links to content-rich pages in your site or app. Show enough information about each link to enable the user to choose well. Show no other significant content on the page.

Use when

You're designing a home page, starting screen, or any other screen whose purpose is to be just a "table of contents"—to show where users can go from here. You may not have room for featured content (such as an article, video, or promotion), or you may simply want to let the user pick a link with no distractions.

Mobile apps and sites especially need Menu Pages to make the best use of their small screens.

If your (full-size) site needs to "hook" visitors into staying on the page, it may be better to use some of the page space for promotional items or other interesting content, and a Menu Page wouldn't be the right design choice. Likewise, a site that needs to explain its value and purpose should use the space to do that instead.

It takes some audacity to design a Menu Page, because you must be very confident that:

- Visitors know what the site or app is about.
- They know what they came for and how to find it.
- They wouldn't be interested in news, updates, or features.

Why

With no distractions, users can focus all their attention on the available navigation options. You get the entire screen (or most of it, anyway) to organize, explain, and illustrate those links, and can thus direct users to the most appropriate destination page for their needs.

How

If you're creating a mobile design, Menu Pages are one of your principal tools for designing sites or apps with many levels of functionality. Keep list labels short, make targets large enough to tap easily (for touch screens), and try not to make hierarchies too deep.

The rest of this applies to full-size sites and apps.

First, label the links well, and provide just enough contextual information for users to decide where to go. This isn't necessarily easy. Visitors may find it very helpful to have a description or teaser with each link, but that could take up a lot of space on the page. Likewise for thumbnail images—they can look great, but how much value do they add?

Look at Figures 3-15 and 3-16. Visitors to the MIT site already know the meanings of these links—they're the names of academic programs—so extra information is unnecessary. The designer is thus able to pack in more links above the fold. The result is an information-dense, useful page.

On the other hand, the articles in the AIGA resources page do benefit from descriptive text and images. The titles alone aren't necessarily enough to persuade a visitor to click through. (Keep in mind, too, that a user who clicks through and finds that the destination page isn't what he wanted will get frustrated quickly. Make sure your descriptions are accurate and fair!)

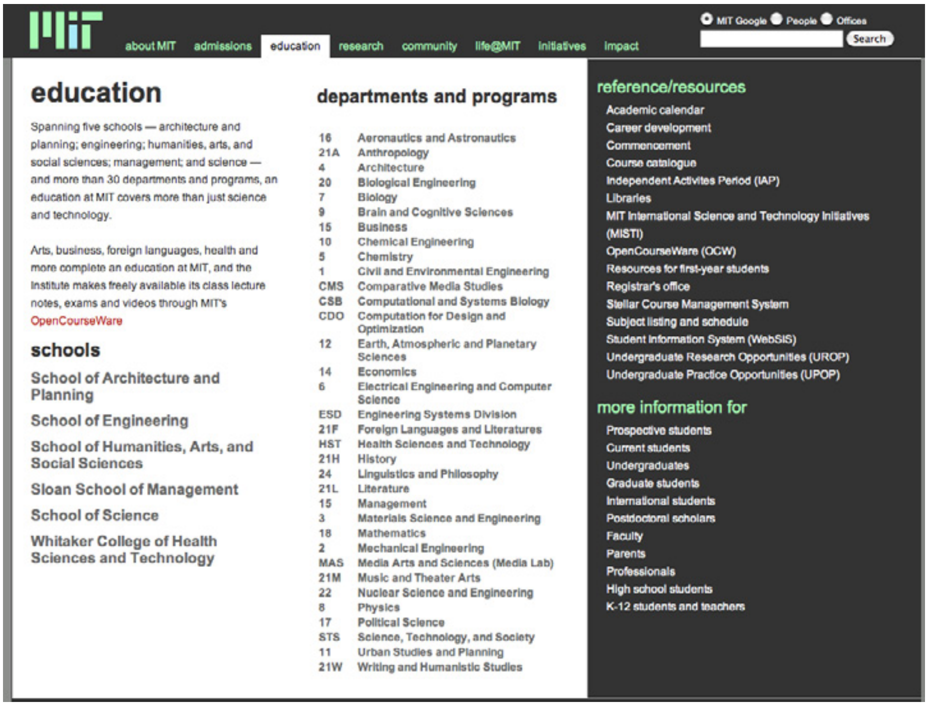
Second, consider the visual organization of the list of links. Do they come in categories, or perhaps a two- or three-level hierarchy? Is it ordered by date? Express that organizational scheme in the list. See Chapter 5 for more discussions on this topic.

Third, don't forget a search box.

Finally, reconsider whether you have anything else to say on this page. Home page space, in particular, is quite valuable for drawing in users. Is there an interesting article teaser you can put there? A work of visual art? A News Box (see Chapter 9)? If such things would annoy more than intrigue, continue designing a pure Menu Page.

Examples

In the website for MIT (Figure 3-15), the "Education" page shows very little explanatory text and a whole lot of links. When a user reaches this point in the website, she's probably looking for a specific department or resource, and she isn't looking for, say, an explanation of what MIT is about. The whole point of this page is to move the visitor along to a page that answers a well-defined need. (The same is true of the Craigslist example in Figure 3-14 at the top of the pattern.)



education

Spanning five schools — architecture and planning; engineering; humanities, arts, and social sciences; management; and science — and more than 30 departments and programs, an education at MIT covers more than just science and technology.

Arts, business, foreign languages, health and more complete an education at MIT, and the Institute makes freely available its class lecture notes, exams and videos through MIT's OpenCourseWare

schools

School of Architecture and Planning
School of Engineering
School of Humanities, Arts, and Social Sciences
Sloan School of Management
School of Science
Whitaker College of Health Sciences and Technology

departments and programs

16	Aeronautics and Astronautics
21A	Anthropology
4	Architecture
20	Biological Engineering
7	Biology
9	Brain and Cognitive Sciences
15	Business
10	Chemical Engineering
5	Chemistry
1	Civil and Environmental Engineering
CMS	Comparative Media Studies
CSB	Computational and Systems Biology
CDO	Computation for Design and Optimization
12	Earth, Atmospheric and Planetary Sciences
14	Economics
6	Electrical Engineering and Computer Science
ESD	Engineering Systems Division
21F	Foreign Languages and Literatures
HST	Health Sciences and Technology
21H	History
24	Linguistics and Philosophy
21L	Literature
15	Management
3	Materials Science and Engineering
18	Mathematics
2	Mechanical Engineering
MAS	Media Arts and Sciences (Media Lab)
21M	Music and Theater Arts
22	Nuclear Science and Engineering
8	Physics
17	Political Science
STS	Science, Technology, and Society
11	Urban Studies and Planning
21W	Writing and Humanistic Studies

reference/resources

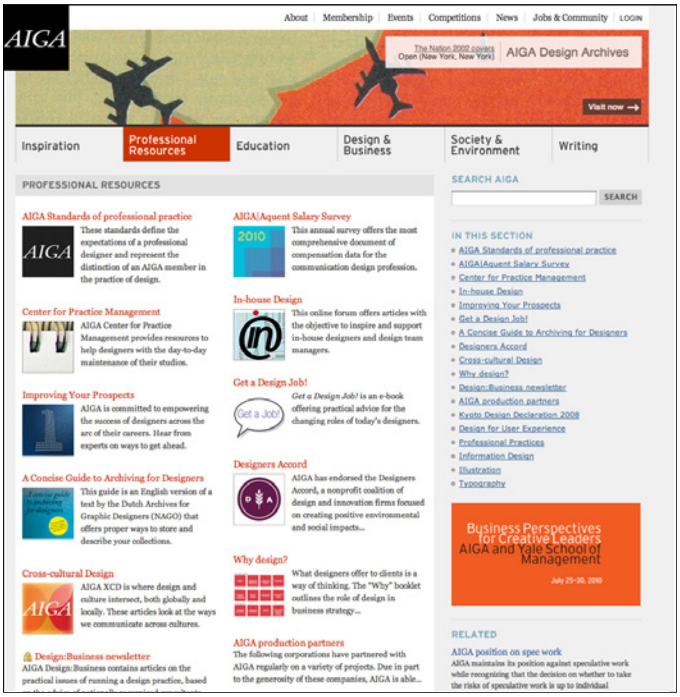
Academic calendar
Career development
Commencement
Course catalogue
Independent Activites Period (IAP)
Libraries
MIT International Science and Technology Initiatives (MISTI)
OpenCourseWare (OCW)
Resources for first-year students
Registrar's office
Stellar Course Management System
Subject listing and schedule
Student Information System (WebSIS)
Undergraduate Research Opportunities (UROP)
Undergraduate Practice Opportunities (UPOP)

more information for

Prospective students
Current students
Undergraduates
Graduate students
International students
Postdoctoral scholars
Faculty
Parents
Professionals
High school students
K-12 students and teachers

Figure 3-15. *A menu page from MIT's website*

The AIGA website contains many resources for design professionals. The site presents several top-level categories for those resources, as shown in the global navigation, but the landing page for each of those categories is a Menu Page (Figure 3-16). The articles are shown with thumbnail images and summary text; the rich format gives the viewer enough of a context to decide whether to invest time in clicking through to the article.



PROFESSIONAL RESOURCES

AIGA Standards of professional practice
These standards define the expectations of a professional designer and represent the distinction of an AIGA member in the practice of design.

Center for Practice Management
AIGA Center for Practice Management provides resources to help designers with the day-to-day maintenance of their studios.

Improving Your Prospects
AIGA is committed to empowering the success of designers across the arc of their careers. Hear from experts on ways to get ahead.

A Concise Guide to Archiving for Designers
This guide is an English version of a text by the Dutch Archives for Graphic Designers (NAGO) that offers proper ways to store and describe your collections.

Cross-cultural Design
AIGA XCD is where design and culture intersect, both globally and locally. These articles look at the ways we communicate across cultures.

Design:Business newsletter
AIGA Design:Business contains articles on the practical issues of running a design practice, based

AIGA|Aquent Salary Survey
This annual survey offers the most comprehensive document of compensation data for the communication design profession.

In-house Design
This online forum offers articles with the objective to inspire and support in-house designers and design team managers.

Get a Design Job!
Get a Design Job! is an e-book offering practical advice for the changing roles of today's designers.

Designers Accord
AIGA has endorsed the Designers Accord, a nonprofit coalition of design and innovation firms focused on creating positive environmental and social impacts...

Why design?
What designers offer to clients is a way of thinking. The "Why" booklet outlines the role of design in business strategy...

AIGA production partners
The following corporations have partnered with AIGA regularly on a variety of projects. Due in part to the generosity of these companies, AIGA is able...

IN THIS SECTION
- AIGA Standards of professional practice
- AIGA|Aquent Salary Survey
- Center for Practice Management
- In-house Design
- Improving Your Prospects
- Get a Design Job!
- A Concise Guide to Archiving for Designers
- Designers Accord
- Cross-cultural Design
- Why design?
- Design:Business newsletter
- AIGA production partners
- Kyoto Design Declaration 2008
- Design for User Experience
- Professional Practices
- Information Design
- Illustration
- Typography

Business Perspectives for Creative Leaders
AIGA and Yale School of Management
July 25-30, 2010

RELATED
AIGA position on spec work
AIGA maintains its position against speculative work while recognizing that the decision on whether to take the risks of speculative work is up to individual

Figure 3-16. *A Menu Page from AIGA's website*

Last, the Museum of Modern Art uses large images and little text on this Menu Page (see Figure 3-17). This page is intriguing enough to hook a user on its own, without featuring any particular content at all.

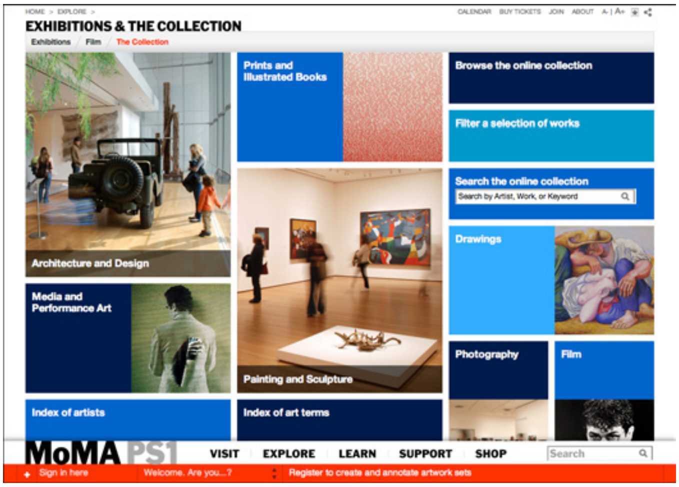

HOME > EXPLORE >
CALENDAR BUY TICKETS JOIN ABOUT A- | A+
EXHIBITIONS & THE COLLECTION
Exhibitions / Film / The Collection
Architecture and Design
Prints and Illustrated Books
Browse the online collection
Filter a selection of works
Search the online collection
Search by Artist, Work, or Keyword
Drawings
Media and Performance Art
Painting and Sculpture
Photography
Film
Index of artists
Index of art terms
MoMA PS1
VISIT EXPLORE LEARN SUPPORT SHOP
Search
Sign in here
Welcome. Are you...?
Register to create and annotate artwork sets

Figure 3-17. *A Menu Page from MoMA's website*

In other libraries

The Directory Navigation pattern at the following URL describes one specialized use of a Menu Page:

http://welie.com/patterns/showPattern.php?patternID=directory

Pyramid

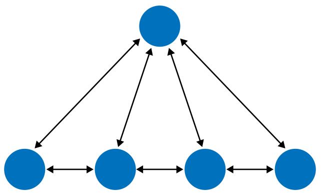


Figure 3-18. *Pyramid schematic*

What

Link together a sequence of pages with Back/Next links. Create a parent page that links to all of the pages in this sequence, and let the user view them either in sequence or out of order.

Use when

The site or application contains a sequence of items that a user would normally view one after another, such as a slideshow, a wizard, chapters in a book, or a set of products. Some users would rather view them one at a time and out of order, however, and they need to be able to pick from a full list of the items.

Almost all Picture Managers (see Chapter 2) use a Pyramid navigational model. Sometimes people need to look at pictures individually; sometimes they would rather browse by walking through the whole sequence. Pyramids support both use cases.

Why

This pattern reduces the number of clicks it takes to get around. It improves navigation efficiency, and it expresses a sequential relationship among the pages.

Back/Next (or Previous/Next) links or buttons are all well and good. People know what to do with them. But a user doesn't necessarily want to be locked into a page sequence that he can't easily get out of: having gone seven pages in, will he need to click the Back button seven times to get back where he started? Not fun!

By putting a link back to the parent page on each sequence page, you increase the user's options. You've now got three main navigation options instead of two—Back, Next, and Up. You haven't made it much more complex, but a casually browsing user (or one who's changed his mind in midstream) will need far fewer clicks to go where he wants to go. It's more convenient for users.

Likewise, chaining together a set of unconnected pages is kind to users who actually want to see all the pages. Without the Back/Next links, they would be "pogo sticking" to the parent page all the time; they might just give up and leave.

How

List all the items or pages, in order, on the parent page. Render the list in a way that suits the types of items you're dealing with (see Chapter 5), such as a Thumbnail Grid for photos, or a rich text list for articles. A click on an item or link brings the user to that item's page.

On each item page, put Back/Next links. Many sites show a small preview of the next item, such as its title or a thumbnail (Flickr does this, as shown in Figure 3-19). In addition, put in an Up link to bring the user back to the parent page, and label it with "Back to <Page Title Here>" or something similar.

One Pyramid variation turns a static linear sequence into a loop by linking the last page back to the first without going back to the parent. This can work, but does the user know she's looped all the way back around? Does she recognize the first page in the sequence? Not necessarily. If the order of a sequence is important, you should link the last page to the parent page, since it tells the user that she's seen all there is to see.

Examples

Flickr's item page is a classic Pyramid example. This Picture Manager shows pictures in a sequence called a *photostream*, which can be seen in its entirety by clicking the labeled link at the top of this widget (see Figure 3-19). The two thumbnails show the previous and next pictures in the photostream.

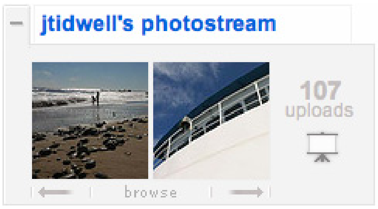
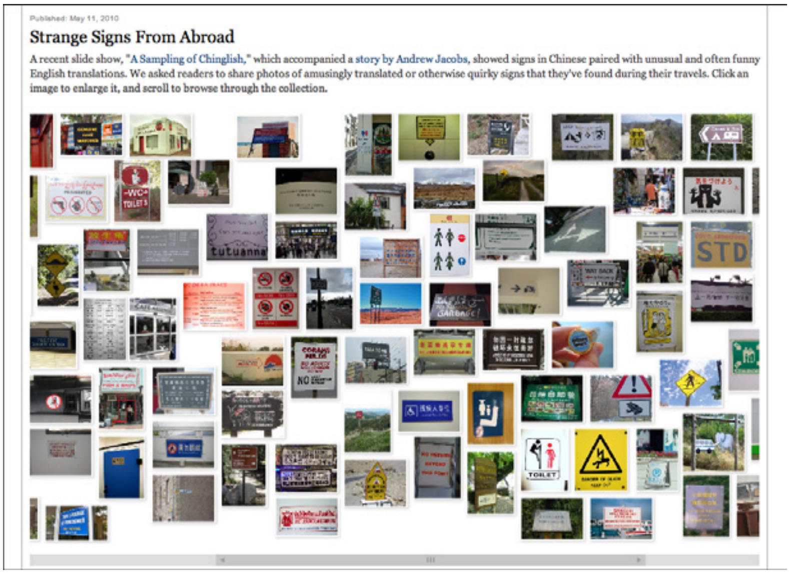


Figure 3-19. *Flickr*

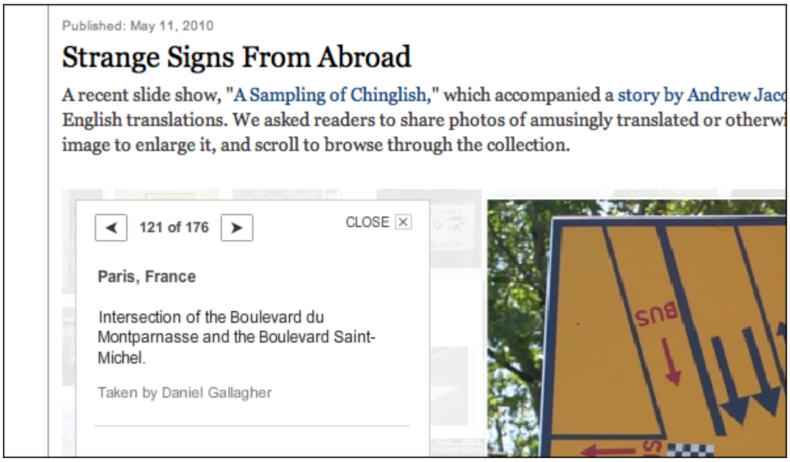
The *New York Times* interactive feature shown in Figure 3-20 is another Picture Manager. The parent page shows an irregular Thumbnail Grid of clickable pictures; the item page (shown in Figure 3-21) contains arrow buttons to traverse the series of photos. Note that this shows the user where she is in the sequence—"121 of 176"—which is a nice touch. There is no "Up" button, but the only other control in that panel, "Close," returns the user to the parent page. (It thus makes an interesting use of a Modal Panel.)


Published: May 11, 2010

Strange Signs From Abroad

A recent slide show, "A Sampling of Chinglish," which accompanied a story by Andrew Jacobs, showed signs in Chinese paired with unusual and often funny English translations. We asked readers to share photos of amusingly translated or otherwise quirky signs that they've found during their travels. Click an image to enlarge it, and scroll to browse through the collection.

Figure 3-20. *A New York Times interactive feature; this is the parent page, where all the photos are shown*


Published: May 11, 2010

Strange Signs From Abroad

A recent slide show, "A Sampling of Chinglish," which accompanied a story by Andrew Jac
English translations. We asked readers to share photos of amusingly translated or otherw
image to enlarge it, and scroll to browse through the collection.

Paris, France

Intersection of the Boulevard du Montparnasse and the Boulevard Saint-Michel.

Taken by Daniel Gallagher

Figure 3-21. *A child page from the same feature, showing Back, Next, and Close buttons near the photo*

Modal Panel

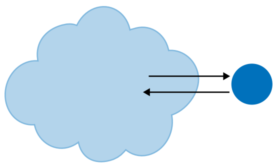


Figure 3-22. *Modal Panel schematic*

What

Show only one page, with no other navigation options, until the user finishes the immediate task.

Use when

The app or site has gotten into a state from which it shouldn't or can't proceed without input from the user. In a document-centric application, for instance, a "save" action might need the user to supply a filename if one wasn't already given. In other contexts, the user may need to sign in before proceeding, or acknowledge an important message.

If the user simply initiates a minor action that may need further input, try to find a way to ask for that input without a modal panel. You could show a text field right below the button that the user clicked, for example, and leave it "hanging" there until the user comes back to it—there's no need to hold up the whole site or app until that input is given. Let the user do something else, and then return to the question at a later time.

Why

A modal panel cuts off all other navigation options from the user. He can't ignore it and go somewhere else in the app or site: he must deal with it here and now. When that's done, he gets sent back to where he was before.

It's an easy model to understand—and to program—though it was overused in applications of past years. A modal panel is disruptive. If the user isn't prepared to answer whatever the modal panel asks, it interrupts his workflow, possibly forcing him to make a decision about something he just doesn't care about. But when used appropriately, a modal panel channels the user's attention into the next decision that he needs to make. There are no other navigation possibilities to distract him.

How

In the same space on the screen where the user's attention lies, place a panel, dialog box, or page that requests the needed information. It should prevent the user from bringing up other pages in that application. This panel ought to be relatively uncluttered, in keeping with the need to focus the user's attention onto this new task with minimal distractions.

Remember that this is a navigation-related pattern. You should carefully mark and label the ways out, and there shouldn't be many of them; one, two, or maybe three. In most cases, they are buttons with short, verbish labels, such as "Save" or "Don't save." There is usually a "Close" or "X" button in the upper right. Upon clicking a button, the user should be taken back to the page he came from.

The lightbox effect is a very effective visual presentation of a modal panel. By dimming most of the screen, the designer highlights the bright modal panel and focuses attention on it. (For this to work, the modal panel needs to be large enough for the user to find it effortlessly. I've seen modal panels that were so small and off-center that it was hard to find them in a large browser window.)

Instead of layering a modal panel on top of another page, some websites simply use pages with extremely limited navigation. Sign-in and registration screens are commonly done this way: global and local navigation are stripped out, and all that's left are the exits (Cancel, Continue, etc.) and an Escape Hatch.

Operating systems and GUI platforms usually offer OS-level modal dialog boxes. These are best used in traditional desktop applications—websites should avoid them in favor of lighter-weight overlay techniques, which are easier for the designer to control and less disruptive to the user.

Examples

SlideShare uses a lightbox to draw attention to its login dialog. If you try to do something on SlideShare that requires you to be signed in, the modal panel in Figure 3-23 appears. There are only three ways to deal with it: sign in, register, or click the familiar "X" button in the upper-right corner. This is very typical of many lightbox-highlighted modal panels on the Web.

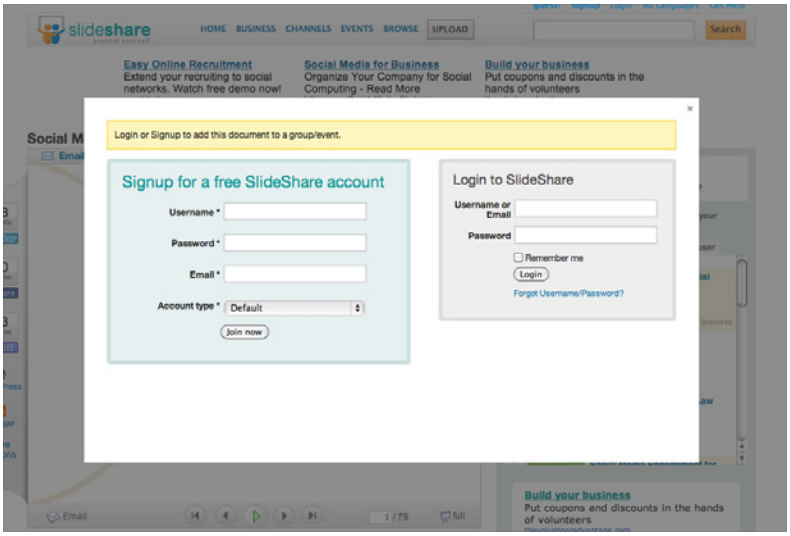

slideshare
HOME BUSINESS CHANNELS EVENTS BROWSE UPLOAD
Login or Signup to add this document to a group/event.
Signup for a free SlideShare account
Username *
Password *
Email *
Account type * Default
Join now
Login to SlideShare
Username or Email
Password
Remember me
Login
Forgot Username/Password?

Figure 3-23. *SlideShare's login modal panel*

Likewise, Kayak uses a similar lightbox for a modified search—but this one actually points to the link that launched it, which helps the user connect her gesture with the resultant modal panel (see Figure 3-24). It's a nice touch.

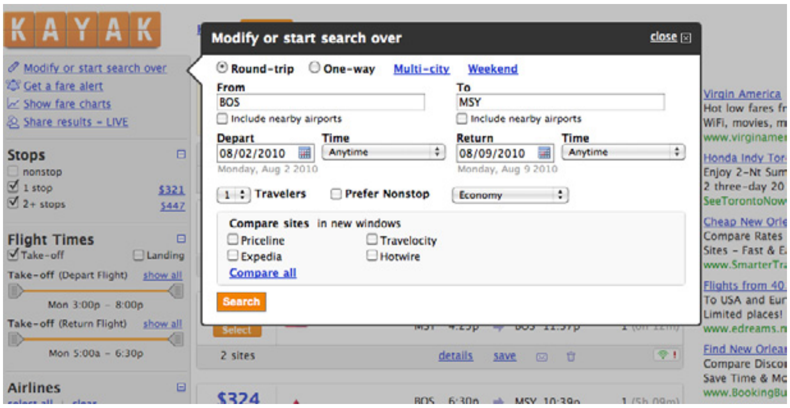
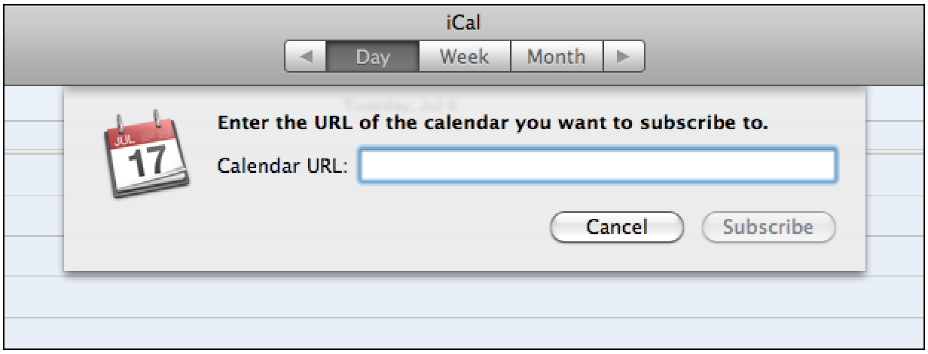


Figure 3-24. *Kayak's modal panel for modifying searches*

The "shade" form of a Mac modal dialog box draws attention to itself as it drops down from the window title bar (animated, of course). These and other application-level modal dialogs actually prevent the user from interacting with the rest of the application, so the user is forced to finish or dismiss this thread of work before doing anything else (see Figure 3-25).



Enter the URL of the calendar you want to subscribe to.

Calendar URL:

Figure 3-25. *A modal panel in a Mac application*

In other libraries

http://quince.infragistics.com/Patterns/Modal%20Panel.aspx

http://patternry.com/p=overlay/

See also the Dialog Overlay pattern in *Designing Web Interfaces* by Bill Scott and Theresa Neil (O'Reilly, *http://oreilly.com/catalog/9780596516253/*). Other types of overlays are described in that chapter as well.

Deep-linked State

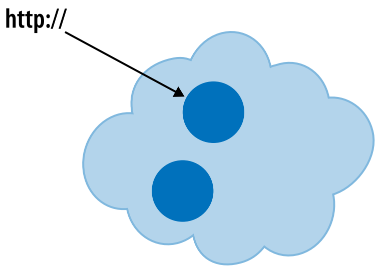


Figure 3-26. *Deep-linked State schematic*

What

Capture the state of a site or app in a URL that can be saved or sent to other people. When loaded, it restores the state of the app to what the user was seeing.

Use when

The site or app's content is something large and interactive, such as a map, book, video, or information graphic. A specific desired point or state might be hard to find, or it may take many steps to get there from a typical starting point. The app may have many user-settable parameters or states, such as viewing modes, scales, data layers, and so on—these may add to the complexity of finding a particular point and seeing it in the "right" way.

Why

Deep-linked State gives the user a way to jump directly to a desired point and application state, thus saving time and work. It behaves like a "deep link" directly into a piece of content on a conventional site—or a permalink to a blog entry—in the sense that you end up with a URL pointing directly to the desired content. But it can be more complex than a permalink, because it can capture both application state and content position.

This pattern is useful for saving a state that the user might want to re-create later, especially if he can "bookmark" it using well-known mechanisms (like browser bookmarks, sites such as Delicious, etc.). It's also handy for sharing with other people, and that's where it really shines. A URL representing a Deep-linked State can be emailed, tweeted, posted to a social network, discussed in a forum, published in a blog entry, and talked about in any number of ways. It might make a statement, or go viral, or become a "socially mediated object."

How

Track the user's position in the content, and put that into a URL. Track supporting data there as well—comments, data layers, markers, highlighting, and so on—so that reloading the URL will bring it all back.

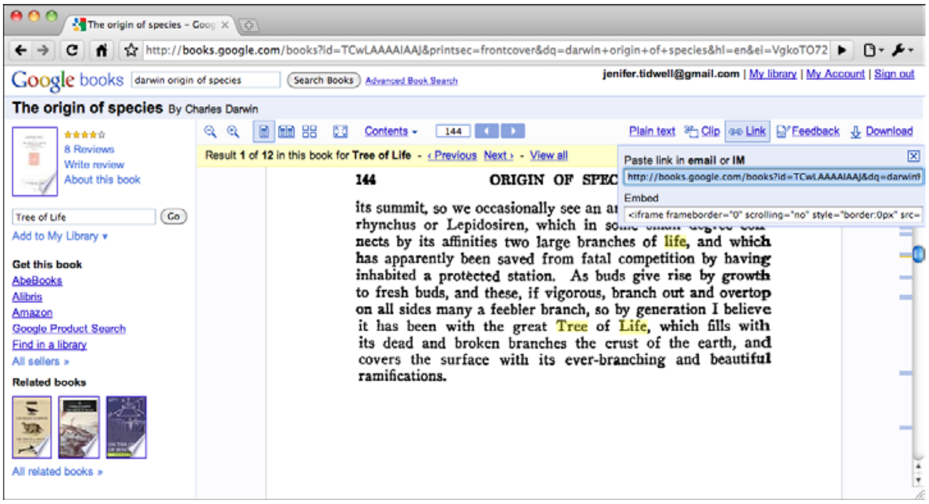
Consider what other parameters or interface states you might want users to save: zoom levels, magnification, viewing modes, search results, and so on. Not all of these should necessarily be captured, since loading the Deep-linked State shouldn't trample on settings that a user doesn't want changed. Work carefully through some usage scenarios to figure this out.

URLs are the best format for saving Deep-linked States: they are universally understood, portable, short, and supported by a vast variety of tools, such as bookmarking services. (If you're dealing with nonweb applications, you may need to be more creative.) Other formats can also be used, such as XML; a text-based format is generally much easier to manage than a binary format.

As a user moves through the content and changes various parameters, immediately put the updated URL in the browser's URL field so that it can be easily seen and captured. Not everyone will think to find it there, so you might also design a "Link" feature whose existence tells the user, "Here's how you create a link to this screen." Some sites offer to generate a JavaScript fragment that not only captures position and state, but also lets users embed the whole thing into another website.

Examples

Google Books captures a large amount of state in its URLs (see Figure 3-27): the position in the book, the viewing mode (single page, two-up, thumbnails), the presence of toolbars, and even search results. It does not capture magnification level, which makes sense, as that's a very individual setting. The URL as seen in the "Link" tool is actually redundant—the URL shown by the browser itself is exactly the same.



http://books.google.com/books?id=TCwLAAAAIAAJ&printsec=frontcover&dq=darwin+origin+of+species&hl=en&ei=VgkoTO72

http://books.google.com/books?id=TCwLAAAAIAAJ&dq=darwin

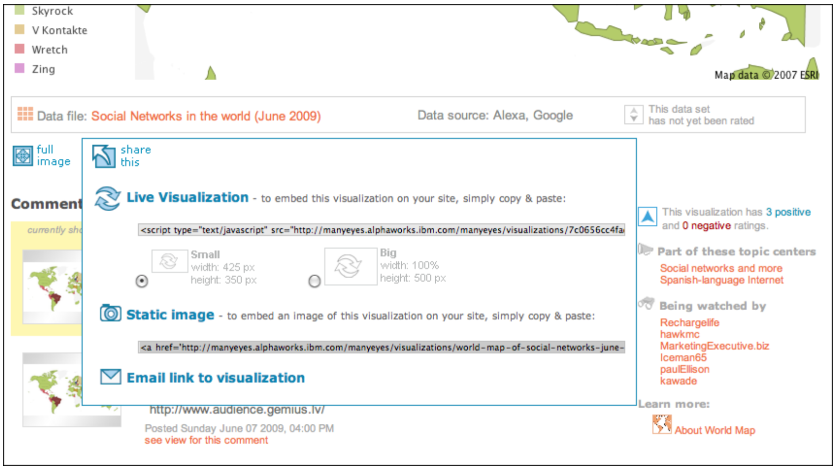
<iframe frameborder="0" scrolling="no" style="border:0px" src=

144 ORIGIN OF SPEC

its summit, so we occasionally see an a rhynchus or Lepidosiren, which in so nects by its affinities two large branches of life, and which has apparently been saved from fatal competition by having inhabited a protected station. As buds give rise by growth to fresh buds, and these, if vigorous, branch out and overtop on all sides many a feebler branch, so by generation I believe it has been with the great Tree of Life, which fills with its dead and broken branches the crust of the earth, and covers the surface with its ever-branching and beautiful ramifications.

Figure 3-27. *Deep-linked State in Google Books, found in two places: the browser's URL field, and the "Link" feature*

Many Eyes, the visualization tools published by IBM, gives visitors the ability to put together their own custom information graphics, based on plot types and data sets offered by the site (see Figure 3-28). They're highly interactive and rich. To share one of these visualizations, you can either generate JavaScript for it (for embedding), or create a snapshot image.



Data file: Social Networks in the world (June 2009) Data source: Alexa, Google This data set has not yet been rated

full image

share this

Comment

currently sh

Live Visualization - to embed this visualization on your site, simply copy & paste:

```
<script type="text/javascript" src="http://manyeyes.alphaworks.ibm.com/manyeyes/visualizations/7c0656cc4fa
```

[● Small] width: 425 px height: 350 px

○ Big width: 100% height: 500 px

Static image - to embed an image of this visualization on your site, simply copy & paste:

```
<a href="http://manyeyes.alphaworks.ibm.com/manyeyes/visualizations/world-map-of-social-networks-june-
```

Email link to visualization

http://www.audience.gemius.lv/

Posted Sunday June 07 2009, 04:00 PM
see view for this comment

This visualization has 3 positive and 0 negative ratings.

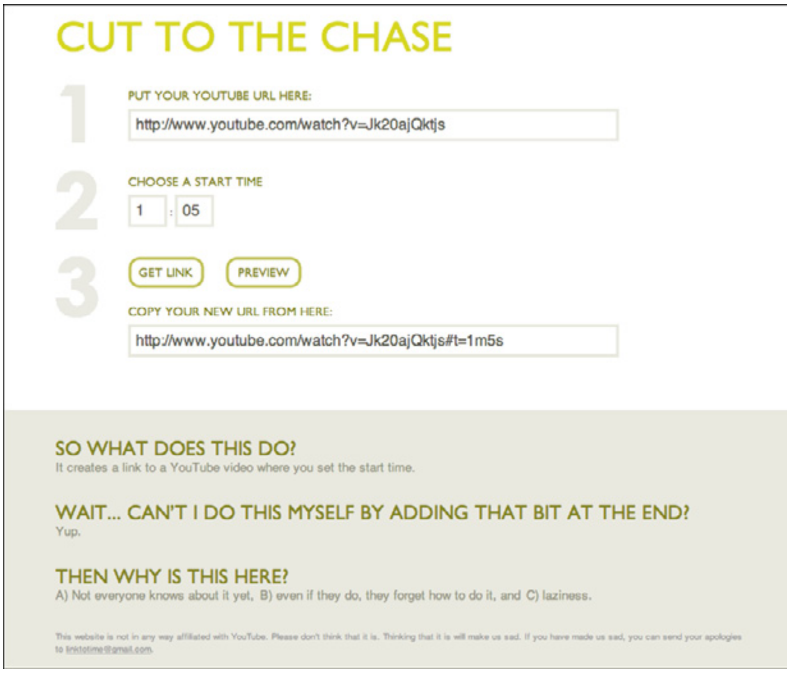
Part of these topic centers
Social networks and more
Spanish-language Internet

Being watched by
Rechargelife
hawkmc
MarketingExecutive.biz
Iceman65
paulEllison
kawade

Learn more:
About World Map

Figure 3-28. *Capturing the state of a visualization at Many Eyes*

Its interface doesn't advertise it, but YouTube lets you put a timestamp into the URL for a video. When loaded, this brings the viewer directly to the specified time in the video. The site *http://youtubetime.com* explains how to do it (see Figure 3-29): add `#t=XmYs` to the end of the URL, where *X* is the number of minutes and *Y* the number of seconds.



CUT TO THE CHASE

1 PUT YOUR YOUTUBE URL HERE:
http://www.youtube.com/watch?v=Jk20ajQktjs

2 CHOOSE A START TIME
1 : 05

3 GET LINK PREVIEW

COPY YOUR NEW URL FROM HERE:
http://www.youtube.com/watch?v=Jk20ajQktjs#t=1m5s

SO WHAT DOES THIS DO?
It creates a link to a YouTube video where you set the start time.

WAIT... CAN'T I DO THIS MYSELF BY ADDING THAT BIT AT THE END?
Yup.

THEN WHY IS THIS HERE?
A) Not everyone knows about it yet, B) even if they do, they forget how to do it, and C) laziness.

This website is not in any way affiliated with YouTube. Please don't think that it is. Thinking that it is will make us sad. If you have made us sad, you can send your apologies to linktotime@gmail.com.

Figure 3-29. *YouTubeTime's explanation of how to use the URL to deep-link into the middle of a video*

Escape Hatch

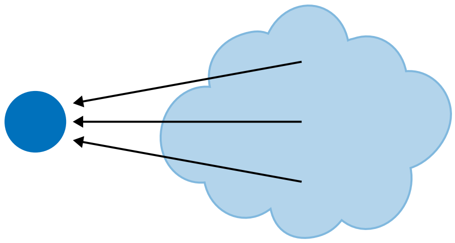


Figure 3-30. *Escape Hatch schematic*

What

On each screen that has limited navigation options, place a button or link that clearly gets the user out of that screen and back to a known place.

Use when

You've got pages that constitute some sort of serial process, such as a wizard, or any pages that lock the user into a limited navigation situation, such as a Modal Panel. These might be pages that users can reach out of context, as they could do via search results.

(Escape Hatches sometimes aren't necessary when you have Sequence Maps or Breadcrumbs on a page. Users who understand them can use those to get back to some known place.)

Why

Limited navigation is one thing, but having no way out is quite another! If you give the user a simple, obvious way to escape from a page, no strings attached, he's less likely to feel trapped there.

This is the kind of feature that helps people feel like they can safely explore an app or site. It's sort of like an undo feature—it encourages people to go down paths without feeling like they're committing to them. See the Safe Exploration pattern in Chapter 1.

Now, if these are pages that users can reach via search results, it's doubly important that Escape Hatches be put on each page. Visitors can click these to get to a "normal" page that tells them more about where they actually are.

How

Put a button or link on the page that brings the user back to a "safe place." This might be a home page, a hub page in a hub-and-spoke design, or any page with full navigation and something self-explanatory on it. Exactly what it links to will depend upon the application's design.

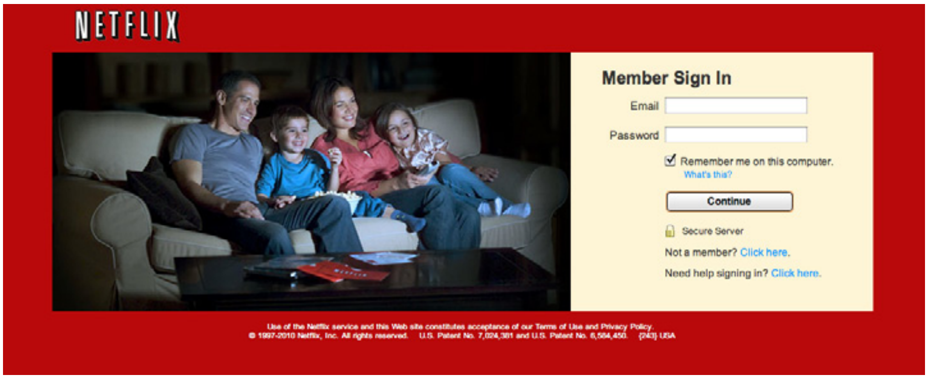
Examples

Websites often use clickable site logos as home-page links, usually in the upper left of a page. These provide an Escape Hatch in a familiar place, while helping with branding.

In some dialogs, a Cancel button or the equivalent can serve this purpose. These also let the user say, "I'm done with this; forget I ever started it."

Have you ever called a company—say, your bank—and had to work your way through a set of phone menus? They can be long, confusing, and time-consuming. If you find yourself in the wrong menu, you may just hang up and try again from the top. But many phone menu systems have a hidden Escape Hatch that they don't tell you about: if you dial "0" at any point, you might be connected to a human operator.

Many websites have certain pages that limit navigation options, such as Modal Panels and pages without global navigation. The Netflix login screen is one example. If a user finds herself here and doesn't want to log in, she can click on the Netflix logo to go back to the home page (see Figure 3-31).


NETFLIX
Member Sign In
Email
Password
Remember me on this computer.
What's this?
Continue
Secure Server
Not a member? Click here.
Need help signing in? Click here.

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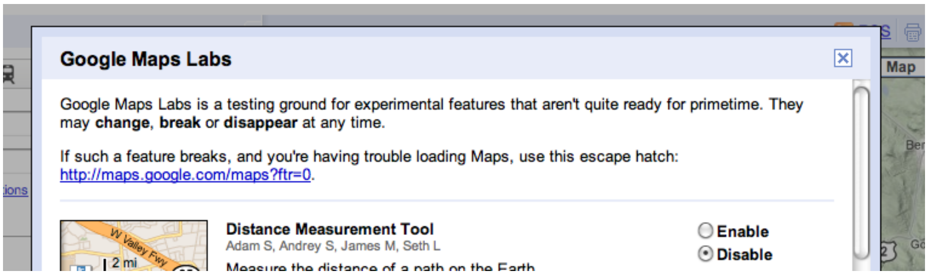
© 1997-2010 Netflix, Inc. All rights reserved. U.S. Patent No. 7,024,381 and U.S. Patent No. 6,584,450. (243) USA

Figure 3-31. *Netflix sign-in page, with the logo as an Escape Hatch*

Sometimes literalism works. Google Labs offers features that aren't ready for release, and they occasionally break. In the example shown in Figure 3-32, Google Maps gives the user an explicit "escape hatch" URL to use when things go wrong.



Google Maps Labs

Google Maps Labs is a testing ground for experimental features that aren't quite ready for primetime. They may **change**, **break** or **disappear** at any time.

If such a feature breaks, and you're having trouble loading Maps, use this escape hatch: http://maps.google.com/maps?ftr=0.

Distance Measurement Tool
Adam S, Andrey S, James M, Seth L
Measure the distance of a path on the Earth

Enable [✓ Disable]

Figure 3-32. *Google Maps Labs Escape Hatch*

In other libraries

These two patterns are named "Home Link." The concept is very similar to Escape Hatch.

http://ui-patterns.com/patterns/HomeLink

http://welie.com/patterns/showPattern.php?patternID=home

Fat Menus

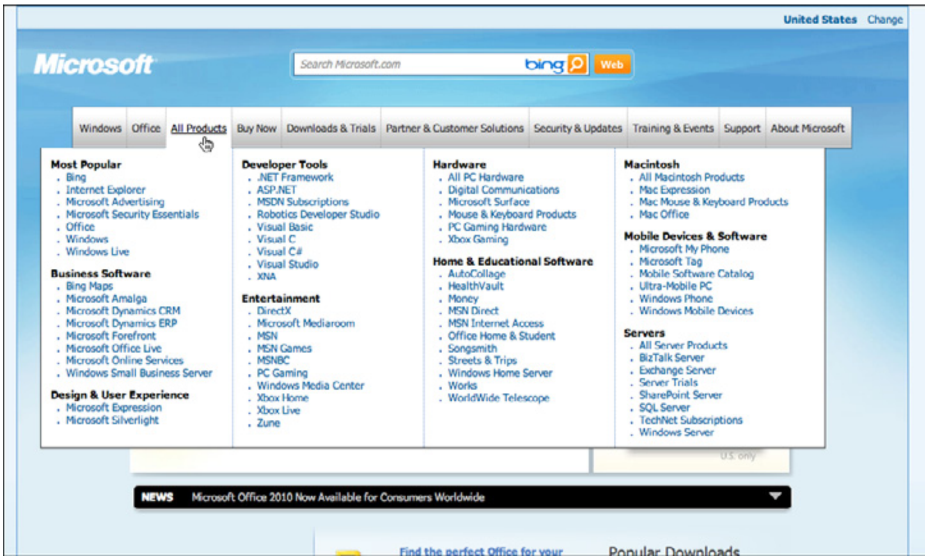


Figure 3-33. *Microsoft's All Products menu*

What

Display a long list of navigation options in drop-down or fly-out menus. Use these to show all the subpages in site sections. Organize them with care, using well-chosen categories or a natural sorting order, and spread them out horizontally.

Use when

The site or app has many pages in many categories, possibly in a hierarchy with three or more levels. You want to expose most of these pages to people casually exploring the site, so they can see what's available. Your users are comfortable with drop-down menus (click to see them) or fly-outs (roll over them with the pointer).

Why

Fat Menus make a complex site more discoverable. They expose many more navigation options to visitors than they might otherwise find.

By showing so many links on every page, you make it possible for a user to jump directly from any subpage to any other subpage (for most subpages, anyhow). You thus turn a multi-level site—where subpages aren't linked to the subpages in other site sections—into a fully connected site.

Fat Menus are a form of *progressive disclosure*, an important concept in user interface design. Complexity is hidden until the user asks to see it. A visitor to a site that uses these can look over the menu headings to get a high-level idea of what's there, and when he's ready to dive in, he can open up a Fat Menu with a gesture. He isn't shown millions of subpages before he's ready to deal with them.

If you're already using menus in your global navigation, you might consider expanding them to Fat Menus if surfacing more links makes the content more attractive to casual browsers. People won't have to drill down into categories and subcategories of your site hierarchy in order to discover interesting pages—they'll see them there, right up front.

How

On each menu, present a well-organized list of links. Arrange them into Titled Sections (Chapter 4) if they fit into subcategories; if not, use a sorting order that suits the nature of the content, such as an alphabetical or time-based list.

Use headers, dividers, generous whitespace, modest graphic elements, and whatever else you need to visually organize those links. And take advantage of horizontal space—you can spread the menu across the entire page if you wish. Many sites make excellent use of multiple columns to present categories. If you make the menu too tall, it might go right off the end of the browser page. (The user controls how tall the browser is; guess conservatively.)

The best sites have Fat Menus that work stylistically with the rest of the site. Design them to fit well into the color scheme, grid, and so on of the page.

Some menu implementations don't work well with accessibility technology such as screen readers. Ensure that your Fat Menus can work with these. If they can't, consider switching to a more static strategy, such as a Sitemap Footer.

Examples

The Fat Menus on the Starbucks website are very well designed (see Figure 3-34). Each menu is a different height but the same width, and follows a strict common page grid (they're all laid out the same way). The style blends in with the site, and the generous whitespace makes it easy to read. Ads are worked into the design, but not obnoxiously. The nonrectangular shape adds a polished look.

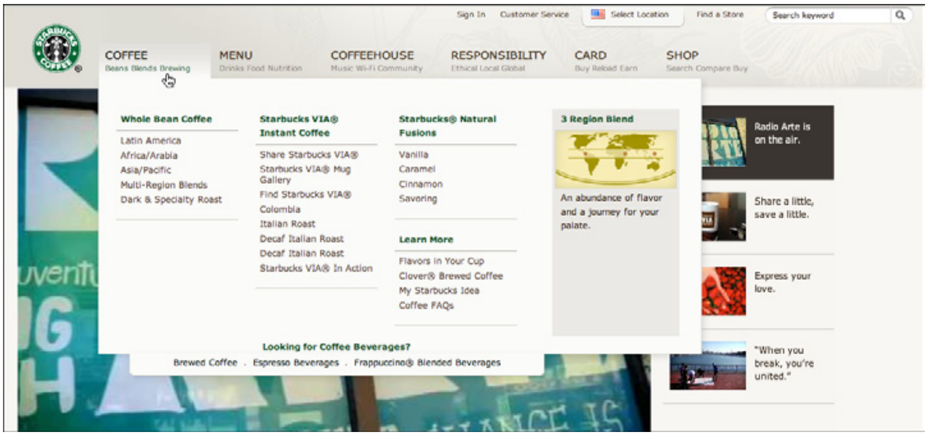
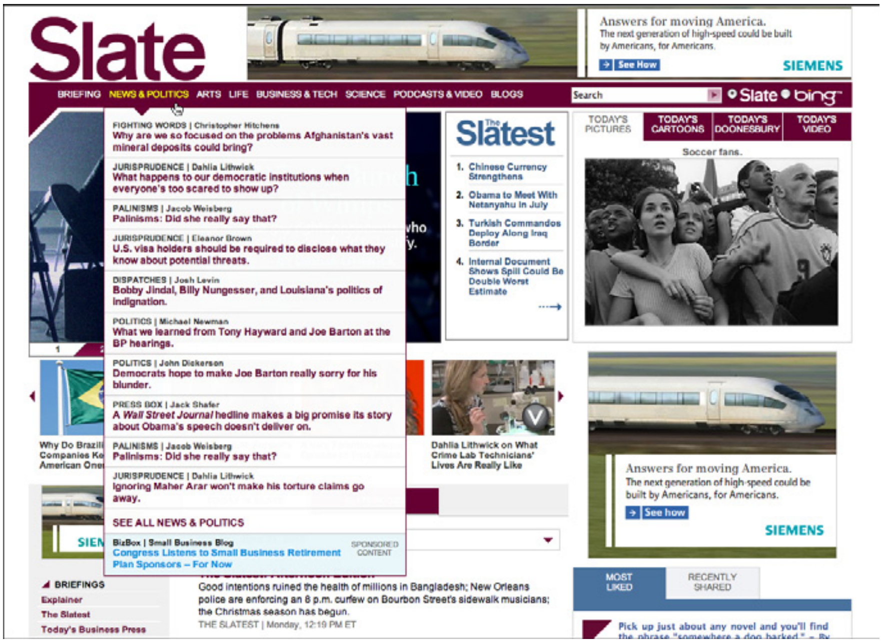


Figure 3-34. *Starbucks coffee menu*

As shown in Figure 3-35, Slate's menus are less readable and more crowded (in keeping with the overall style of the site). These don't take full advantage of horizontal space, either. But the idea of using them to show featured articles is clever—the knowledgeable user can skim a large number of headlines by rolling over the menus.



FIGHTING WORDS | Christopher Hitchens
Why are we so focused on the problems Afghanistan's vast mineral deposits could bring?

JURISPRUDENCE | Dahlia Lithwick
What happens to our democratic institutions when everyone's too scared to show up?

PALINISMS | Jacob Weisberg
Palinisms: Did she really say that?

JURISPRUDENCE | Eleanor Brown
U.S. visa holders should be required to disclose what they know about potential threats.

DISPATCHES | Josh Levin
Bobby Jindal, Billy Nungesser, and Louisiana's politics of indignation.

POLITICS | Michael Newman
What we learned from Tony Hayward and Joe Barton at the BP hearings.

POLITICS | John Dickerson
Democrats hope to make Joe Barton really sorry for his blunder.

PRESS BOX | Jack Shafer
A *Wall Street Journal* hedline makes a big promise its story about Obama's speech doesn't deliver on.

PALINISMS | Jacob Weisberg
Palinisms: Did she really say that?

JURISPRUDENCE | Dahlia Lithwick
Ignoring Maher Arar won't make his torture claims go away.

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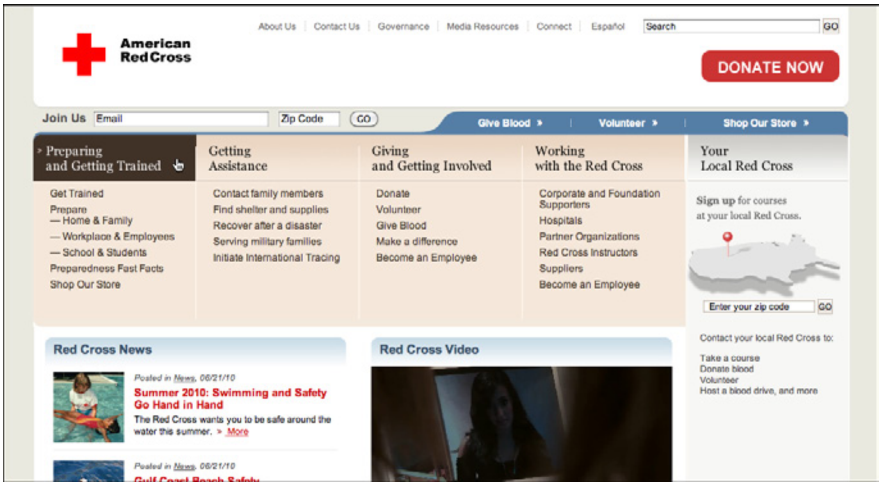
Dahlia Lithwick on What Crime Lab Technicians' Lives Are Really Like

Good intentions ruined the health of millions in Bangladesh; New Orleans police are enforcing an 8 p.m. curfew on Bourbon Street's sidewalk musicians; the Christmas season has begun.
THE SLATEST | Monday, 12:19 PM ET

Pick up just about any novel and you'll find the phrase "somewhere a dog barked." – By

Figure 3-35. *Slate's News & Politics menu*

The American Red Cross doesn't merely float its menus over the top of the page (see Figure 3-36). When the user rolls over any top-level menu item, the resultant Fat Menu actually replaces a carousel-style rotating news panel, taking its space in the page. The menu is the same for all the top-level menu items, so all the subpages in every category are visible at once.



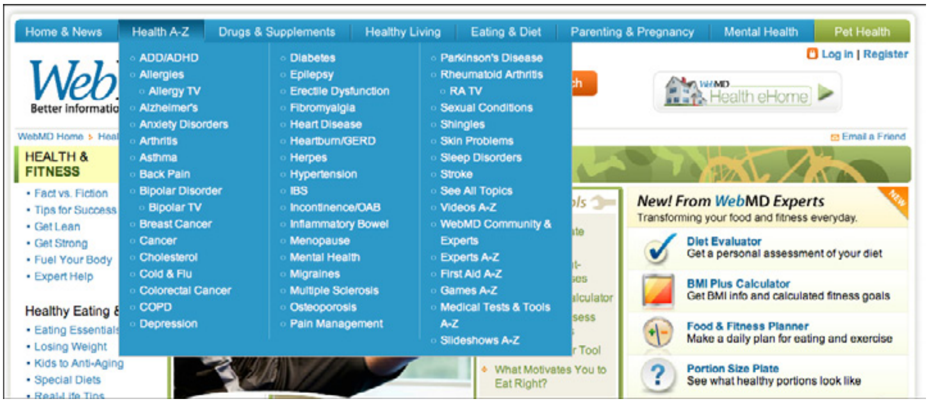
Contact your local Red Cross to:
Take a course
Donate blood
Volunteer
Host a blood drive, and more

Posted in News, 06/21/10
Summer 2010: Swimming and Safety Go Hand in Hand
The Red Cross wants you to be safe around the water this summer. > More

Posted in News, 06/21/10

Figure 3-36. *The American Red Cross menus (all of them)*

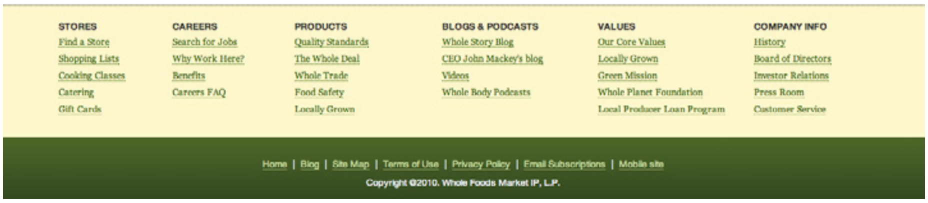
WebMD uses an alphabetical sorting order for its long, flat list of health topics, as shown in Figure 3-37.



Transforming your food and fitness everyday.
Diet Evaluator
Get a personal assessment of your diet
BMI Plus Calculator
Get BMI info and calculated fitness goals
Food & Fitness Planner
Make a daily plan for eating and exercise
Portion Size Plate
See what healthy portions look like

Figure 3-37. *WebMD's Health A–Z menu*

Sitemap Footer



STORES	CAREERS	PRODUCTS	BLOGS & PODCASTS	VALUES	COMPANY INFO
Find a Store	Search for Jobs	Quality Standards	Whole Story Blog	Our Core Values	History
Shopping Lists	Why Work Here?	The Whole Deal	CEO John Mackey's blog	Locally Grown	Board of Directors
Cooking Classes	Benefits	Whole Trade	Videos	Green Mission	Investor Relations
Catering	Careers FAQ	Food Safety	Whole Body Podcasts	Whole Planet Foundation	Press Room
Gift Cards		Locally Grown		Local Producer Loan Program	Customer Service

Home | Blog | Site Map | Terms of Use | Privacy Policy | Email Subscriptions | Mobile site

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Figure 3-38. *Whole Foods footer*

What

Place a site map into the footer of every page in a site. Treat it as part of the global navigation, complementary to the header. Abridge the site map if you need to make it fit into a compact space.

Use when

The site you're designing uses a generous amount of space on each page, and you don't have severe constraints on page size or download time. You don't want to take up too much header or sidebar space with navigation.

The site has more than a handful of pages, but not an outrageously large number of categories and "important" pages (things that users will look for). You can fit a reasonably complete site map—at least for pages that aren't in the header—into a strip no taller than about half of a browser window.

There may be a global navigation menu in the page header, but it doesn't show all levels in the site hierarchy—maybe it only shows the top-level categories. You prefer a simple, well-laid-out footer instead of Fat Menus, perhaps because of implementation ease or accessibility issues.

Why

Sitemap Footers make a complex site more discoverable. They expose many more navigation options to visitors than they might otherwise have.

By showing so many links on every page, you make it possible for a user to jump directly from any subpage to any other subpage (or major page, anyhow). You thus turn a multilevel site—where subpages aren't linked to the subpages in other site sections—into a fully connected site. The footer is where the user's attention lands when she reads to the end of a page. By placing interesting links there, you entice the user to stay on the site and read more.

Finally, showing users the whole site map gives them a strong sense of how the site is constructed and where they might find relevant features. In complex sites, that could be valuable.

You may find yourself trying to choose between a Sitemap Footer design and a Fat Menus design. In conventional websites, a Sitemap Footer would be easier to implement and debug because it doesn't depend on anything dynamic: instead of showing fly-out menus when the user rolls over items or clicks on them, a Sitemap Footer is just a set of static links. It's also easier to use with screen readers and it doesn't require fine pointer control, so it wins on accessibility as well.

On the other hand, the footer may be ignored by busy or casual users who focus only on the page content and the headers. Usability-test if you have any doubts, and watch the click metrics to see if anyone even uses the Sitemap Footer.

How

Design a page-wide footer that contains the site's major sections (categories) and their most important subpages. Include utility navigation, tools such as language choice or Social Links (Chapter 9), and other typical footer information such as copyright and privacy statements.

This might constitute a complete site map for your site, or it might not. The idea is to cover most of what visitors need to find, without overloading the header or sidebar navigation.

In practice, what often happens is that the global navigation options at the top of the page reflect a more task-oriented design—it tries to answer visitors' immediate questions regarding "What is this about?" and "Where do I find *X* right this second?" Meanwhile, the Sitemap Footer shows the actual hierarchical structure of the site itself. This two-part arrangement appears to work well.

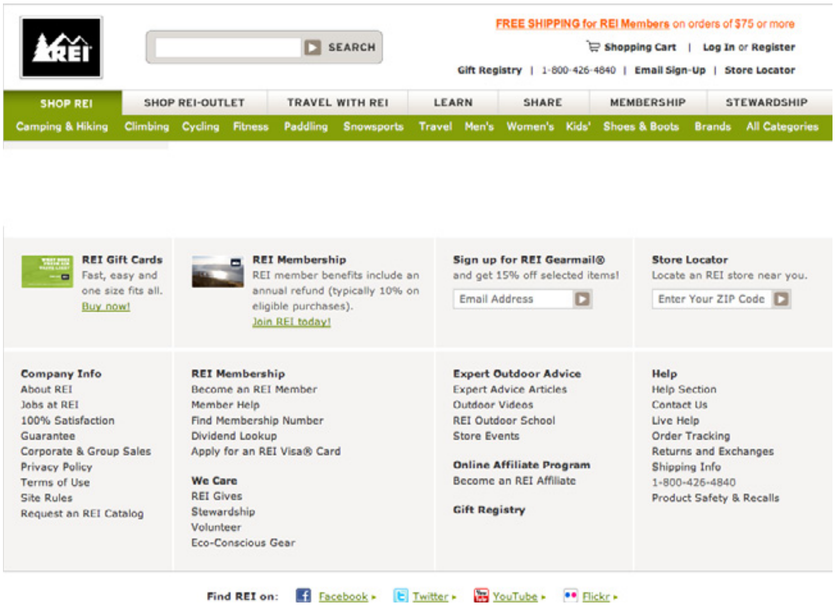
If your site deals with content that itself requires complex navigation—such as a large set of products, news articles, music, videos, books, and so on—you could use the top of the page for content navigation and the Sitemap Footer for almost everything else.

Here are some features that can often be found in Sitemap Footers:

- Major content categories
- Information about the site or organization
- Partner or sister sites—for example, sites or brands owned by the same company
- Community links, such as forums
- Help and support
- Contact information
- Current promotions
- Donation or volunteer information, for nonprofits

Examples

REI's website demonstrates the difference between task-oriented top-of-page global navigation and an effective Sitemap Footer (see Figure 3-39). Shopping, learning, and travel dominate the header, as they should—these are what most site visitors come for. The footer handles secondary tasks that are nevertheless important: "about" information, customer support, membership, and so on.



SEARCH

FREE SHIPPING for REI Members on orders of $75 or more

Shopping Cart | Log In or Register

Gift Registry | 1-800-426-4840 | Email Sign-Up | Store Locator

SHOP REI | SHOP REI-OUTLET | TRAVEL WITH REI | LEARN | SHARE | MEMBERSHIP | STEWARDSHIP

Camping & Hiking | Climbing | Cycling | Fitness | Paddling | Snowsports | Travel | Men's | Women's | Kids' | Shoes & Boots | Brands | All Categories

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Site Rules
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Volunteer
Eco-Conscious Gear

Expert Outdoor Advice
Expert Advice Articles
Outdoor Videos
REI Outdoor School
Store Events

Online Affiliate Program
Become an REI Affiliate

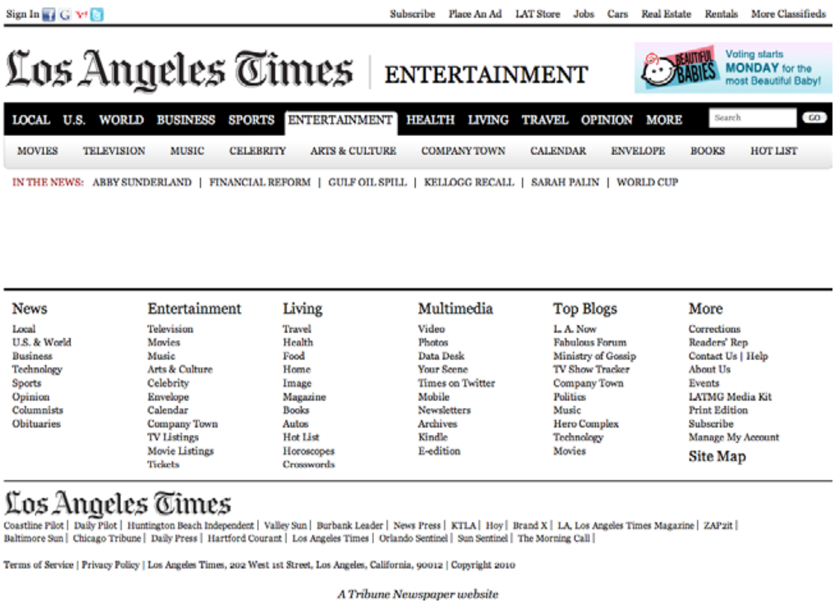
Gift Registry

Help
Help Section
Contact Us
Live Help
Order Tracking
Returns and Exchanges
Shipping Info
1-800-426-4840
Product Safety & Recalls

Find REI on: Facebook ▸ Twitter ▸ YouTube ▸ Flickr ▸

Figure 3-39. *REI header and footer*

The *Los Angeles Times* footer shows much of the same content as the double tab in the header, but flattened and organized somewhat differently (see Figure 3-40).



Sign In | Subscribe | Place An Ad | LAT Store | Jobs | Cars | Real Estate | Rentals | More Classifieds

Los Angeles Times | ENTERTAINMENT

LOCAL | U.S. | WORLD | BUSINESS | SPORTS | ENTERTAINMENT | HEALTH | LIVING | TRAVEL | OPINION | MORE | Search | GO

MOVIES | TELEVISION | MUSIC | CELEBRITY | ARTS & CULTURE | COMPANY TOWN | CALENDAR | ENVELOPE | BOOKS | HOT LIST

IN THE NEWS: ABBY SUNDERLAND | FINANCIAL REFORM | GULF OIL SPILL | KELLOGG RECALL | SARAH PALIN | WORLD CUP

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Technology	Arts & Culture	Home	Your Scene	TV Show Tracker	About Us
Sports	Celebrity	Image	Times on Twitter	Company Town	Events
Opinion	Envelope	Magazine	Mobile	Politics	LATMG Media Kit
Columnists	Calendar	Books	Newsletters	Music	Print Edition
Obituaries	Company Town	Autos	Archives	Hero Complex	Subscribe
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	Tickets	Crosswords			

Los Angeles Times

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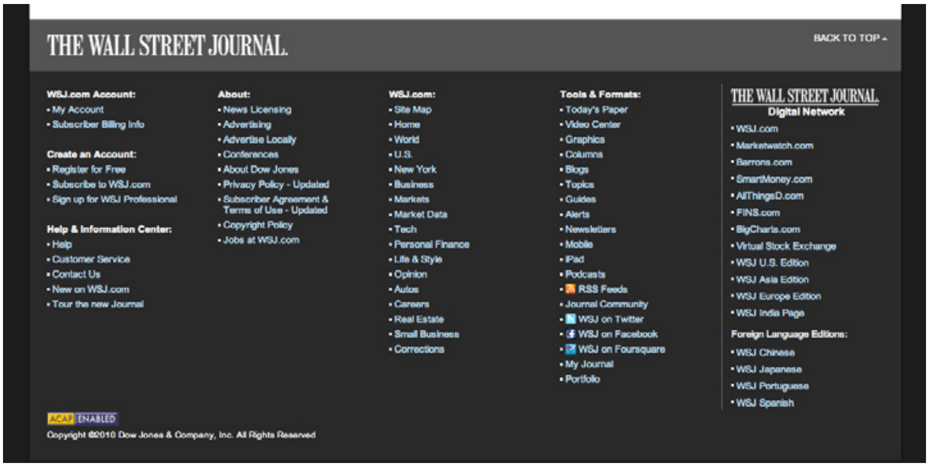
Baltimore Sun | Chicago Tribune | Daily Press | Hartford Courant | Los Angeles Times | Orlando Sentinel | Sun Sentinel | The Morning Call |

Terms of Service | Privacy Policy | Los Angeles Times, 202 West 1st Street, Los Angeles, California, 90012 | Copyright 2010

A Tribune Newspaper website

Figure 3-40. *Los Angeles Times header and footer*

The *Wall Street Journal* has an immense footer (see Figure 3-41). This is probably larger than you'll want to make yours.



THE WALL STREET JOURNAL. BACK TO TOP

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- Subscriber Billing Info

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- Subscribe to WSJ.com
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- Tech
- Personal Finance
- Life & Style
- Opinion
- Autos
- Careers
- Real Estate
- Small Business
- Corrections

Tools & Formats:
- Today's Paper
- Video Center
- Graphics
- Columns
- Blogs
- Topics
- Guides
- Alerts
- Newsletters
- Mobile
- iPad
- Podcasts
- RSS Feeds
- Journal Community
- WSJ on Twitter
- WSJ on Facebook
- WSJ on Foursquare
- My Journal
- Portfolio

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- Marketwatch.com
- Barrons.com
- SmartMoney.com
- AllThingsD.com
- FINS.com
- BigCharts.com
- Virtual Stock Exchange
- WSJ U.S. Edition
- WSJ Asia Edition
- WSJ Europe Edition
- WSJ India Page

Foreign Language Editions:
- WSJ Chinese
- WSJ Japanese
- WSJ Portuguese
- WSJ Spanish

ACAP ENABLED

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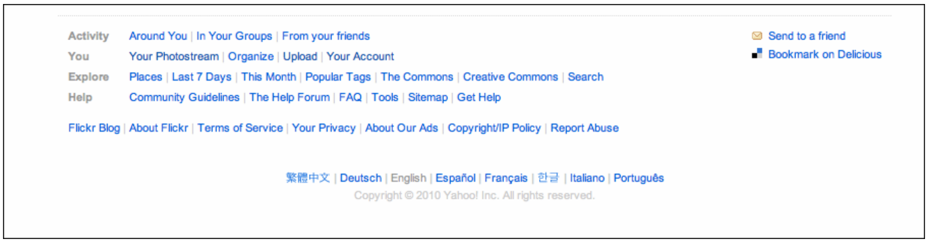
Figure 3-41. *Wall Street Journal footer*

Flickr, as always, is minimalist (see Figure 3-42). It eschews the column structure that most other sites use for their Sitemap Footers, and uses rows instead. MapQuest uses columns, but it also does a lovely job in a small amount of space (see Figure 3-43).



Activity Around You | In Your Groups | From your friends
You Your Photostream | Organize | Upload | Your Account
Explore Places | Last 7 Days | This Month | Popular Tags | The Commons | Creative Commons | Search
Help Community Guidelines | The Help Forum | FAQ | Tools | Sitemap | Get Help

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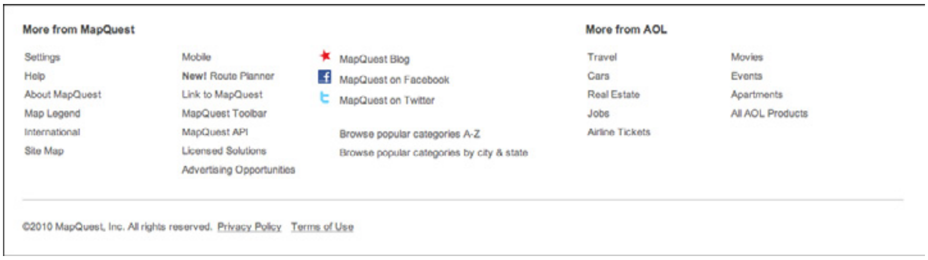
Figure 3-42. *Flickr footer*



More from MapQuest

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Map Legend
International
Site Map

Mobile
New! Route Planner
Link to MapQuest
MapQuest Toolbar
MapQuest API
Licensed Solutions
Advertising Opportunities

MapQuest Blog
MapQuest on Facebook
MapQuest on Twitter

Browse popular categories A-Z
Browse popular categories by city & state

More from AOL

Travel
Cars
Real Estate
Jobs
Airline Tickets

Movies
Events
Apartments
All AOL Products

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Figure 3-43. *MapQuest footer*

In other libraries

http://welie.com/patterns/showPattern.php?patternID=sitemap-footer

http://ui-patterns.com/patterns/FatFooter

The name "Fat Footer" has sometimes been used for this pattern, with a slightly expanded definition. For some wonderful examples, see the *Smashing Magazine* article titled "Informative and Usable Footers in Web Design":

http://www.smashingmagazine.com/2009/06/17/informative-and-usable-footers-in-web-design/

Sign-in Tools

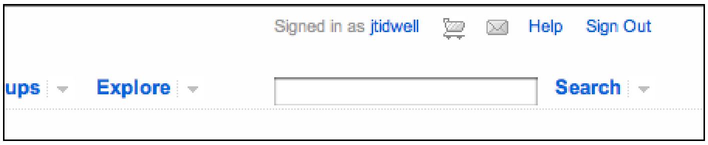


Figure 3-44. *Flickr sign-in tools*

What

Place utility navigation related to a signed-in user's site experience in the upper-right corner. Show tools such as shopping carts, profile and account settings, help, and sign-out buttons.

Use when

Sign-in Tools are useful for any site or service where users often sign in.

Why

This pattern is purely convention; the upper-right corner is where many people expect such tools to be, so they will often look there. Give users a successful experience by putting these tools where they expect them to be.

How

Reserve space near the upper-right corner of each page for Sign-in Tools. Place the user's sign-in name there first (and possibly a small version of her avatar, if it exists), unless the name and avatar are already present elsewhere on the page. Make sure each tool works exactly the same on every page in the site or app.

Cluster together tools such as the following:

- Sign-out button or link (this is important, so make sure it's here)
- Account settings
- Profile settings
- Site help

- Customer service
- Shopping cart
- Personal messages or other notifications
- A link to personal collections of items (e.g., image sets, favorites, or wish lists)
- Home

Don't make this space too large or loud, lest it dominate the page—it shouldn't. This is utility navigation; it's there when a user needs it, but is otherwise "invisible" (well, not literally). For some items, you can use small icons instead of text—shopping carts, messages, and help all have standard visuals you can use, for instance. See the examples in this pattern for some of them.

The site search box is often placed near the Sign-in Tools, although it needs to be in a consistent spot regardless of whether anyone is signed in.

When no user is signed in, this area of the page can be used for a sign-in box—name, password, call to action, and possibly tools for retrieval of forgotten passwords.

Examples

Figure 3-45 shows an assortment of Sign-in Tools from Mint, Twitter, Amazon, and Gmail. These are visually unobtrusive, but findable simply because they're in the correct corner of the page or window.

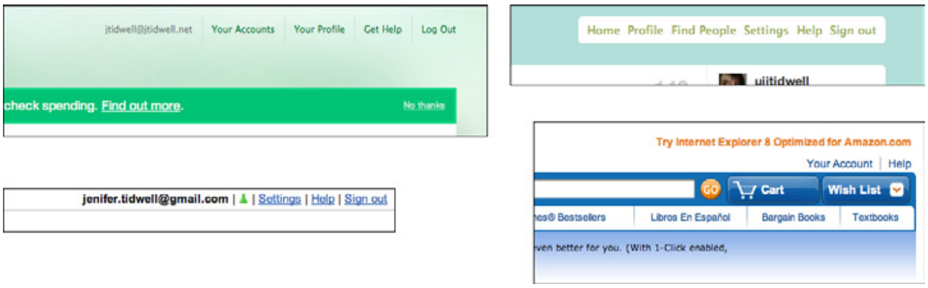

jtidwell@jtidwell.net
Your Accounts
Your Profile
Get Help
Log Out
check spending. Find out more.
No thanks
Home Profile Find People Settings Help Sign out
uiitidwell
Try Internet Explorer 8 Optimized for Amazon.com
Your Account | Help
GO
Cart
Wish List
Bestsellers
Libros En Español
Bargain Books
Textbooks
ven better for you. (With 1-Click enabled,
jenifer.tidwell@gmail.com | | Settings | Help | Sign out

Figure 3-45. *Clockwise from top left: Mint, Twitter, Amazon, and Gmail*

Scribd uses almost all of the tools listed in this pattern (see Figure 3-46). Since there are so many of them, a drop-down menu seems appropriate to keep them from cluttering the corner of the page. iTunes also uses a drop down (see Figure 3-47).

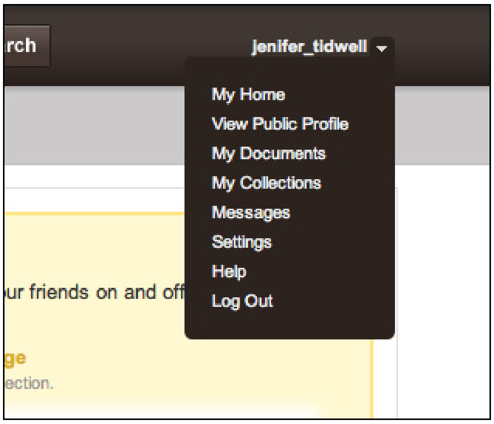


Figure 3-46. *Scribd sign-in tools*

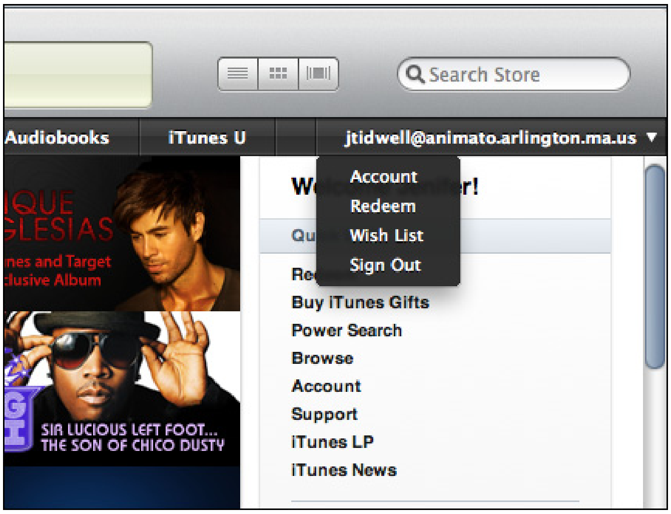


Figure 3-47. *iTunes sign-in tools*

Sequence Map

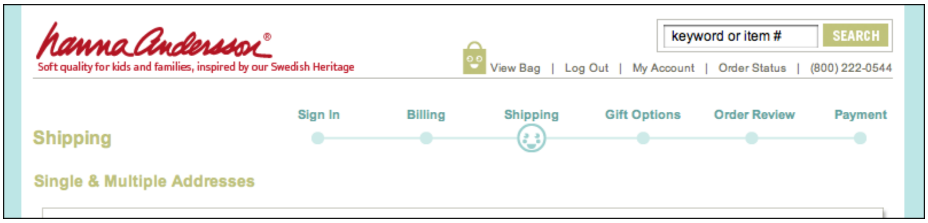

hanna Andersson®
Soft quality for kids and families, inspired by our Swedish Heritage
keyword or item #
SEARCH
View Bag | Log Out | My Account | Order Status | (800) 222-0544
Sign In
Billing
Shipping
Gift Options
Order Review
Payment
Shipping
Single & Multiple Addresses

Figure 3-48. *Hanna Andersson order sequence map*

What

On each page in a sequence, show a map of all the pages in order, including a "You are here" indicator.

Use when

You design a written narrative, a process flow, a Wizard, or anything else through which a user progresses page by page. The user's path is mainly linear.

If the navigation topology is large and hierarchical (as opposed to linear) you may want to consider using Breadcrumbs instead. If you have a large number of steps or items and their order doesn't matter much, this morphs into a Two-Panel Selector (Chapter 5) or Overview Plus Detail (Chapter 7).

Why

Sequence Maps tell a user how far he's come through a series of steps—and, more importantly, how far he has yet to go before he's finished. Knowing this helps him decide whether to continue, estimate how long it will take, and stay oriented.

Sequence Maps also serve as navigational devices. If someone wants to go back to a previously completed step, he can do so by clicking that step in the map.

How

Near an edge of the page, place a small map of the pages in the sequence. Make it one line or column if you can, to keep it from competing visually with the actual page content. Give the current page's indicator some special treatment, such as making it lighter or darker than the others; do something similar with the already-visited pages.

For the user's convenience, you might want to put the map near or next to the main navigation controls, usually Back and Next buttons.

How should you label each page's indicator on the map? If the pages or steps are numbered, use the numbers—they're short and easy to understand. But you should also put the page titles in the map. (Keep the titles short, so the map can accommodate them.) This gives the user enough information to know which pages to go back to, and anticipate what information he'll need in upcoming pages.

Examples

The slideshow shown in Figure 3-49 has a Sequence Map at the bottom. It allows viewers to move somewhat randomly through the images, though most users will probably use the Prev and Next buttons at the top.

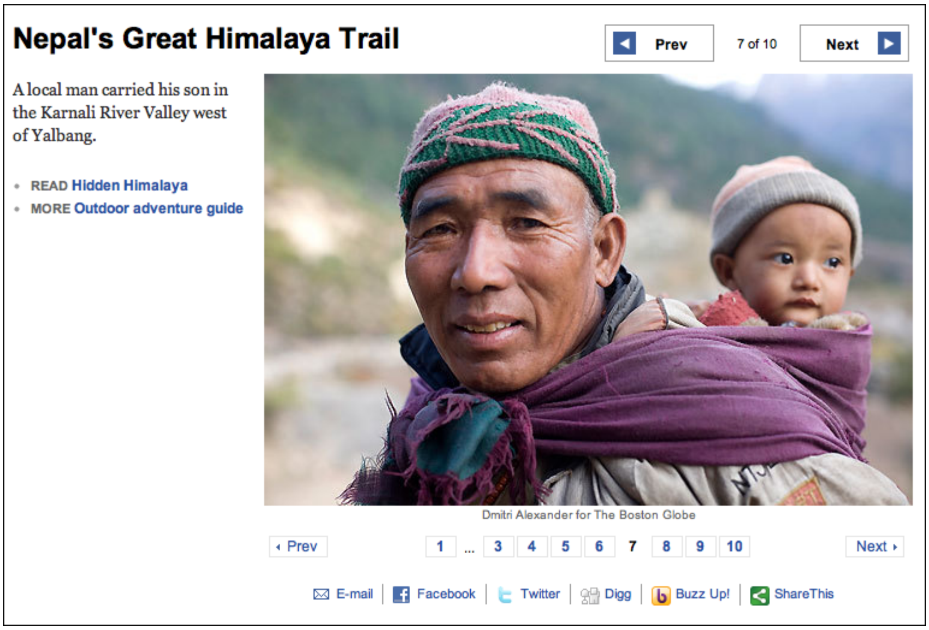
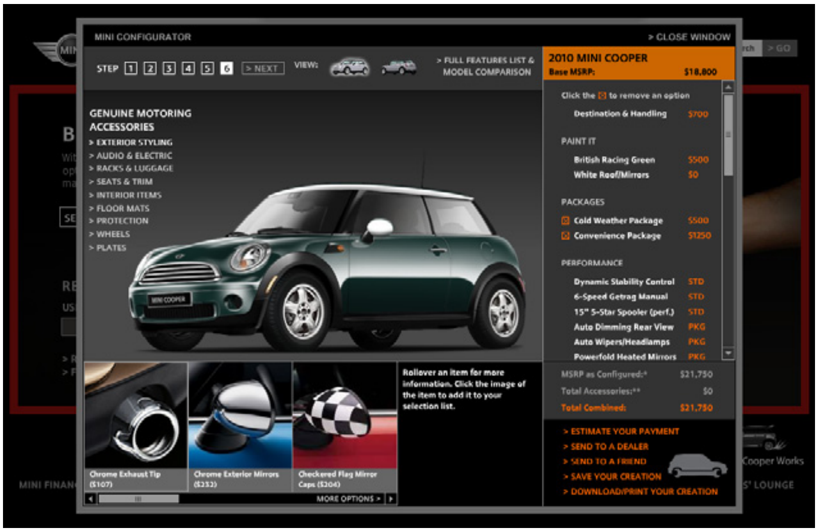

Nepal's Great Himalaya Trail
Prev
7 of 10
Next
A local man carried his son in the Karnali River Valley west of Yalbang.
READ Hidden Himalaya
MORE Outdoor adventure guide
Dmitri Alexander for The Boston Globe
‹ Prev
1 ... 3 4 5 6 7 8 9 10
Next ›
E-mail | Facebook | Twitter | Digg | Buzz Up! | ShareThis

Figure 3-49. *Boston Globe slideshow, with sequence map under photo*

The Mini Cooper product configurator (see Figure 3-50) is a cross between a Settings Editor and a Wizard in that it lets the user move back and forth at will, but organizes the pages in a numbered sequence. The Sequence Map at the top is a critical control for "playing" with the app, for moving among the various pages and exploring different options.

Installation wizards usually require a lot of steps. The one shown in Figure 3-51, from Adobe, has a typical Sequence Map on the lefthand side. Its steps are disabled when they're irrelevant or bypassed, such as this trial installation that has no Adobe ID.



Rollover an item for more information. Click the image of the item to add it to your selection list.

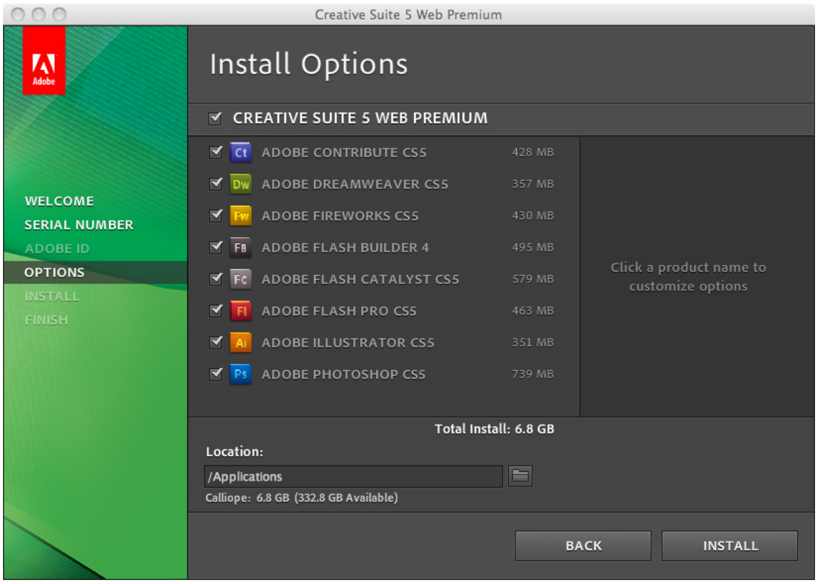
2010 MINI COOPER

Base MSRP:	$18,800

Click the ⊠ to remove an option

Destination & Handling	$700
PAINT IT	
British Racing Green	$500
White Roof/Mirrors	$0
PACKAGES	
⊠ Cold Weather Package	$500
⊠ Convenience Package	$1250
PERFORMANCE	
Dynamic Stability Control	STD
6-Speed Getrag Manual	STD
15" 5-Star Spooler (perf.)	STD
Auto Dimming Rear View	PKG
Auto Wipers/Headlamps	PKG
Powerfold Heated Mirrors	PKG
MSRP as Configured:*	$21,750
Total Accessories:**	$0
Total Combined:	$21,750

Figure 3-50. *Mini Cooper product configurator, with sequence map in upper left*



Install Options

☑ CREATIVE SUITE 5 WEB PREMIUM

☑ ADOBE CONTRIBUTE CS5	428 MB
☑ ADOBE DREAMWEAVER CS5	357 MB
☑ ADOBE FIREWORKS CS5	430 MB
☑ ADOBE FLASH BUILDER 4	495 MB
☑ ADOBE FLASH CATALYST CS5	579 MB
☑ ADOBE FLASH PRO CS5	463 MB
☑ ADOBE ILLUSTRATOR CS5	351 MB
☑ ADOBE PHOTOSHOP CS5	739 MB

Click a product name to customize options

Total Install: 6.8 GB

Location:

/Applications

Calliope: 6.8 GB (332.8 GB Available)

Figure 3-51. *Adobe CS5 installer, with sequence map at left*

In other libraries

http://ui-patterns.com/patterns/StepsLeft

http://developer.yahoo.com/ypatterns/navigation/bar/progress.html

Breadcrumbs

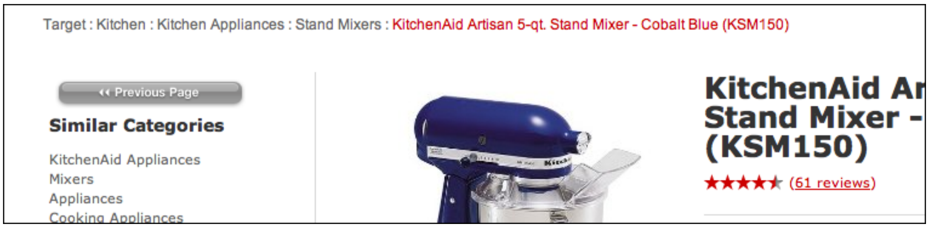

Target : Kitchen : Kitchen Appliances : Stand Mixers : KitchenAid Artisan 5-qt. Stand Mixer - Cobalt Blue (KSM150)

Figure 3-52. *Target breadcrumbs*

What

On each page in a deep navigational hierarchy, show a list of all the parent pages, up to the main or home page.

Use when

Your application or site has a hierarchical structure with two or more levels. Users move around via direct navigation, browsing, filtering, searching within the site, or deep-linking into it from elsewhere. Global navigation alone isn't sufficient to show a "You are here" signpost, because the hierarchy is too deep or large.

Alternatively, your site or app may have a set of browsing and filtering tools for a large data set, such as products being sold online. The products are categorized in a hierarchy, but that categorization doesn't necessarily match the way people will look for those products.

Why

Breadcrumbs show each level of hierarchy leading to the current page, from the top of the application all the way down. In a sense, they show a single linear "slice" of the overall map of the site or app.

So, like a Sequence Map, Breadcrumbs help a user figure out where he is. This is especially handy if he's jumped abruptly to somewhere deep in the tree, as he would by following search results or a faceted browsing tool. Unlike a Sequence Map, though, Breadcrumbs don't tell the user where he's headed next. They deal only with the present.

Some texts tell you that Breadcrumbs—so named for the Hansel and Gretel story, in which Hansel drops breadcrumbs on a forest trail to mark his way home—are most useful for telling the user how he got to where he is from the top of the site or app. But that's only true if the user has drilled straight down from the top, with no sidetracking, or following other branches, or dead ends, or searching, or linking directly from other pages…not likely.

Instead, Breadcrumbs are best for telling you where you are relative to the rest of the app or site—it's about context, not just history. Look at the Target example in Figure 3-52. Faceted browsing—searching for items with certain characteristics—brought me to this page deep in the Target website. (A keyword search could have done the same.) But now that I'm here, I can see where I am in the product hierarchy and I know what else I can look at. I can use the Breadcrumbs to look at all of Target's stand mixers and do some comparison shopping.

Finally, Breadcrumbs are usually clickable links or buttons. This turns them into a navigational device in their own right.

How

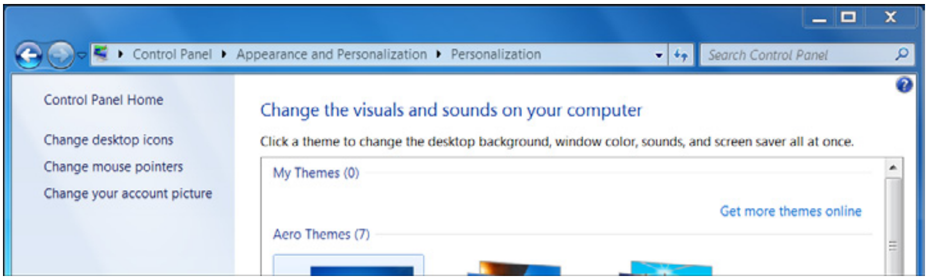
Near the top of the page, put a line of text or icons indicating the current level of hierarchy. Start with the top level; to its right, put the next level and so on down to the current page. Between the levels, put a graphic or text character to indicate the parent/child relationship between them. This is usually a right-pointing arrow, triangle, greater-than sign (>), slash (/), or right angle quotes (»).

The labels for each page should be the page titles. Users should recognize them if they've been to those pages already; if not, the titles should at least be self-explanatory enough to tell the user what those pages are about. The labels should be links to those pages.

Some Breadcrumbs show the current page as the last item in the chain; some don't. If yours do, make them visually different from the rest of the items, since they're not links.

Examples

The Windows 7 control panel is a hierarchical Settings Editor that can be three levels deep. The screenshot in Figure 3-53 shows the Personalization settings within the Appearance and Personalization category (which has at least six subcategories in addition to Personalization).

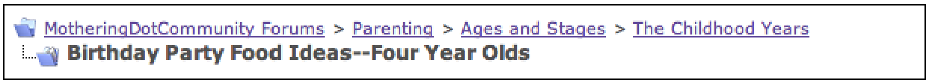


Change the visuals and sounds on your computer

Click a theme to change the desktop background, window color, sounds, and screen saver all at once.

Figure 3-53. *Windows 7 control panel*

Online communities such as the one shown in Figure 3-54 often have deep hierarchies: forum categories, forums, subforums, yet more subforums, and threads. Breadcrumbs help users understand and traverse this hierarchy.

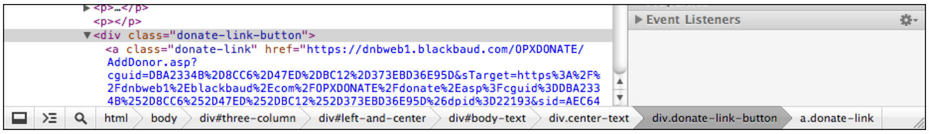


MotheringDotCommunity Forums > Parenting > Ages and Stages > The Childhood Years

Birthday Party Food Ideas--Four Year Olds

Figure 3-54. *Mothering.com forums*

Figure 3-55 shows an example of Breadcrumbs used outside a "page" context. The Chrome developer tools, among many other such tools for software developers, provide a way for users to manage very deep hierarchical structures (in this case, nested structural tags in an HTML page). Breadcrumbs are invaluable here for keeping track of where one is in that structure.



```
      ▶<p>…</p>
       <p></p>
      ▼<div class="donate-link-button">
         <a class="donate-link" href="https://dnbweb1.blackbaud.com/OPXDONATE/
         AddDonor.asp?
         cguid=DBA2334B%2D8CC6%2D47ED%2DBC12%2D373EBD36E95D&sTarget=https%3A%2F%
         2Fdnbweb1%2Eblackbaud%2Ecom%2FOPXDONATE%2Fdonate%2Easp%3Fcguid%3DDBA233
         4B%252D8CC6%252D47ED%252DBC12%252D373EBD36E95D%26dpid%3D22193&sid=AEC64
```

Figure 3-55. *Chrome developer tools*

In other libraries

http://developer.yahoo.com/ypatterns/navigation/breadcrumbs.html

http://ui-patterns.com/patterns/Breadcrumbs

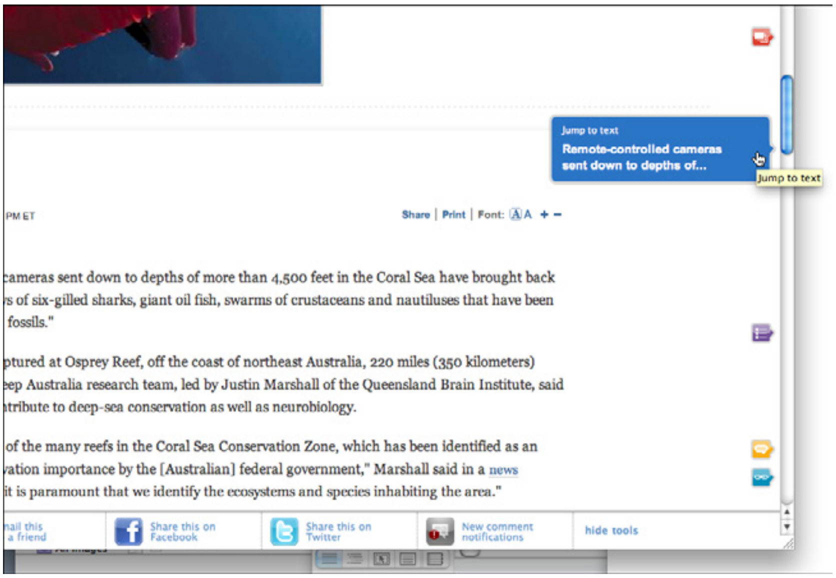
http://www.welie.com/patterns/showPattern.php?patternID=crumbs

http://patternry.com/p=breadcrumbs/

http://quince.infragistics.com/Patterns/Breadcrumbs.aspx

http://www.smashingmagazine.com/2009/03/17/breadcrumbs-in-web-design-examples-and-best-practices-2/

Annotated Scrollbar


Jump to text
Remote-controlled cameras sent down to depths of...
Jump to text

PM ET

Share | Print | Font: A A + −

cameras sent down to depths of more than 4,500 feet in the Coral Sea have brought back
s of six-gilled sharks, giant oil fish, swarms of crustaceans and nautiluses that have been
fossils."

ptured at Osprey Reef, off the coast of northeast Australia, 220 miles (350 kilometers)
ep Australia research team, led by Justin Marshall of the Queensland Brain Institute, said
tribute to deep-sea conservation as well as neurobiology.

of the many reefs in the Coral Sea Conservation Zone, which has been identified as an
ation importance by the [Australian] federal government," Marshall said in a news
it is paramount that we identify the ecosystems and species inhabiting the area."

Figure 3-56. *MSNBC scrollbar showing page sections*

What

Make the scrollbar serve double-duty as a map of the content, or as a "You are here" indicator.

Use when

You're designing either a document-centric application or a pan-and-zoom interface, such as a map or large visualization. Users will scan this document or graphic for items of note, such as specific page numbers or landmarks. They might have trouble keeping track of where they are and where to go next as they scroll.

Why

Even though the user remains within one navigational space as she scrolls through the content, signposts are still useful. When scrolling quickly, it's really hard to read the text flying by (or impossible, if the screen can't refresh quickly enough), so some other indicator of position is necessary. Even if she stops briefly, the part of the document she can see may not contain anything she can orient herself by, like headers.

Why a scrollbar? Because that's where the user's attention is focused. If you put signposts there, the user will see them and use them as she scrolls, rather than trying to look at two different screen areas at once. You can put signposts close to the scrollbar and still get the same effect; the closer, the better.

When the scrollbar shows indicators in the scrollbar track itself, you get something that behaves just like a one-dimensional Overview Plus Detail (Chapter 7). The track is the overview; the scrolled window is the detail.

How

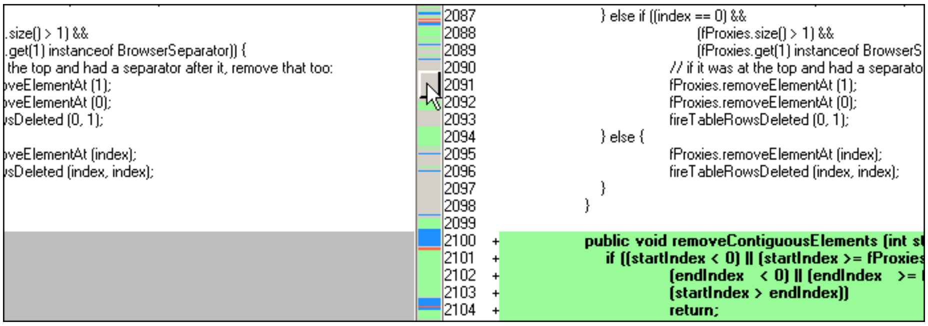
Put a position indicator on or near the scrollbar. Either static or dynamic indicators might work—static indicators are those that don't change from second to second, such as blocks of color in the scrollbar track (see the tkdiff screenshot in Figure 3-57). Make sure their purpose is clear, though; such things can baffle users that aren't used to seeing graphics in the scrollbar track!

Dynamic indicators change as the user scrolls, and they are often implemented as tool tips. As the scroll position changes, the tool tip shown next to the scroll thumb changes to show information about the content there. This will vary with the nature of the application. Microsoft Word, for instance, puts page numbers and headers in these tool tips.

In either case, you'll need to figure out what a user will most likely be looking for, and thus what you need to put into the annotations. The content structure is a good starting point. If the content is code, you might show the name of the current function or method; if it's a spreadsheet, show the row number, and so on. Also consider whether the user is currently performing a search—the scrollbar annotation should show where the search results are in the document.

Examples

The tkdiff application shown in Figure 3-57 visually highlights the differences between two versions of a text file: newly added sections are marked in green, changed sections are in blue, and deleted sections are in red. An Annotated Scrollbar serves as an overall map, thus making large file "diffs" easier to comprehend.

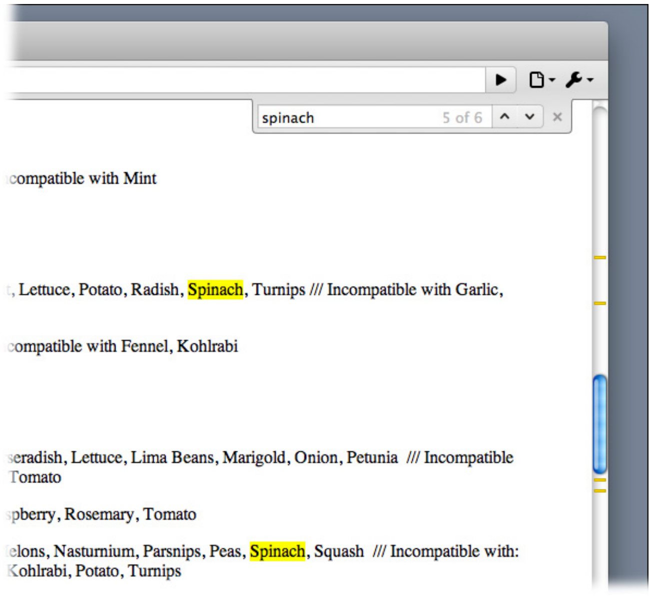


```
.size() > 1) &&
.get(1) instanceof BrowserSeparator)) {
the top and had a separator after it, remove that too:
oveElementAt (1);
oveElementAt (0);
sDeleted (0, 1);

oveElementAt (index);
sDeleted (index, index);
```

```
            } else if ((index == 0) &&
                    (fProxies.size() > 1) &&
                    (fProxies.get(1) instanceof BrowserS
                // if it was at the top and had a separato
                fProxies.removeElementAt (1);
                fProxies.removeElementAt (0);
                fireTableRowsDeleted (0, 1);
            } else {
                fProxies.removeElementAt (index);
                fireTableRowsDeleted (index, index);
            }
        }

+       public void removeContiguousElements (int st
+           if ((startIndex < 0) || (startIndex >= fProxies
+                   (endIndex   < 0) || (endIndex   >=
+                   (startIndex > endIndex))
+               return;
```

Figure 3-57. *tkdiff*

Chrome annotates its scrollbar with search results (see Figure 3-58). When you search for a word on a web page, Chrome highlights the found words on the page with yellow, and places a yellow indicator in the scrollbar wherever they are found. This way, the user can scroll directly to those points in the document.



spinach 5 of 6

compatible with Mint

, Lettuce, Potato, Radish, Spinach, Turnips /// Incompatible with Garlic,

ompatible with Fennel, Kohlrabi

eradish, Lettuce, Lima Beans, Marigold, Onion, Petunia /// Incompatible
Tomato

pberry, Rosemary, Tomato

elons, Nasturnium, Parsnips, Peas, Spinach, Squash /// Incompatible with:
Kohlrabi, Potato, Turnips

Figure 3-58. *Chrome "Find" results*

In other libraries

http://quince.infragistics.com/Patterns/Annotated%20Scrollbar.aspx

Animated Transition

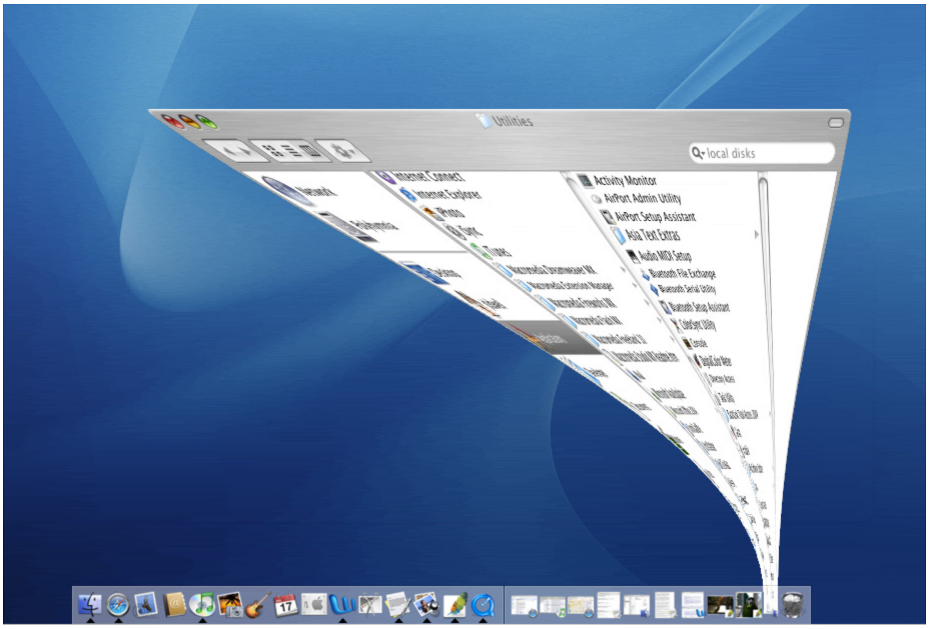


Figure 3-59. *Mac OS dock transition*

What

Smooth out a startling or dislocating transition with an animation that makes it feel natural.

Use when

Users move through a large virtual space, such as an image, spreadsheet, graph, or text document. They might be able to zoom in to varying degrees, pan or scroll, or rotate the whole thing. This is especially useful for information graphics, such as maps and plots. (See Chapter 7 for more about information graphics.)

Alternatively, the interface might have sections that can be closed and opened again, either by the system or by the user—such as trees with closable parent nodes, standalone windows that open and close, or an interface built with Collapsible Panels (Chapter 4). Animated Transition might also be used when users jump from one separate page to another.

Why

All of these transformations can disrupt a user's sense of where she is in the virtual space. Zooming in and out, for instance, can throw off her spatial sense when it's done instantaneously, as can rotation and the closing of entire sections that prompts a re-layout of the screen. Even scrolling down a long page of text, when it's jumpy, can slow down the reader.

But when the shift from one state to another is visually continuous, it's not so bad. In other words, you can animate the transition between states so that it looks smooth, not discontinuous. This helps keep the user oriented. We can guess that it works because it more closely resembles physical reality—when was the last time you instantly jumped from the ground to 20 feet in the air? Less fancifully, an animated transition gives the user's eyes a chance to track a location while the view changes, rather than trying to find the location again after an abrupt change.

When done well, Animated Transitions bolster your application's cool factor. They're fun.

How

For each type of transformation that you use in your interface, design a short animation that "connects" the first state with the second state. For zoom and rotate, you might show the in-between zoom or rotate levels; for a closing panel, you might show it shrinking while the other panels expand to take up the space it leaves behind. To whatever extent possible, make it look like something physical is happening.

But this pattern is a double-edged sword. Beware of making the user motion-sick! The animations should be quick and precise, with little or no lag time between the user's initiating gesture and the beginning of the animation. Limit it to the affected part of the screen; don't animate the whole window. And keep it short. My preference would be to keep it well under a second, and research shows that 300 milliseconds might be ideal for smooth scrolling. Test it with your users to see what's tolerable.

If the user issues multiple actions in quick succession, such as pressing the down arrow key many times to scroll, combine them into one animated action. Otherwise, the user might sit there through several seconds' worth of animation as the punishment for pressing the down arrow key 10 times. Again: keep it quick and responsive.

Some of the types of transitions listed by the Yahoo! pattern library (*http://developer.yahoo.com/ypatterns/richinteraction/transition/*) and *Designing Web Interfaces* are as follows:

- Brighten and dim
- Expand and collapse
- Fade in, fade out, and cross-fade
- Self-healing
- Slide
- Spotlight

In other libraries

For more discussion and tons of great examples of the Animated Transitions in the preceding list, see the Transition cluster of patterns at the Yahoo! Design Pattern Library:

http://developer.yahoo.com/ypatterns/richinteraction/transition/

In addition, Scott and Neil's *Designing Web Interfaces* contains an entire chapter on transitions. It covers some of the same ground as the Yahoo! site, but it's worth reading.