

Oti-Tani? → see Stanford P.D. professor
or other geometric designs

crown/claw potential up
with the object

Alan's idea:
attach the wires to
the middle tube

HEURISTICS PART 2

Scott Klemmer

www.hci-class.org

Bill: copyright
visualization of line



Scott: a gate that shows
who walked through it last
Bill: a gate that measures
ceremonial gates



Recognition Over Recall

Recognition: Avoid codes

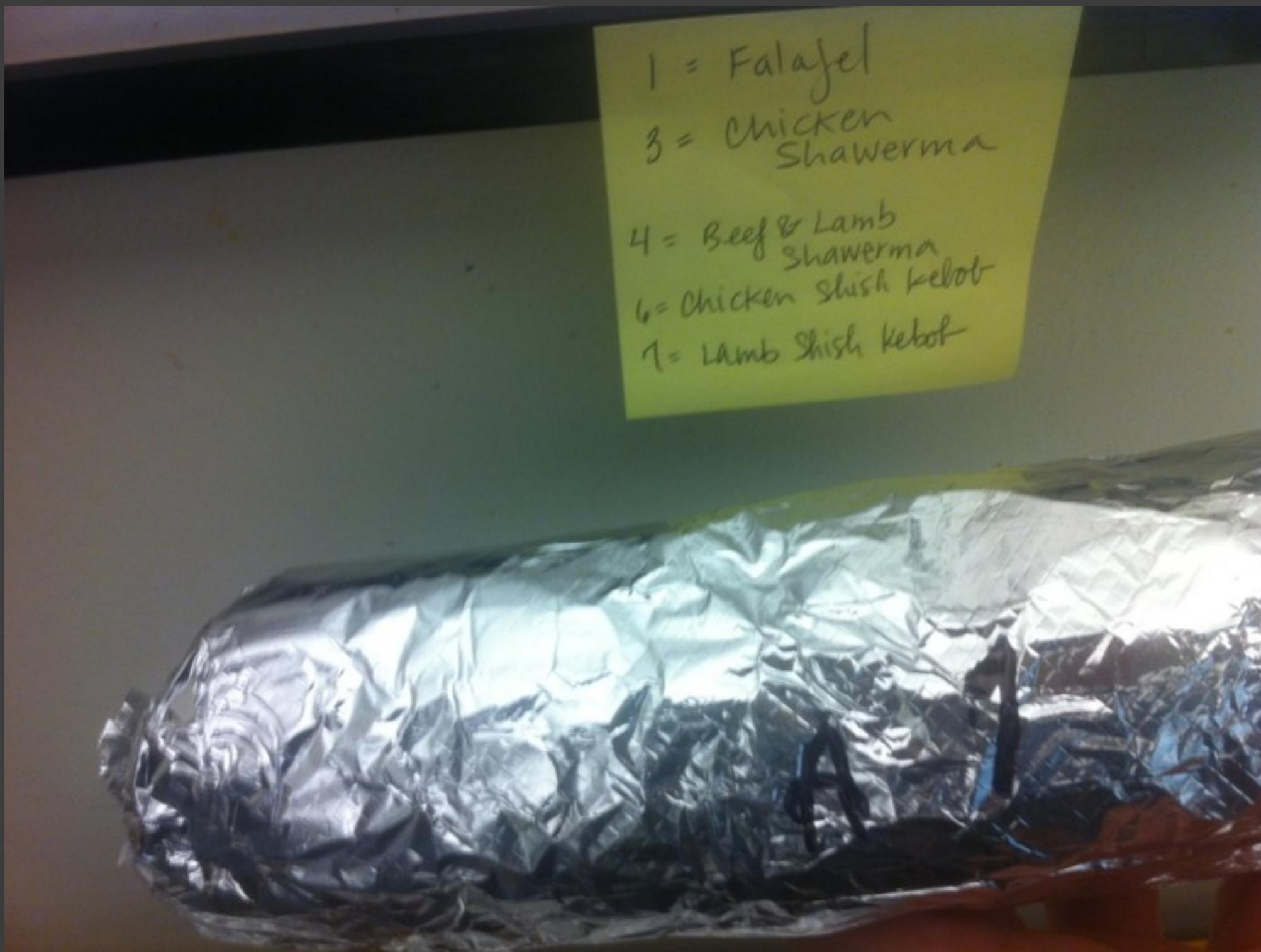


Photo by Scott Klemmer; taken at Stanford HCI lunch

Recognition: Avoid extra hurdles

Welcome

webtixs.easytixs.com/SundanceKabuki/TicketingStartPage.aspx?634229118899241250

KABUKI

Tickets & Showtimes

PLEASE SELECT A SEARCH OPTION

For Today's Schedules or to Purchase Tickets for Today

For Future Schedules or to Purchase Tickets for a Future Date

Search

GO

GO

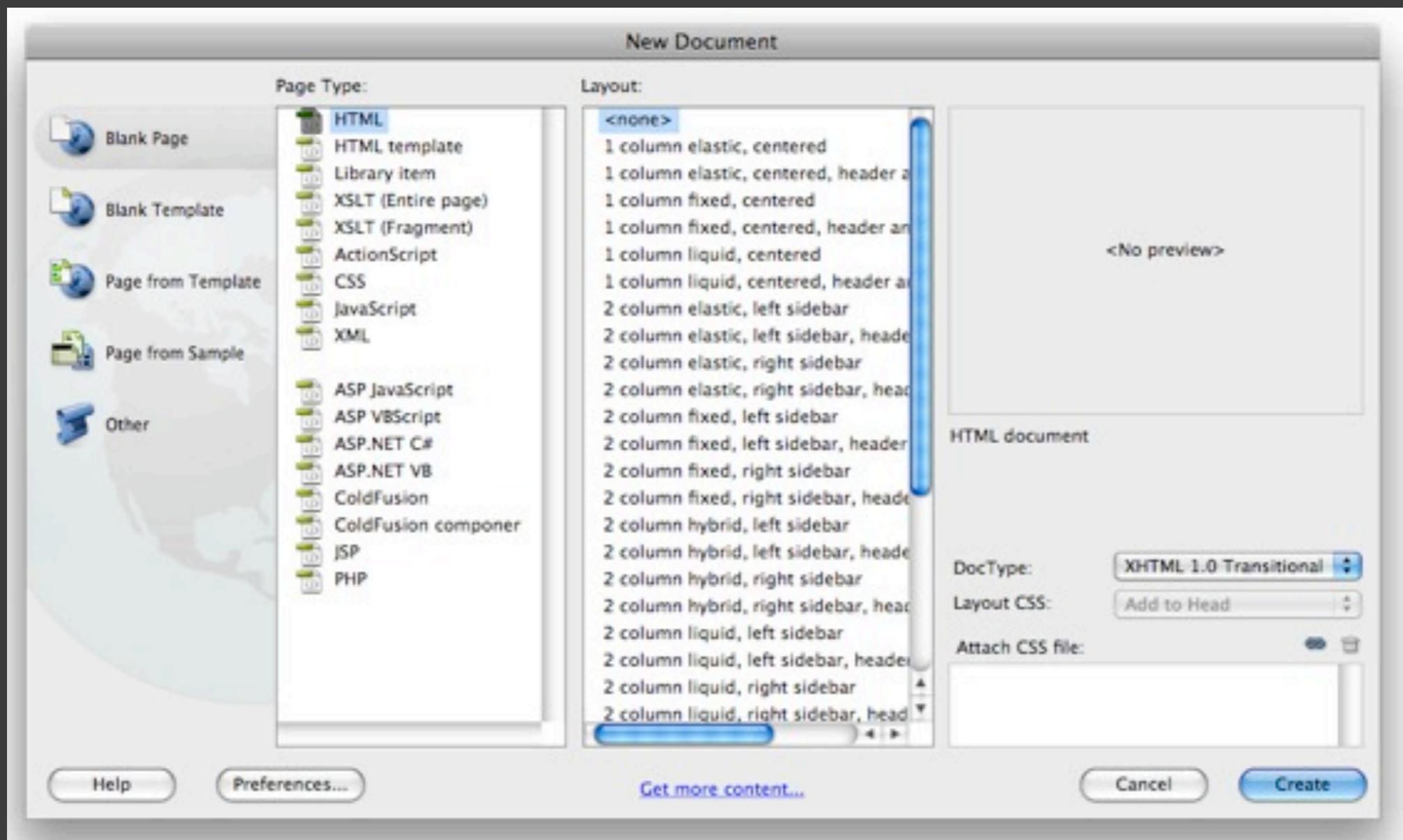
GO

Gift Card Information

Gift Card Number:

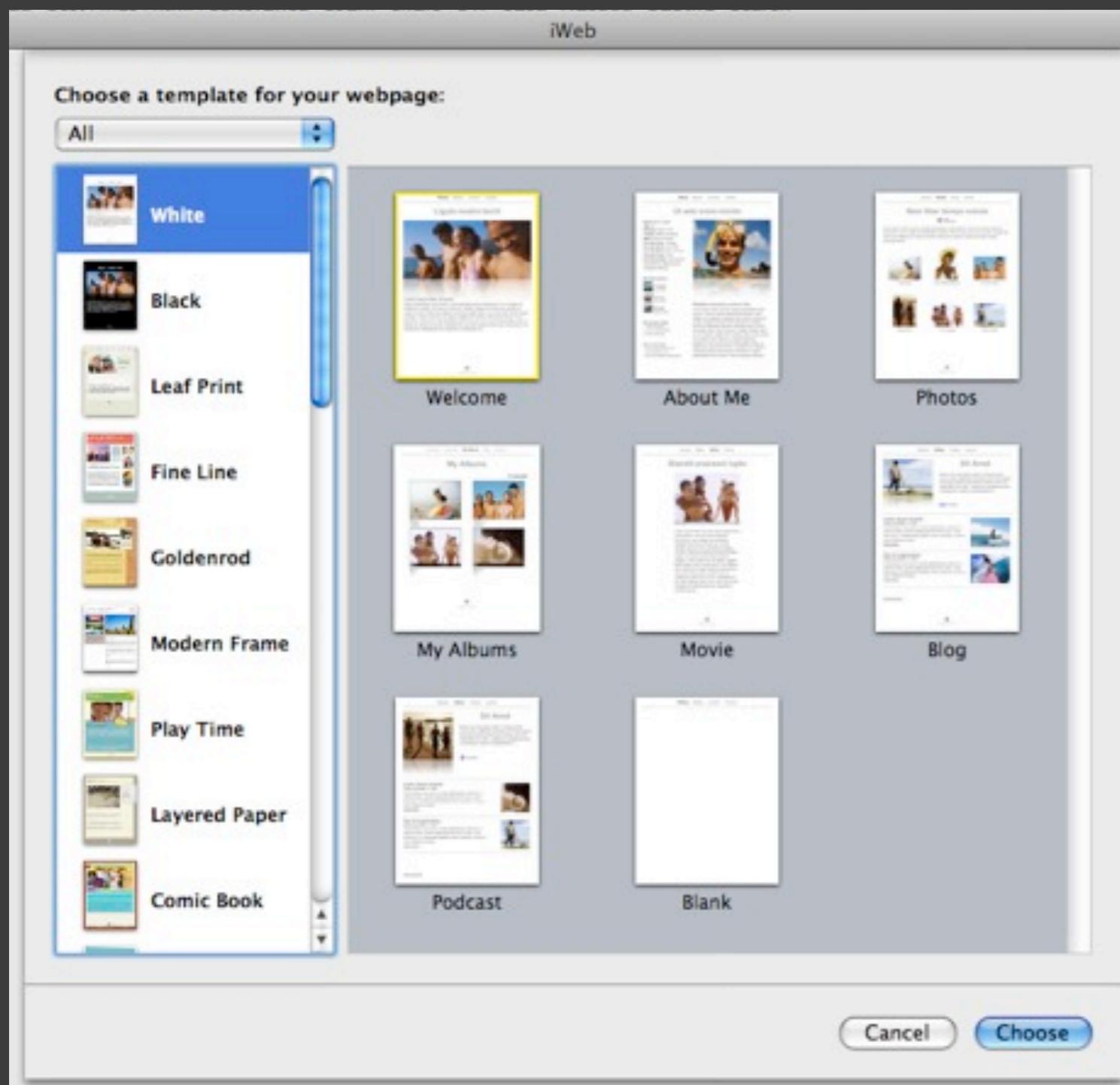
LOGIN

Recognition with previews



Adobe Dreamweaver New Document dialog

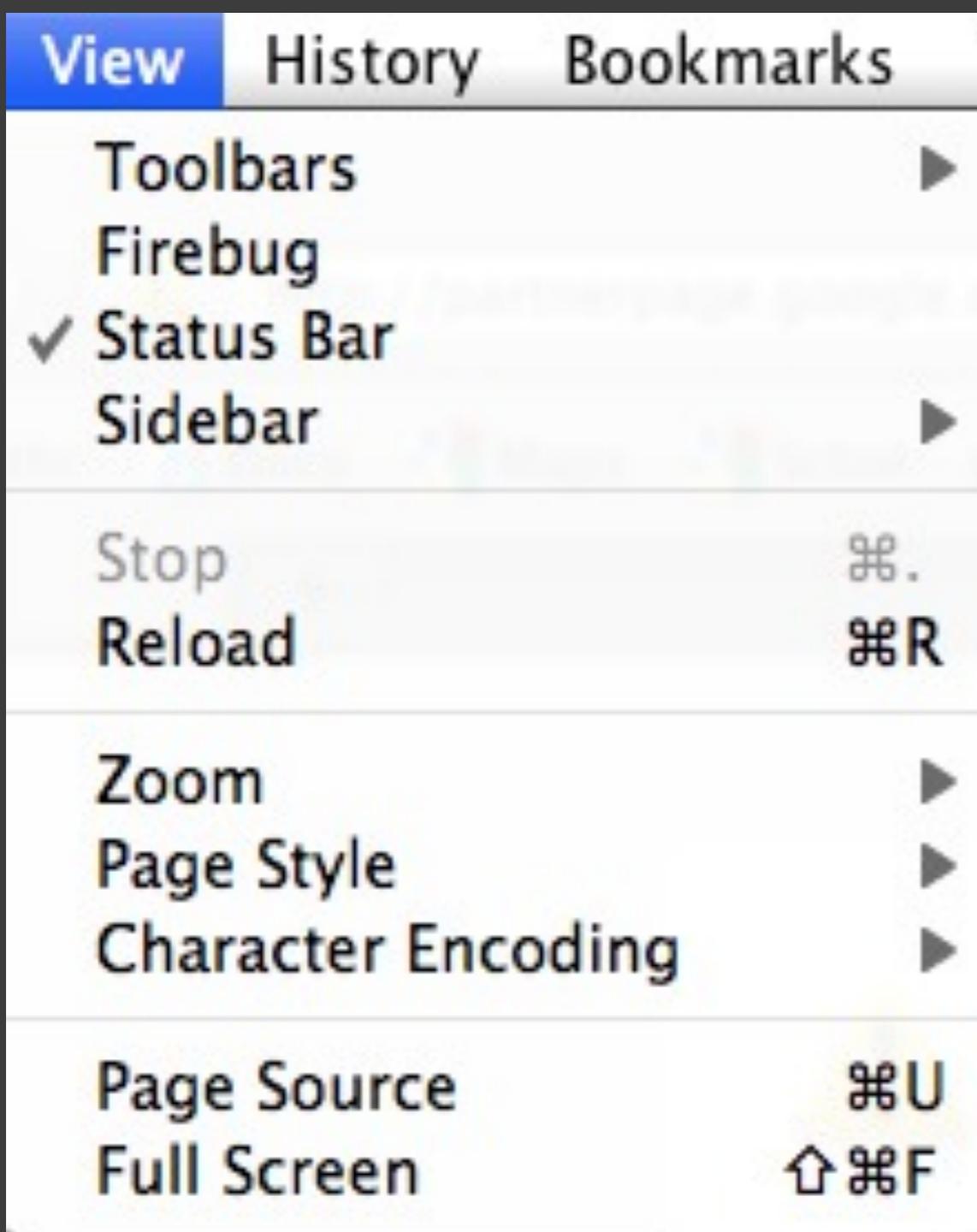
Recognition with previews



Apple iWeb Choose a template dialog

Flexibility & Efficiency

Flexible shortcuts



Firefox View menu

Flexible defaults with options

The screenshot shows a web-based travel booking interface. At the top, there's a navigation bar with tabs for "Hotels" (which is selected), "Cars", "Flights", "Cruises", "Activities", "DEALS & OFFERS", "Maps", and "Business". A yellow "NO FEES!" badge is positioned above the "Hotels" tab. Below the navigation bar, a large orange header reads "Please help us with a little more information". A red text box below it says "Please enter a location." A list of cities follows, each preceded by a radio button. The city "Atlanta" has a blue checked radio button next to it. Other cities listed include Boston, Chicago, Dallas, Ft. Lauderdale, Las Vegas, London, Los Angeles, Miami, Myrtle Beach, New York, Orange County, Orlando, Paris, Phoenix, San Antonio, San Diego, San Francisco, Seattle, and Washington D.C. At the bottom, there's a section titled "Choose an option" with two buttons: "Continue" and "Start search over".

Please help us with a little more information

Please enter a location.

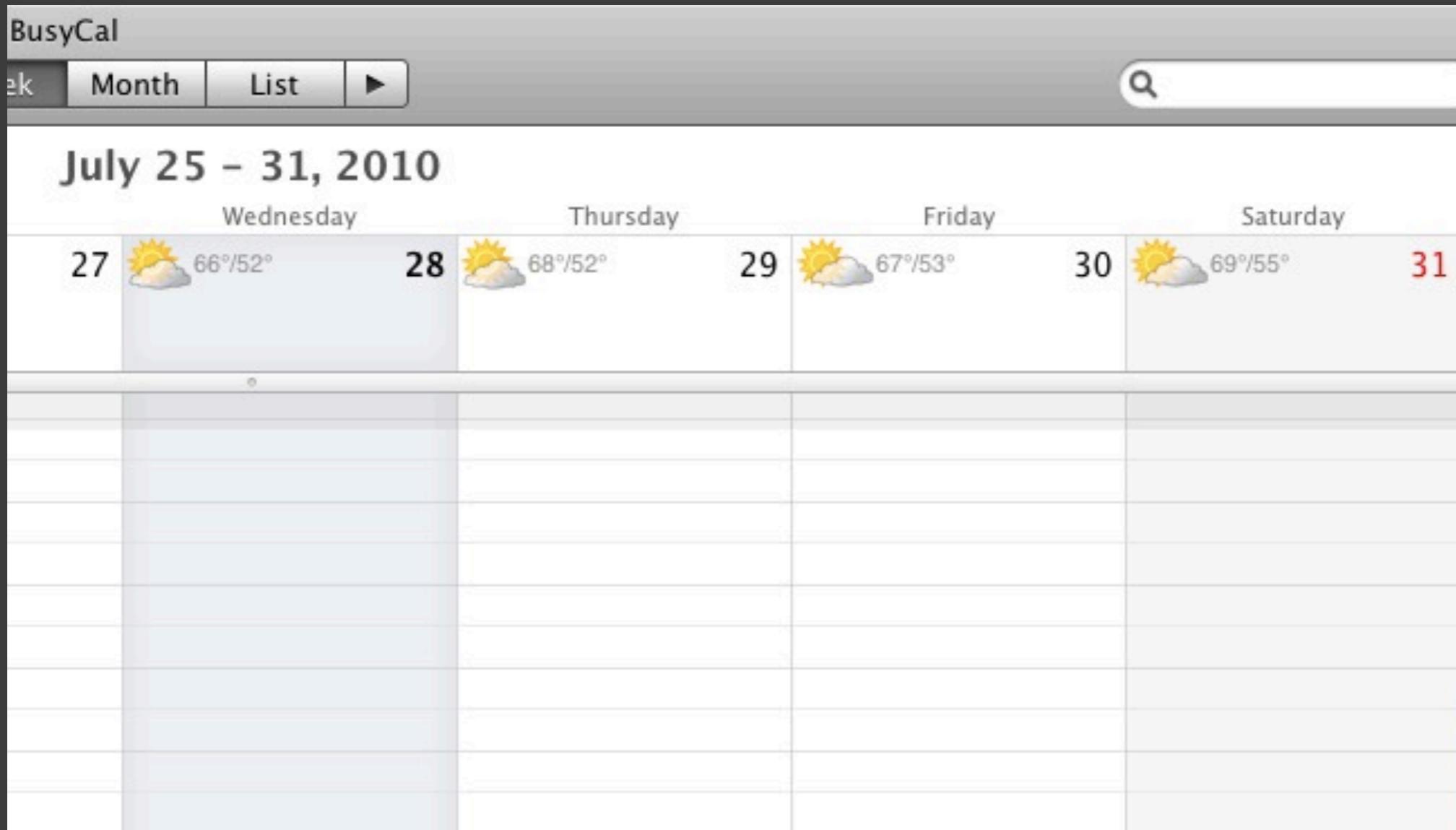
<input checked="" type="radio"/> Atlanta	<input type="radio"/> Las Vegas	<input type="radio"/> New York	<input type="radio"/> San Antonio
<input type="radio"/> Boston	<input type="radio"/> London	<input type="radio"/> Orange County	<input type="radio"/> San Diego
<input type="radio"/> Chicago	<input type="radio"/> Los Angeles	<input type="radio"/> Orlando	<input type="radio"/> San Francisco
<input type="radio"/> Dallas	<input type="radio"/> Miami	<input type="radio"/> Paris	<input type="radio"/> Seattle
<input type="radio"/> Ft. Lauderdale	<input type="radio"/> Myrtle Beach	<input type="radio"/> Phoenix	<input type="radio"/> Washington D.C.
<input type="radio"/> Other city: <input type="text"/>			

Choose an option

[Continue](#)

[Start search over](#)

Flexible: ambient information



BusyCal weather in week view

Flexible proactivity

Advance Program Available: IS&T/SPIE Electronic Imaging [Inbox](#) | [X](#)

SPIE Meetings [to srk](#) [show details](#) 12:50 PM (0 minutes ago) [Reply](#) ▾

Images are not displayed.
Display images below - Always display images from SPIE-Meetings@reply.spie.org

To view this email as a web page, go [here](#).

IS&T/SPIE Electronic Imaging Advance Program

- View the [Advance Program Online](#)
- Download the [Advance Program](#) (PDF)

Attend IS&T/SPIE Electronic Imaging. Hear the latest developments in imaging science and technology in these program tracks:

- 3D Imaging, Interaction, and Measurement
- Imag
- Imag
- Digita
- Multir
- Visua

Unsubscribe from SPIE Meetings? [X](#)

In addition to marking this message as spam, Stanford University HCI Group Mail can attempt to automatically unsubscribe you from **SPIE Meetings**, by sending an unsubscribe request on your behalf. [Learn more](#).

[Unsubscribe and report spam](#) [Report spam](#) [Cancel](#)

Your Ele

- More than 800 presentations in 23 conferences

Flexibility: Recommendations

MANZANA POSTOBON

Manzana Postobon; An apple flavored soda from Colombia (contains artificial and natural flavors). [12 fl. oz./354 mL]



DOUBLE DARE

If you've tried Manzana Postobon before and you really liked it, we recommend giving [Sidral Aqa](#), and [Sidral Mundet](#) a try.

INGREDIENTS: Carbonated Water, High Fructose Corn Syrup, Natural And Artificial Flavor, Citric Acid, Sodium Benzoate (Preservative) And Artificial Colors (FD&C Red #40, FD&C Blue #1).

GIVE MANZANA POSTOBON A TRY TODAY!

\$1.85 each 1 qty.

Flexibility: keep it relevant

Customer Discussions

This product's forum

Discussion	Replies	Latest Post	Related forums
No discussions yet			health

Ask questions, Share opinions, Gain insight

Start a new Active discussions in related forums

Topic:

Discussion			
<input checked="" type="checkbox"/> toys USPS Carriers smoke in their trucks			
<input checked="" type="checkbox"/> toys NO harm in second hand smoke			
<input checked="" type="checkbox"/> home improvement BEST PERFORMING REPLACEMENT TOILET??			
<input checked="" type="checkbox"/> toys Will these resellers now honor returns on the Zhu Zhus?			
<input checked="" type="checkbox"/> home improvement Several Sunset and Lowes Home Improvement Books RECALLED			
<input checked="" type="checkbox"/> toys lollipop haters are disgusting			
<input checked="" type="checkbox"/> home improvement Quiet Bedroom Fan			
<input checked="" type="checkbox"/> health Why are Americans still struggling with obesity?	1901	3 hours ago	
<input checked="" type="checkbox"/> health Why do you read or post to these forums? Honestly.	260	20 hours ago	

Active discussions

Discussion
<input checked="" type="checkbox"/> health Male circumcision
<input checked="" type="checkbox"/> health fat and slimming
<input checked="" type="checkbox"/> health Does chewing gum help lose weight
<input checked="" type="checkbox"/> health Do you think you have a healthy diet
<input checked="" type="checkbox"/> health Phrases that make you feel good
<input checked="" type="checkbox"/> health Why are Americans still struggling with obesity?
<input checked="" type="checkbox"/> health Why do you read or post to these forums? Honestly.

Search Customer Discussions

Flexibility: keep it relevant



User-modified remote control courtesy Bill Moggridge

Aesthetic & Minimalist Design

Minimalism: above the fold

The screenshot shows the homepage of The Weather Channel. At the top left is the logo 'The Weather Channel'. To its right is a light blue button with a white plus sign and the text 'Add a Location'. On the far right of the header are links for 'United States (English) ▾', temperature units ('°F °C'), and 'Sign In'.

The main navigation bar has tabs for 'Weather' (selected), 'Lifestyle', 'Social', 'Maps', 'Video', 'News', and 'TV'. Below this is a secondary row with 'Local', 'National Forecast', 'Severe Weather', 'Alerts', 'Hurricane Central', 'Safety & Preparedness', and 'Farming'. A search bar at the top right contains the placeholder 'Search Zip, City or Place (Disney World)' and a 'SEARCH' button.

A large black banner across the middle features the text 'LIFEGUARD! SOUTHERN CALIFORNIA+' in red, followed by 'THURSDAYS at 9/8c' and 'DIVE IN TO A NEW ORIGINAL SERIES'. To the right is a photo of a lifeguard on a jet ski. The 'The Weather Channel' logo is in the bottom right corner of the banner.

The main content area starts with 'San Francisco, CA (94110) Weather' in bold black text. Below it is a smaller line of text: 'Updated: Mar 12, 2012, 9:05am PDT'. To the right is an orange 'SHARE' button with a white arrow pointing up-left.

Below the main title is a 'SOCIAL' section with the text 'NEW! See what people are saying about the weather in San Francisco'. Underneath are buttons for 'Today', 'Hourly', 'Tomorrow', 'Weekend', '5 day', '10 day', 'Monthly', and 'Map'.

A red box contains a map of the Pacific Northwest and Mountain West regions with purple and green shading. Next to it is the text 'More Wintry Weather for Mountain West' and a paragraph about rain and snow. Below is a link 'Winter Weather Update' with a small camera icon.

An orange footer bar at the bottom left includes an 'ALERT' icon, a 'Special Weather Statement' link, and links for 'Map', 'Safety and Awareness Tips', and 'Desktop Alerts'. On the right is a 'ALL ALERTS' button with a small '2' indicating new alerts.

To the right of the main content is a vertical sidebar with a blue background. It features the Citi ThankYou Premier credit card logo with the name 'L WALKER' on it. Below the card is the text 'Earn unlimited ThankYou® Points with no expiration date.'

Minimalism: signal-to-noise

RELIABLE COPIER SERVICE
SERVING COPIES SERVICE

Office Equipment Computers Equipment Supplies Other Items

Checkout Account Search Store Front Product List Basket Contents



Reliable accepts Visa, Mastercard, American Express and Discover Card

International Orders Shipped via U.S.P.S. Only !

Code	Product	Quantity	Price/Ea.	Total
TZS145	Brother 3/ 4" Extra Strength Super Adhesive White on Clear Industrial Tape TZS145 TZ-S145	1	\$13.95	\$13.95
Total: \$13.95				

Basket Contents

Qty	Product	Price
1	Brother 3/ 4" Extra Strength Super Adhesive White on Clear Industrial Tape TZS145 TZ-S145	\$13.95
Subtotal \$13.95		

Shipping Options?
[Checkout](#)

Recently Visited Items

Ship To:

First Name:
Last Name:
Email Address:
Phone Number:
Fax Number:
Company:
Address:
City:
State/Province:

Bill To (If Different):

First Name:
Last Name:
Email Address:
Phone Number:
Fax Number:
Company:
Address:
City:
State/Province:

Please complete the following optional questions

Comments:

How did you find us?

Rate our server speed:

Reliable Copier Service checkout screen

Minimalism: signal-to-noise

<p>What information were you primarily looking for during your visit?</p> <p><input type="radio"/> How to get started with AdWords <input type="radio"/> Ad approvals and policy help <input type="radio"/> Customer support contact information <input type="radio"/> Billing or payment help <input type="radio"/> Account settings help <input type="radio"/> Campaign management help <input type="radio"/> Ad performance help <input checked="" type="radio"/> Google Analytics or conversion tracking help <input checked="" type="radio"/> Other reason (please specify): landing page help</p>														
<p>Did you find the information you were looking for?</p> <table border="1"><tr><td>No, I found none of it</td><td>I found part of it</td><td>Yes, I found all of it</td></tr><tr><td><input type="radio"/></td><td><input checked="" type="radio"/></td><td><input type="radio"/></td></tr></table>					No, I found none of it	I found part of it	Yes, I found all of it	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>				
No, I found none of it	I found part of it	Yes, I found all of it												
<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>												
<p>During your past visit, you browsed this help center page: https://adwords.google.com/support/aw/bin/answer.py?hl=en&answer=177673</p>														
<p>Thinking about this page specifically, how helpful was the information on the Help Center page you saw, for the purpose of your visit? :</p>														
<table border="1"><tr><td>Not at all helpful</td><td>Not very helpful</td><td>Somewhat helpful</td><td>Very helpful</td><td>Extremely helpful</td></tr><tr><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td></tr></table>					Not at all helpful	Not very helpful	Somewhat helpful	Very helpful	Extremely helpful	<input type="radio"/>				
Not at all helpful	Not very helpful	Somewhat helpful	Very helpful	Extremely helpful										
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>										
<p>How clear was the information on this page (https://adwords.google.com/support/aw/bin/answer.py?hl=en&answer=177673)?</p>														
<table border="1"><tr><td>Not at all clear</td><td>Not very clear</td><td>Somewhat clear</td><td>Very clear</td><td>Extremely clear</td></tr><tr><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td></tr></table>					Not at all clear	Not very clear	Somewhat clear	Very clear	Extremely clear	<input type="radio"/>				
Not at all clear	Not very clear	Somewhat clear	Very clear	Extremely clear										
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>										
<p>Please rate the amount of information on this page (https://adwords.google.com/support/aw/bin/answer.py?hl=en&answer=177673):</p>														
<table border="1"><tr><td>Too little information</td><td>Just enough information</td><td>Too much information</td><td>I'm not sure</td></tr><tr><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td></tr></table>					Too little information	Just enough information	Too much information	I'm not sure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Too little information	Just enough information	Too much information	I'm not sure											
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>											

Minimalist Login

Your personal domain management dashboard is only a few seconds away!

Ordering a domain is fast and easy!

Sign in with your email address and iWantMyName password or enter a new one if you are not a customer yet:

What is your email address?

My email address is:

Do you have an iWantMyName password?

- Yes, I'm a returning customer and have a password.
 No, I'm a new customer.

Enter password:

Type it again:

I accept the [Terms and Conditions](#)

With an iWantMyName account

- Register domains in 90+ extensions
- Set up the best web services in one click
- Use free email with Google Apps & Gmail
- Purchase domains from your iPhone
- Manage DNS records in real-time

payments powered by
WorldPay



We accept Visa and MasterCard credit cards. You will receive an email invoice for every order. Please note that we will only process your order after successful payment. You can rest assured that iWantMyName is fully PCI standard compliant.

Continue (secure connection) »

[Forgot your password?](#)

Minimalism: Redundancy

Round-Trip ? One-Way ? Multi-City ? AAdvantage Award ?

One-Way Flight Search

1. Where Do You Want to Go?

From: [City or Airport Code](#)
JFK
and airports within 0 Miles

To: [City or Airport Code](#)
SFO
and airports within 0 Miles

2. How Do You Want to Search?

Show Results By: Price & Schedule
 Schedule
Number of Stops None

Show 10 flight results.
Number of Stops None

3. When Do You Want to Go?

Departure Date
 Month Day Morning

4. Number of Passengers

1 Adult (15-64)
0 Senior (65+)
0 Young Adult (12-14)
0 Child (2-11)
0 Infant in Seat (under 2)

(Maximum of 6 passengers per reservation)

 [Children Under 15 Traveling Alone](#)
 [Information Regarding Lap Infants](#)

5. What Is Your Cabin Service Preference?

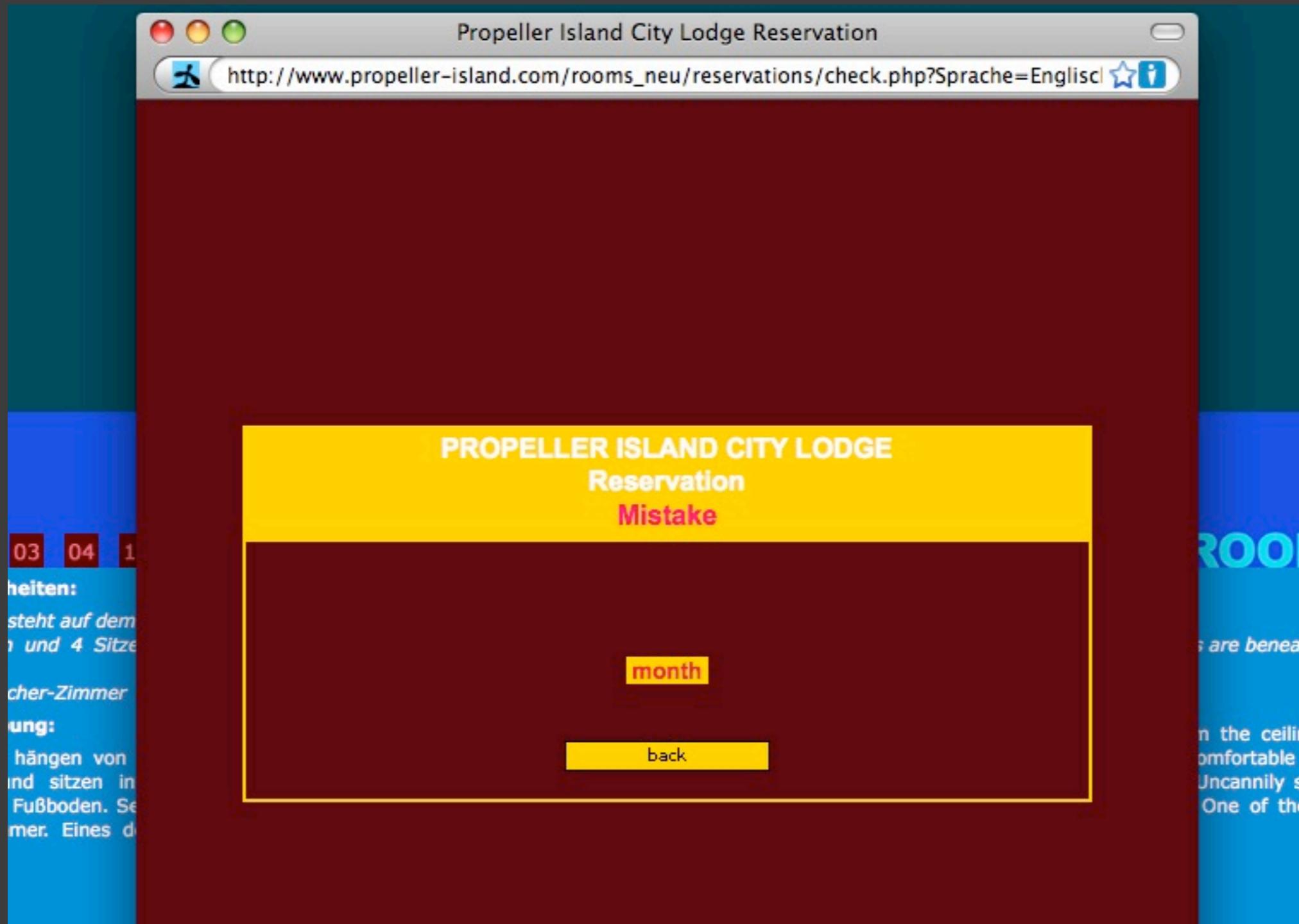
Economy Business Class & Higher First/Premium

Minimalism: functionality

The image shows a screenshot of a web application interface. On the left, there is a vertical sidebar with two items: "Print Loan Summary Letter" and "Forms". The main content area is titled "My Widgets" and contains a sub-titled "(add widgets)". In the center, there is a large, light-gray rectangular button with a gear icon and the text "Add Widget". At the bottom of the page, there is a green footer bar with the text "© 2001-2011 Nelnet, Inc. and Affiliates. All Rights Reserved [Terms of Use](#) | [Privacy & Security](#)".

Recognize, Diagnose, & Recover from Errors

Errors: make problem clear



Errors: make problem clear

NASA IT Summit 2011 Registration Site [\(View Details\)](#)

Registration Information Agenda Checkout Confirmation

 **The following errors were detected:**

- You must fill out all required fields.

Please select which sessions you plan to attend:

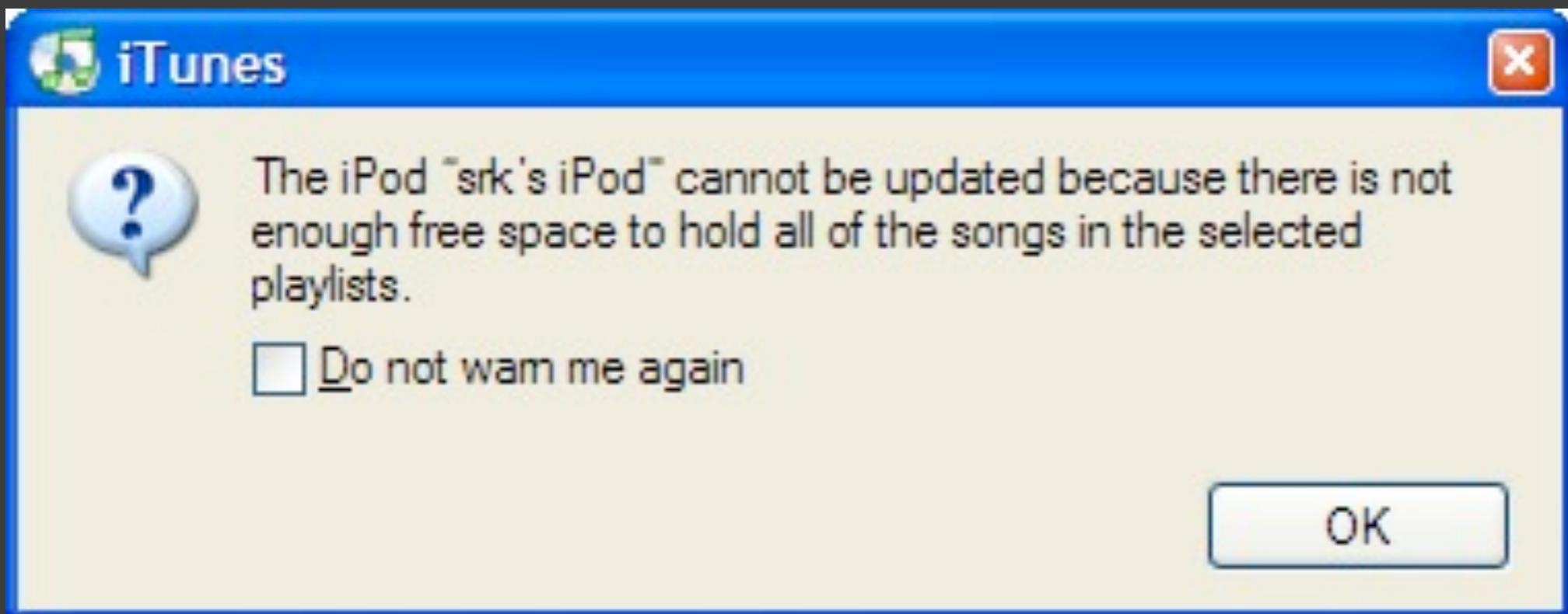
Monday, August 15 -

General Session
KEYNOTE SPEAKER: Lynn Tilton, Chief Executive Officer, Patriarch Partners LLC
Date: 8/15/2011 8:00 AM - 9:15 AM (Pacific Time)
Location: Yerba 7-9

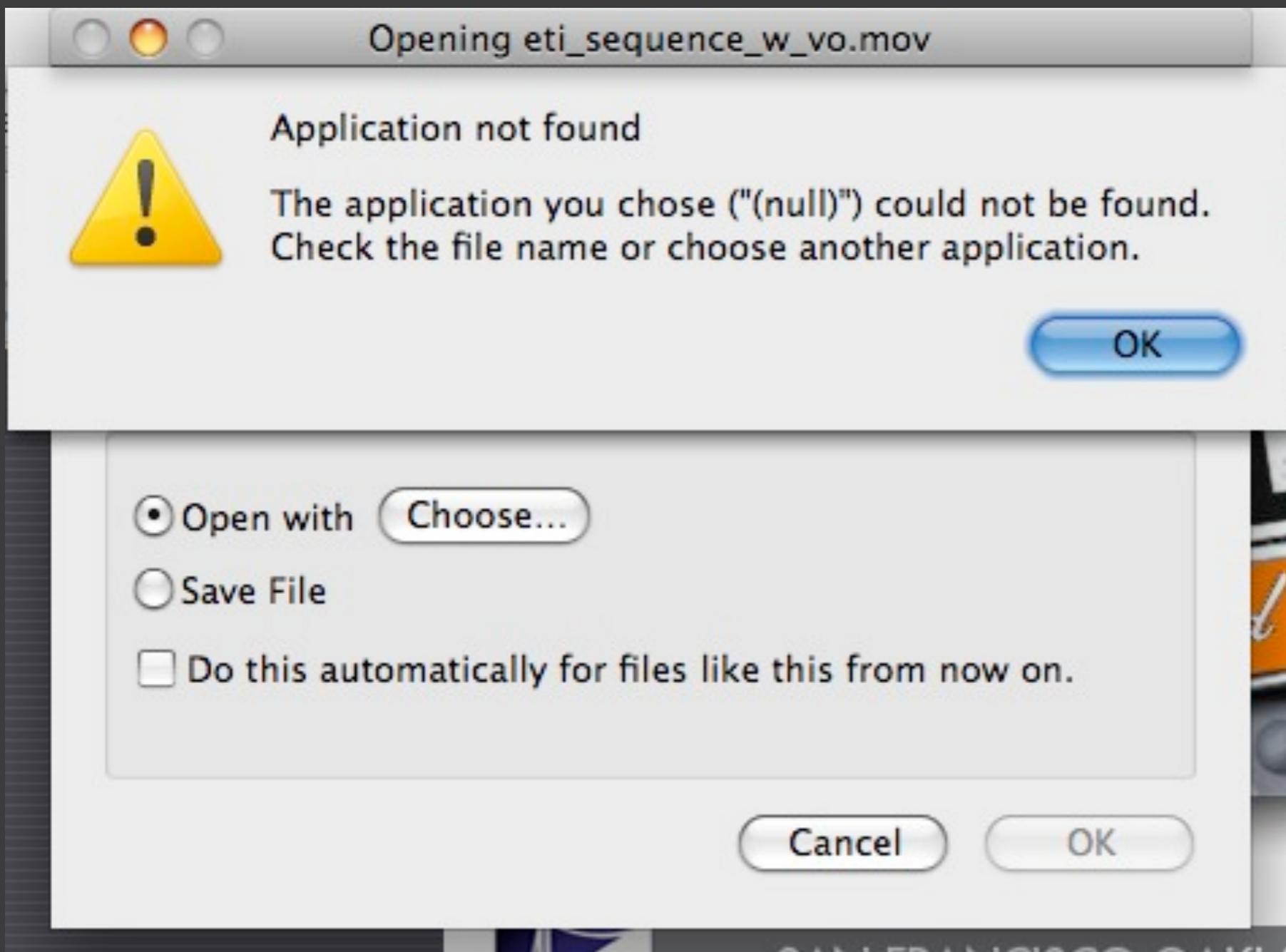
Mission IT Supporting Science & Engineering
Title: NASA Supercomputing and Its Impact on Agency Missions
Speaker: Rupak Biswas, Ames Research Center
Date: 8/15/2011 9:45 AM - 10:45 AM (Pacific Time)
Location: Yerba 5-6

Waves of the Future

Errors: Provide a solution



Errors: show a path forward



Errors: propose an alternative

No Trips Found

- No flight options were found for this trip.

[Perform another search](#)



Recognize Errors



Reported Attack Page!

This web page at batmazgumruk.com.tr has been reported as an attack page and has been blocked based on your security preferences.

Attack pages try to install programs that steal private information, use your computer to attack others, or damage your system.

Some attack pages intentionally distribute harmful software, but many are compromised without the knowledge or permission of their owners.

[Get me out of here!](#)

[Why was this page blocked?](#)

[Ignore this warning](#)

Help

Help learning with examples

The screenshot shows a web browser displaying the PHP documentation. The title bar reads "php PHP: Your first PHP-enabled page ...". The main content area has a purple header with the "php" logo. Below it, there's a navigation menu with links to "downloads", "documentation", "faq", "getting help", "mailing lists", and "licenses". A search bar is also present. On the left, a sidebar contains links for "PHP Manual", "Getting Started", "A simple tutorial", and a list of "What do I need?". The main content area starts with "«What do I need?". It then displays the title "Your first PHP-enabled page" and instructions to create a file named `hello.php`. Below this, there's a section titled "Example #1 Our first PHP script: `hello.php`" containing the following code:

```
<html>
<head>
<title>PHP Test</title>
</head>
<body>
<?php echo '<p>Hello World</p>'; ?>
</body>
</html>
```

Help choices with examples

Sign up to receive e-mail from UPS and stay on top of the latest promotions, news, critical updates and announcements.

E-mail Options:

- Send me the following UPS e-mail communications:
 - New Product Announcements/Enhancements
 - Promotions and Offers
 - Newsletters
 - Service Updates / Regulatory Changes

- Remove me from UPS e-mail communications*

Need more information?

[View Examples](#)

4 Payment Defaults

How will you pay for your shipping?

No Payment Default

Note: After completing registration, you can change your payment defaults in Shipping Preferences.

5 Primary Role

Which of these statements best describes you? *

- I don't ship daily, but when I do, I want it to be quick and informative.
- I use ups.com daily and know several shortcuts to save time.
- I use ups.com to troubleshoot and to report on shipping activity.
- I focus on the big picture and monitor shipping operations performance.
- I prefer to use the web only when necessary. My job is easier without it.

You can manage the e-mail communications you receive from UPS. To receive the types of communications that are of interest to you, choose any of the following options:

New Product Announcements/Enhancements

Select **New Product Announcements/Enhancements** to keep up to date with new product announcements and enhancements to existing products.



Promotions and Offers

Select **Promotions and Offers** to receive communications regarding available UPS promotions and special offers that best suit your business needs.



Newsletters

Select **Newsletters** to receive the latest information, exclusive news, and feature stories.



Service Updates/Regulatory Changes

Select **Service Updates/Regulatory Changes** to receive alerts about service changes or announcements of proposed regulatory changes.



Help guide the way

s by exposing them—and encouraging them to—examples of previous work. Merging and ast solutions to fit the current context can facilitate in new situations [20, 21]. Design compen-
n as *The Big Book of Logos* [5] serve as valuable or inspiration, and the advent of prolific, search-
content has provided ready access to a broad ar- k created by other designers. When appropriate, esigns can offer pragmatic value as well as inspi-
lue. Starting with an existing design and modify- provide a lower barrier to entry than starting with ate. Amateurs, prototypers, and ew design quickly find reusing able [2, 17, 27].

current practices for working w
ormal and ad hoc [19, 28]. Can

upon which we create new ideas [13, 30, 36], and someone else's successful actions is more efficient inventing them from scratch. As Gick and Holy cinctly put it, "analogy pervades thought" [16]. D centrality of experience to creativity and insight, p ten neglect to draw on relevant knowledge, even couraged to do so through summarizing the relevance, stating the principle it embodies, or creati gram [15, 16]. People are much more likely to analogous experiences and infer the underlying when provided with multiple examples, or when

a case, and asked to compare processes combine partial structures rly in learning when n" [14]. The benefits of



Microsoft Word for Mac, print warning dialog

Help show the steps

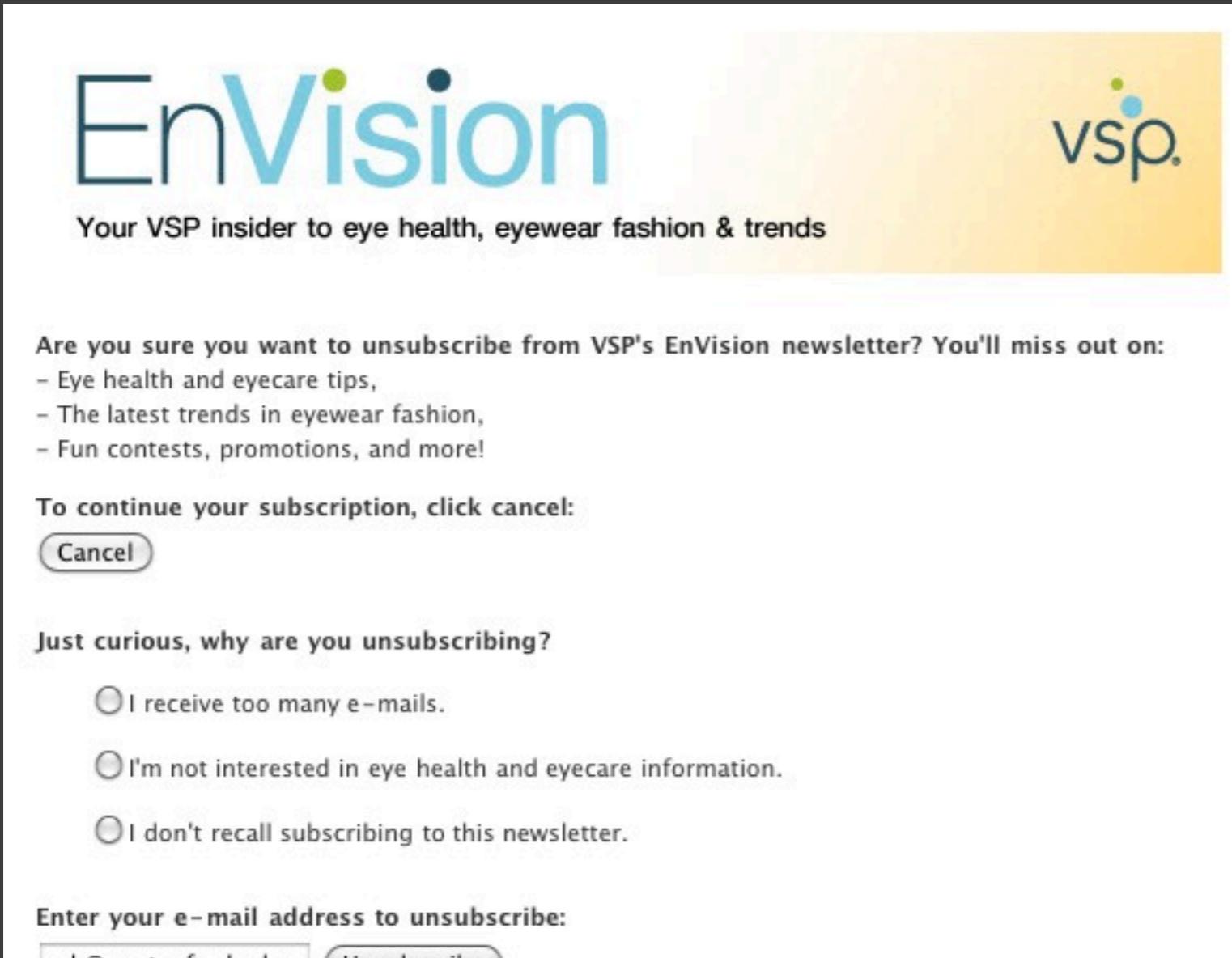


Help point things out

The image shows a composite screenshot of a computer screen. On the left, there is an open email window titled "Re: You've received a message". The recipient's address is "UseTheYellowButton@ebay.com". The message body contains the text "I'll take it...". Below the email is a snippet of an eBay message from a member named "mohamed". The message starts with "Message from eBay member," followed by a warning about responding outside eBay. It also includes "User details:" and a partially visible "From User:".

On the right, there is an eBay item listing for a product with the condition "New with tags". The quantity is 1, and the price is US \$22.00. There are three main buttons: "Buy It Now", "Add to cart" (with a shopping cart icon), and "Add to Watch list". A tooltip for the "Add to cart" button says: "NEW! eBay shopping cart. Shop, compare and buy several items at once with your shopping cart." To the right of the item listing, there is a sidebar with a "100% Positive" rating badge and a list of four green checkmarks: "Consistent ratings", "Ships Items", and "Has earned".

Help provide more information



The image shows a screenshot of an email from EnVision, VSP's newsletter. The header features the EnVision logo in blue and green, followed by the tagline "Your VSP insider to eye health, eyewear fashion & trends". The VSP logo is in the top right corner. The main content asks if the user is sure they want to unsubscribe, listing benefits like eye health tips and contests. It includes a "Cancel" button and a section for unsubscribing reasons with three options. A text input field for an email address is at the bottom.

Are you sure you want to unsubscribe from VSP's EnVision newsletter? You'll miss out on:

- Eye health and eyecare tips,
- The latest trends in eyewear fashion,
- Fun contests, promotions, and more!

To continue your subscription, click cancel:

[Cancel](#)

Just curious, why are you unsubscribing?

I receive too many e-mails.
 I'm not interested in eye health and eyecare information.
 I don't recall subscribing to this newsletter.

Enter your e-mail address to unsubscribe:

Help provide more information



The image shows the header of an EnVision newsletter. On the left is the "EnVision" logo in blue and green. To its right is a yellow rectangular area containing the "vsp." logo. Below the logo is the tagline "Your VSP insider to eye health, eyewear fashion & trends".

Are you sure you want to unsubscribe from VSP's EnVision newsletter? You'll miss out on:

- Eye health and eyecare tips,
- The latest trends in eyewear fashion,
- Fun contests, promotions, and more!

To continue your subscription, click cancel:

[Cancel](#)

Just curious, why are you unsubscribing?

I receive too many e-mails.

Wait – You can change the frequency!

Monthly Every other month Quarterly

[Update](#)

I'm not interested in eye health and eyecare information.

I don't recall subscribing to this newsletter.

Enter your e-mail address to unsubscribe:

[Unsubscribe](#)

Help clearly

Please Accept the TurboTax License Agreement X

Just one more thing before you get started (our lawyers made us do it).

I have read and agree to the terms of the license agreement. [View agreement.](#)

Cancel Continue

+ Add more personal information to your bill

+ Yes, I want to be reminded by SMS if I forget my username and password

I agree that Telekom Deutschland GmbH can use my data to contact me by e-mail, mail, telephone SMS or MMS, to provide me with advice, information and for market research purposes.

Please carefully read the [Terms & Conditions and pricing](#), [Data Privacy](#) and [Right of Withdrawal](#) notices before purchasing HotSpot

*) Please complete all mandatory fields.

back proceed

Help people have fun

The screenshot shows a web browser window with the title "Kimpton InTouch - Join Kimpto...". The main content area is titled "My Stay Favorites:" and contains several text input fields with dropdown menus:

- "I sleep best when I lay my head on:" dropdown menu options: Feather (selected), Select Pillow Type, A Sympathetic Shoulder
- "I'm happy when my room is:" dropdown menu options: Feather, Foam
- "If I wasn't working, I'd be:" dropdown menu options: (empty)
- "Special Request:" dropdown menu options: (empty)
- "Smoking:" dropdown menu options: Non-Smoking