



Designing Best-in-Class Embedded User Assistance

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Overview

- ▶ Why embedded UA is effective
- ▶ Best practices
- ▶ Types of embedded UA
- ▶ Best-in-class examples
- ▶ Context-sensitive embedded UA
- ▶ AJAX and Web 2.0

Hands-on activities

- ▶ Designing embedded UA for new products
- ▶ Designing embedded UA for existing products
- ▶ Creating context-sensitive embedded UA



Embedded UA is effective

Fact: Users will not request help or even hints, even after making multiple mistakes.
- Alevan, et al. (2006)

Fact: Users don't see embedded UA as "help."
- Grayling (2002)

Fact: Users use embedded help.
- Martin et al. (2005)



Embedded UA best practices

- ▶ Provide information at the point of use
- ▶ Write topics to answer user questions
- ▶ Combine embedded UA with external help
- ▶ Provide focused help links ('Tell me more,' 'Tips,' 'Why?')
 - Miller & Remington (2004), Reuning (2004)
- ▶ Use text links, not icon links
 - McElwain, et al. (2002)
- ▶ Use unique formatting for UA links
 - Spool, et al. (1998)

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Combining embedded UA and external help

Functional UA (field labels)

Context-sensitive external help links

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Combining embedded UA and external help

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Functional UA - user questions

Descriptions

"What does this button do?"

Reminders

"What does this acronym mean?"

Examples

"What's a good password?"

Exceptions

"What if I have two middle names?"

Relationships and dependencies

"How do these settings relate to each other?"

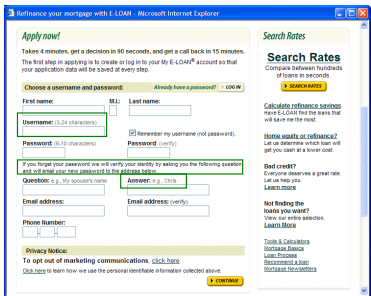


Functional UA - best practices

- ▶ Embed field-level help for required fields
- ▶ Provide examples - Große & Renkl (2006), Moallem (2003)
- ▶ Provide minimums and maximums
- ▶ Link to conceptual and procedural help topics when needed
- ▶ Group related topics



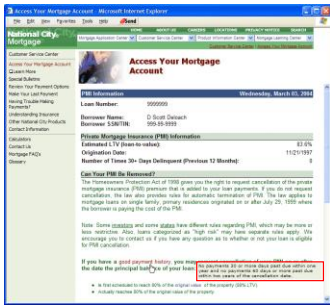
Functional UA - in-page content



eLoan.com



Functional UA - popup layers



nationalcitymortgage.com



Functional UA - drop-down layers



movielens.com



Functional UA - drop-down layers



movielens.com



Functional UA - dedicated panel

alamo.com

ClickStart

Functional UA - tooltips

Microsoft Office 2007

ClickStart

Hands-on activity

Procedural UA - user questions

Task steps

"How do I complete my task?"

High-level process

"What do I do next?"

Expectations

"How long will this take?"



Procedural UA - best practices

- ▶ Embed UA for most commonly-performed tasks
- ▶ Link to external help for less commonly-performed and complex tasks
- ▶ Highlight the current step to focus the user
- ▶ Provide time estimates for longer tasks
- ▶ Position tasks within higher-level processes



Procedural UA - overlapping panel



USPS (in post office)



Procedural UA - dedicated panel

Categories: select up to two for your listing	% item match
<input type="checkbox"/> CDs & Movies > DVD	81%
<input type="checkbox"/> Books > Fiction Books	10%
<input type="checkbox"/> Books > Antiquarian & Collectible	8%
<input type="checkbox"/> Books > Audiobooks	5%
<input type="checkbox"/> CDs & Movies > VHS	4%
<input type="checkbox"/> Books > Nonfiction Books	3%
<input type="checkbox"/> Video Games > Accessories > PC Games > Other Accessories	2%
<input checked="" type="checkbox"/> Books > Children's Books	1%

Help
Selecting a Category
 Select the category that best describes your item so that more buyers will find it.
 • For better search results, enter more specific words. For example, a search for "Fiction" gives you more results than a search for "books".
 • If possible, avoid choosing an "Other" category. For example, "Video Games > Other" because buyers are less likely to find your item.
 Related topics:
 • Listing a New Category
 • Topic Index

eBay.com ClickStart

Conceptual UA - user questions

Justification
 "Why do you need this information?"

Navigation
 "Am I on the right page?"

Features and limitations
 "Can I save this information?"

Goals
 "What can I do with this application?"

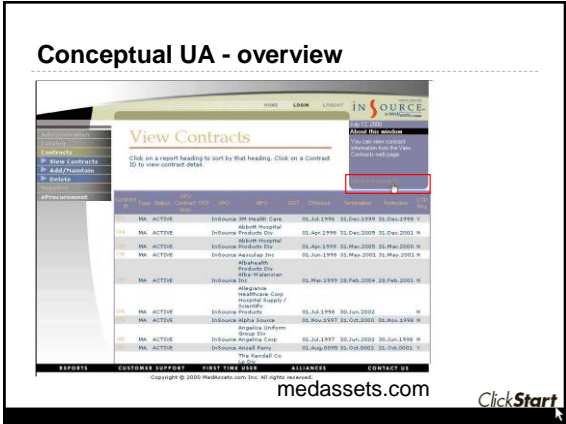
ClickStart

Conceptual UA - best practices

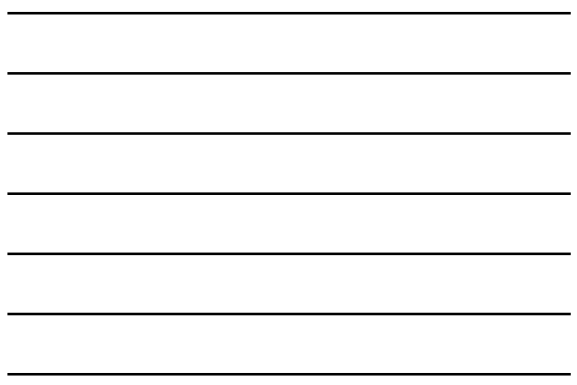
- ▶ Embed vital information and warnings
- ▶ Explain key tasks and why they might be completed
- ▶ Define key concepts
- ▶ Link to external help topics for background, introductory, and advanced information

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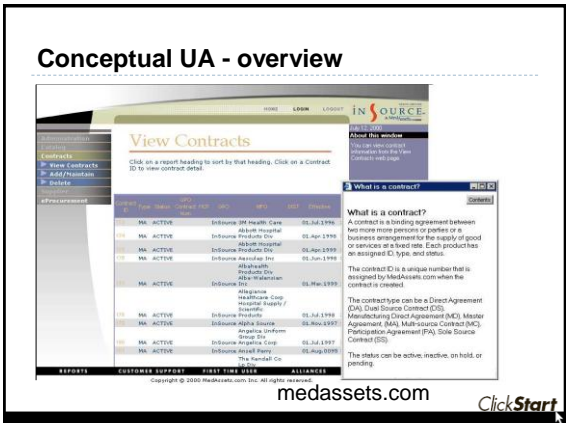
Conceptual UA - overview



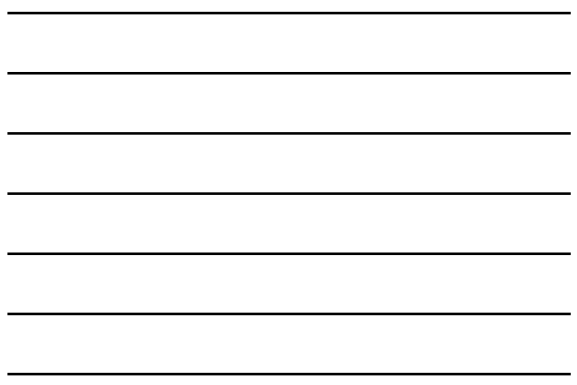
medassets.com ClickStart



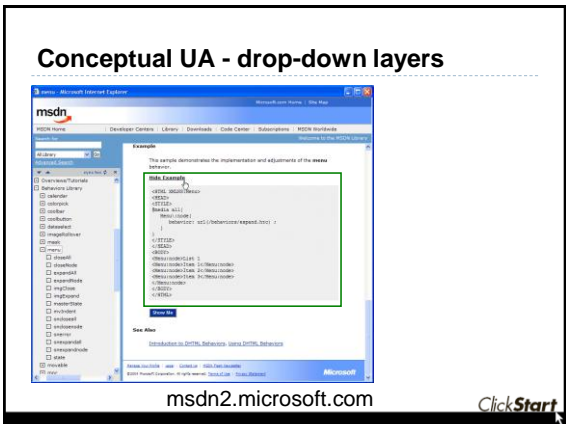
Conceptual UA - overview



medassets.com ClickStart



Conceptual UA - drop-down layers



msdn2.microsoft.com ClickStart



Conceptual UA - dedicated panel

How do e-Bills make paying bills more convenient?
 Paying your bills online is even easier and faster when you receive e-Bills. An e-Bill is just like the paper statement you receive in the mail—the same information without the paper. With e-Bills, you can receive and pay your bill online in the same place.

How do e-Bills work?
 Many of the companies on our clients list can send e-Bills. After you request e-Bills from one of your payees, the payee starts sending your bill online to Bill Pay. You control the payment amount and date of each e-Bill you pay.

Now e-Bills appear in several places in Bill Pay, including the Incoming e-Bills box on the Bill Pay Overview page and on the e-Bills Overview page.

Request e-Bills (7)

You can request e-Bills from the following payees that you've already added to your payee list.

Bankcard Services Edward Jones MC 0000	Request e-Bills
Citibank Credit Card cit bank personal card -4687	Request e-Bills
Shell Energy Services gas bill 4452	Request e-Bills

Why aren't all of my payees listed here?
 Only the payees you've added that can send e-Bills are listed.
[Search or browse our list of payees that can send e-Bills](#)

Payees That Send You e-Bills (7)

You already receive e-Bills from the following payees.

Chrysler Financial car loan 1204	Edit e-Bill information
Power 88 49 03 e-Bill automatic payment set up	Edit e-Bill automatic payment
Sylvania Power power 88 49 03	Edit e-Bill information
e-Bill automatic payment set up	Edit e-Bill automatic payment

bankofamerica.com ClickStart

What is AJAX?

- ▶ Asynchronous JavaScript
- ▶ XML - XMLHttpRequest object

"Single-page experience"

What it means for UA

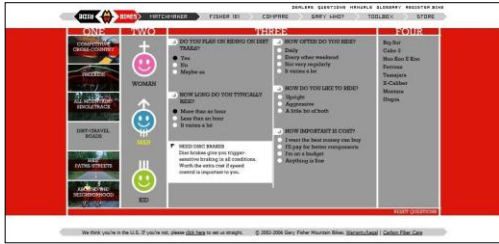
- ▶ Single-sourced content stored in a database
- ▶ Dynamic content

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AJAX functional UA

fisherbikes.com ClickStart

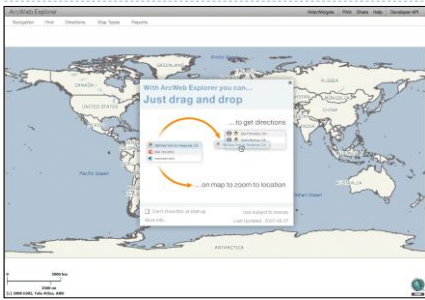
AJAX functional UA



fisherbikes.com



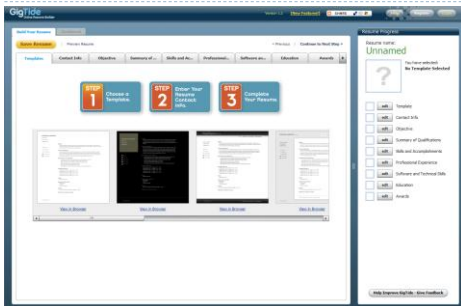
AJAX procedural UA



ESRI – arcwebservices.com



AJAX procedural UA



gigtide.com



AJAX procedural UA

Planning your Park City Mountain Resort vacation is easy! Here's a quick overview of how our planner works:

- Select a lift ticket**: Select a lift ticket from the available options. When added, some tickets open a small pop-up window with additional information.
- Add to cart**: Add your lift ticket to the cart. You can add multiple tickets to your cart.
- Review and checkout**: Review the total of orders including the tax rate for the category you selected. Check the boxes next to the desired payment methods or review details and make changes to your order.
- Complete purchase**: Complete your purchase. An email confirmation and a PDF of your lift tickets will be sent to you.

parkcity.com

ClickStart



AJAX dynamic UA

NETFLIX | You're logged in | Member | Sign In

Browse Selection

Here's what to watch from our 50,000+ DVD Titles. From classics to new releases and TV series, there are also a variety of feature movies, TV episodes, and more. Instantly on your PC, plus additional devices.

Blu-ray

Netflix carries nearly 500 Blu-ray DVDs.

Casino Royale

James Bond returns to action in the first of the new Bond films in a long time. In this action-packed film, Bond is sent to the Bahamas to investigate a mysterious explosion that has killed a prominent politician. He must first survive a gunfight on a tropical island, then a high-tech car chase, and finally a showdown with the villainous M. Evanson, who has a plan to take over the world.

50,000+ DVD Titles

200+ DVD Genres

Browse Our DVD Selection:

- Action & Adventure
- Animation
- Classics
- Comedy
- Documentary
- Drama
- Family
- Foreign
- Horror
- Independent
- Music & Musicals
- Non-Fiction
- Science Fiction
- Sports
- TV Shows
- Western

netflix.com

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AJAX dynamic UA

NationMaster.com

Home | Encyclopedia | Statistics | Countries A-Z | Flags | Maps | Education | Forum

Encyclopedia > Russian literature

Encyclopedia of Russian literature

Russian literature refers to the literary works of the Russian people. It is a rich and diverse tradition, spanning from the early days of the Russian Empire to the present. The most famous Russian authors include Leo Tolstoy, Fyodor Dostoevsky, and Anton Chekhov. Other notable authors include Alexander Pushkin, Nikolai Gogol, and Ivan Turgenev. The Russian literary tradition is characterized by its depth, complexity, and its ability to explore the human condition in a profound way.

Post-Soviet era

The post-Soviet era is a period of significant change and uncertainty for Russia. It is a time of rapid economic growth, but also of social and political challenges. The Russian literary tradition continues to evolve, reflecting the complexities of this new era.

nationmaster.com

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What is Web 2.0?

Social networking

- ▶ Wikis, blogs, and social bookmarking
- ▶ Page ratings and comments

ClickStart

Web 2.0 customizable UA

The screenshot shows a wikiHow article page. At the top, there's a search bar and navigation links. The main content area is titled "How to Make a Voodoo Doll" and includes a list of steps for creating a voodoo doll. A small image of a voodoo doll is visible on the right side of the article. The page footer includes the wikiHow logo and the text "wikihow.com".

ClickStart

Web 2.0 customizable UA

The screenshot shows a web page titled "Showing and Hiding". It features a text area with a "View" button and a "Source" button. Below the text area, there's a paragraph of text about the movie "The Seven Samurai". At the bottom of the text area, there's a link that says "<<< Show less". The page footer includes the text "backbase.com".

backbase.com

ClickStart

Web 2.0 customizable UA

Showing and Hiding

This example demonstrates how you can easily show and hide portions of your web site in response to user action. It makes use of the show-hide command.

```

View  Source  Edit
<h3>The Seven Samurai (七人の侍 Shichinin no samurai, 1954)</h3>
<p>A movie by Akira Kurosawa starring Takashi Shimura and Toshro Mifune. The film takes place in war-ridden 16th century Japan, where a village of farmers look for ways to ward off a band of marauding robbers. Since they do not know how to fight, they hire seven rōnin (lordless samurai) to fight for them. Kurosawa made Seven Samurai because he wanted to make a real jidaijeki, a period-film that would present the past as meaningful, while also being an entertaining film.</p>
<p style="display: none;" id="show-hide">The Seven Samurai is widely regarded as a significant film in many respects. It is regarded by many as one of Akira Kurosawa's greatest achievements, both on a national and international level, as regarded as one of the greatest Japanese films ever made, and has been declared the best Japanese movie by many organizations and polls. It is also one of the few Japanese films to become widely known in the West, and is the subject of both popular and critical acclaim; it consistently ranks in the top ten movies on the IMDb Top 250 List and was voted one of the Sight & Sound Directors' Top Ten movies in 2002.</p>
<p style="margin-top: 5px; text-align: right;"><button type="button" id="show-hide"> Show less</a>
</p>
<a href="#">Read more &#x2190;</a>
<a href="#" style="display:none">Show less</a>
  
```

backbase.com



Web 2.0 customizable UA resources

- ▶ backbase.com
- ▶ PHP-Learn-It.com
- ▶ editingplace.org
- ▶ tool-man.org/examples/edit-in-place.html



Web 2.0 topic comments

Table of Contents

- ◊ Create Content items
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- ◊ Windows Content Plans
- ◊ Workflow
- ◊ WorkflowStream Release Program
- ◊ Workflow Editor
- ◊ Data Options
- ◊ Security
- ◊ Customized Search
- ◊ Programming Service Guide

Release Notes

Release notes include descriptions of new and improved features for each release. They provide a log for you to keep up to date with new ways to improve your site with newly released tools.

Note: The links on this page open Portable Document Format (PDF). Be and you must have Adobe® Acrobat® Reader® to view or use these files. To download a copy of Acrobat Reader from the Adobe Web site, click the icon below.

8.0 Release Notes
Version 8.0 - Jan 14, 2006

7.0 Release Notes

- Version 7.0.2 - Dec 11, 2007
- Global Payment Method Quarterly Release Notes - Nov 15, 2007 - Learn more about the new payment methods added to our platform last quarter.
- Version 7.0.1 - Nov 15, 2007
- Version 7.0.0 - Oct 9, 2007
- Version 7.0.0 - Sept 11, 2007
- Version 7.0.0 - Aug 15, 2007

Global Payment Method Quarterly Release Notes - Learn more about the new payment methods added to our platform last quarter.

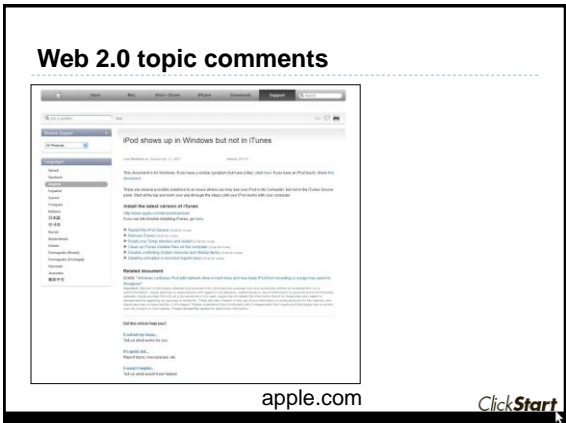
Was this topic helpful? or

digitalriver.com

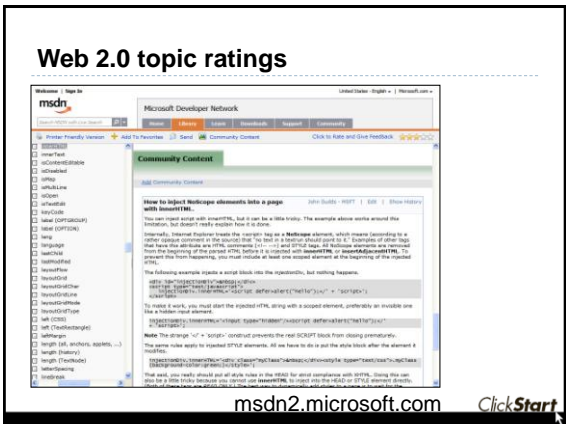




digitalriver.com ClickStart



apple.com ClickStart



msdn2.microsoft.com ClickStart

Web 2.0 rating system resources

- ▶ www.codeproject.com/KB/aspnet/RatingDemystifiedAjaxWay.aspx
- ▶ www.progressive-coding.com/tutorial.php?id=6
- ▶ www.masugadesign.com/the-lab/scripts/unobtrusive-ajax-star-rating-bar
- ▶ www.hotscripts.com/Detailed/62822.html

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Hands-on activity

ClickStart

Creating context-sensitive embedded UA

Can be created for fields or pages

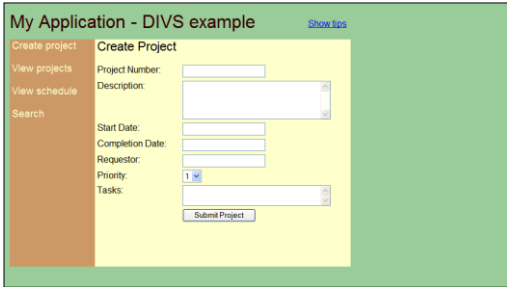
Can be created using:

- ▶ DIVs or spans
- ▶ iFrames
- ▶ AJAX

Each context-sensitive element needs an ID
JavaScript method: getElementById

ClickStart

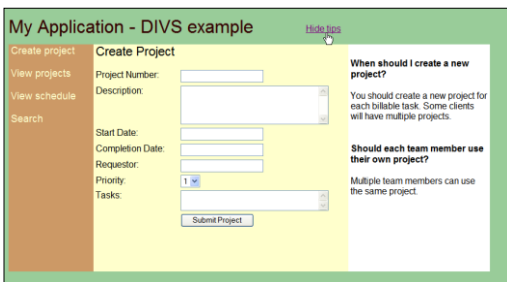
Opening embedded UA - demo



myApp.htm

ClickStart

Opening embedded UA - demo



myApp.htm

ClickStart

Opening embedded UA - divs

Embedded UA

```
<div id="helpPane">UA content</div>
```

JavaScript Code

```
function toggleUA() {
    if (document.getElementById('helpPane').style.display=="block") {
        document.getElementById('helpPane').style.display = "none"; }
    else {
        document.getElementById('helpPane').style.display = "block"; } }
```

ClickStart

Opening embedded UA - iFrame

Embedded UA

```
<div id="helpPane"><iframe src="h_myApp.htm"></iframe></div>
```

JavaScript Code

```
function toggleUA() {
  if (document.getElementById('helpPane').style.display=="block") {
    document.getElementById('helpPane').style.display = "none"; }
  else {
    document.getElementById('helpPane').style.display = "block"; } }
```

ClickStart

Opening embedded UA - AJAX

Embedded UA

```
<div id="helpPane"></div>
```

JavaScript Code

```
function toggleUA() {
  if (document.getElementById('helpPane').style.display=="block") {
    document.getElementById('helpPane').style.display = "none"; }
  else {
    xmlhttp.open("GET", "h_myApp.htm",true);
    xmlhttp.onreadystatechange=function() {
      if (xmlhttp.readyState==4) {
        document.getElementById('helpPane').innerHTML = xmlhttp.responseText;
        document.getElementById('helpPane').style.display = "block";
      } xmlhttp.send(null) } }
```

ClickStart

Opening embedded UA - AJAX

JavaScript Code to use XMLHttpRequest

```
var xmlhttp=false;
/* @cc_on @*/
/*@if (@_jscript_version >= 5)
  try {
    xmlhttp = new ActiveXObject("Msxml2.XMLHTTP");
  } catch (e) {
    try {
      xmlhttp = new ActiveXObject("Microsoft.XMLHTTP");
    } catch (E) {
      xmlhttp = false;
    }
  }
@end @*/
```

ClickStart

Context-sensitive embedded UA resources

- ▶ www.clickstart.net
- ▶ www.codeproject.com/KB/ajax/ContextSensitiveHelp.aspx
- ▶ www.notesoncode.com/articles/2007/06/building-a-custom-ajax-control-extender/

ClickStart

Hands-on activity

ClickStart

Example embedded UA sites

General

monster.com

Procedural UA

eBay.com

Field-level UA

eloan.com
nationalcitymortgage.com
movielens.com
alamo.com

Conceptual UA

msdn2.microsoft.com
bankofamerica.com
medassets.com

ClickStart

Example embedded UA sites

AJAX

fisherbikes.com
ESRI – arcwebservices.com
gigtide.com
parkcity.com
netflix.com
nationmaster.com

Web 2.0

wikihow.com
backbase.com
apple.com
digitalriver.com
msdn2.microsoft.com



Questions?



MadCap Flare Express
available May 2008



CSS Express
available May 2008

Scott DeLoach

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Embedded UA consultant and trainer