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Web Design and Databases
WD: Class 3: Usability

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Last time

- Pre-production
- Navigation
- Layout
- Writing

Homework

- Find 3 websites with clear themes/metaphors
- Discuss these themes, metaphors and use of colour.

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Doritos

MEET THE BAND PRODUCTS ABOUT

MEET THE BAND

FOR FUN
ADD A LITTLE *Mexican*

VIEW OUR PRODUCTS

MAGNOLIA BAKERY
NEW YORK CITY
855-MBAKERY

DAILY CUPCAKES | BAKERY MENU | FIND A STORE

ONLINE STORE | CATERING | GALLERY | ABOUT US | FRANCHISE

search

855-MBAKERY (855-622-5379)
Returning Customer?
Log In | My Account/Reorder

Shipping Policy

Shopping Bag

The Shopping Bag is currently empty

Redeem Online Gift Certificate

Shopping Cart by Nexternal

**Please note our online store packages are only available for nationwide shipping.
For local pick-up and delivery orders, please call 1.855.MBAKERY
or click here for your nearest Magnolia Bakery.
We do not ship our baked products to any NYC Hospitals.**

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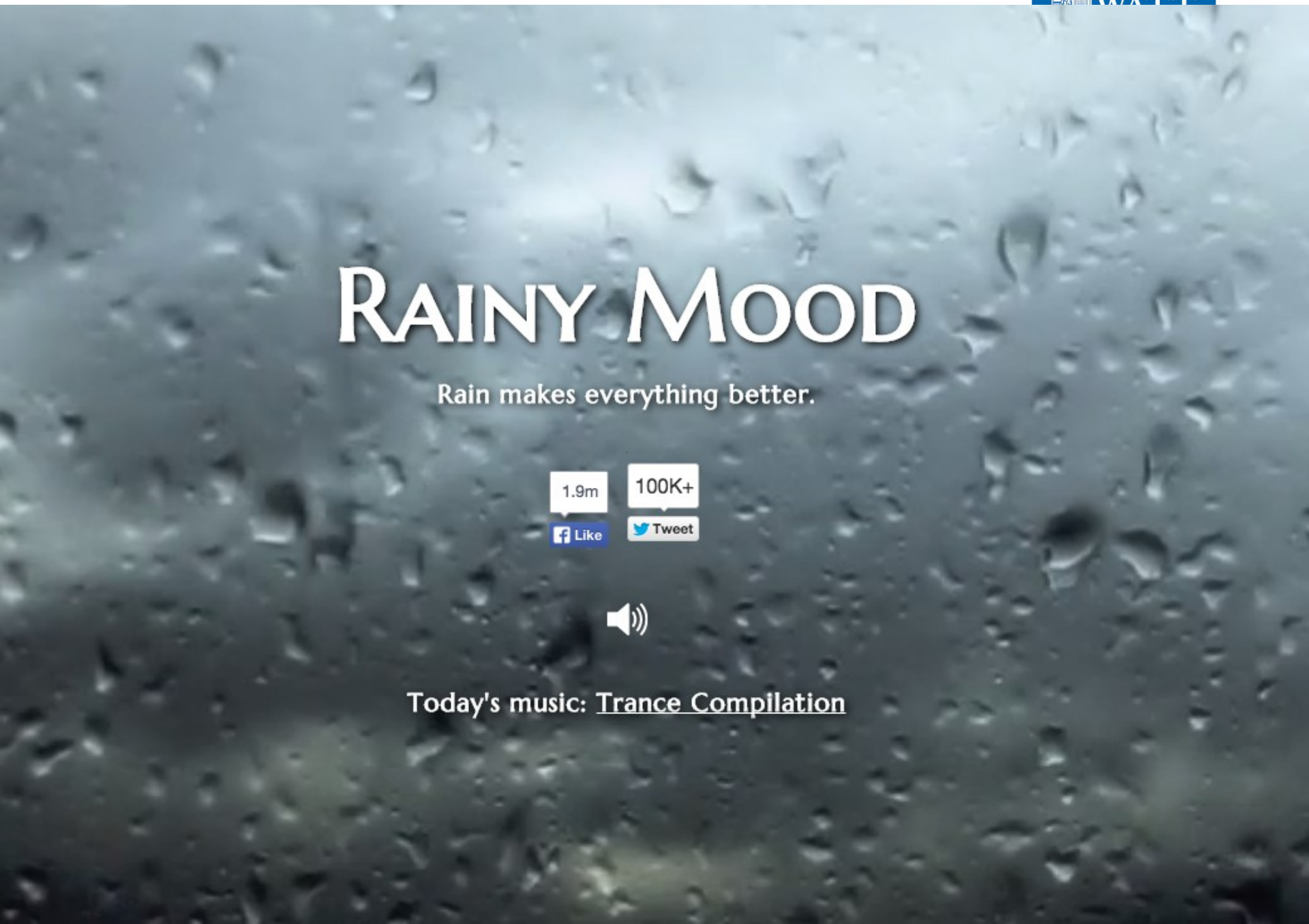

RAINY MOOD
Rain makes everything better.
1.9m
Like
100K+
Tweet
Today's music: Trance Compilation

Remember

- Colours and icons *enforce* a theme
  - E.g. blue and Nasa's space theme
- Colours *aren't a theme* in themselves
- Not all websites have themes but lots use colour for branding (e.g. Apple and white)

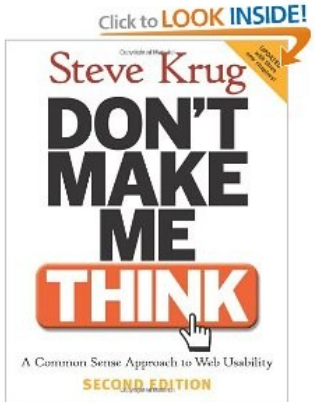
Today's Class

- How to create user-friendly websites

  --- removing the question marks.
- What users do compared to what we think they do?
- Creating a billboard in 5 steps
- Navigation and browsing
- Usability testing

Material contributions from the book “Don’t make me think” by Steve Krug (www.sensible.com/)

and Rekha Karnata (connect.humanfactors.com)



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"What's *the most important* thing I should do if I want to make sure my website is easy to use?" according to Krug

It is not

"Nothing important should ever be more than two clicks away."

It is not

"Speak the user's language."

It is not

"Be consistent."

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These are all important but the most important thing….

is …..

don’t make me think.

Web pages should be self-evident

- We should be able to “get it”
  - What it is?
  - How to use it?
- Without expending any effort thinking about it.

Visitors shouldn't spend their time thinking about:

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Things that make us think:

From "Don't make me think" by Steve Krug

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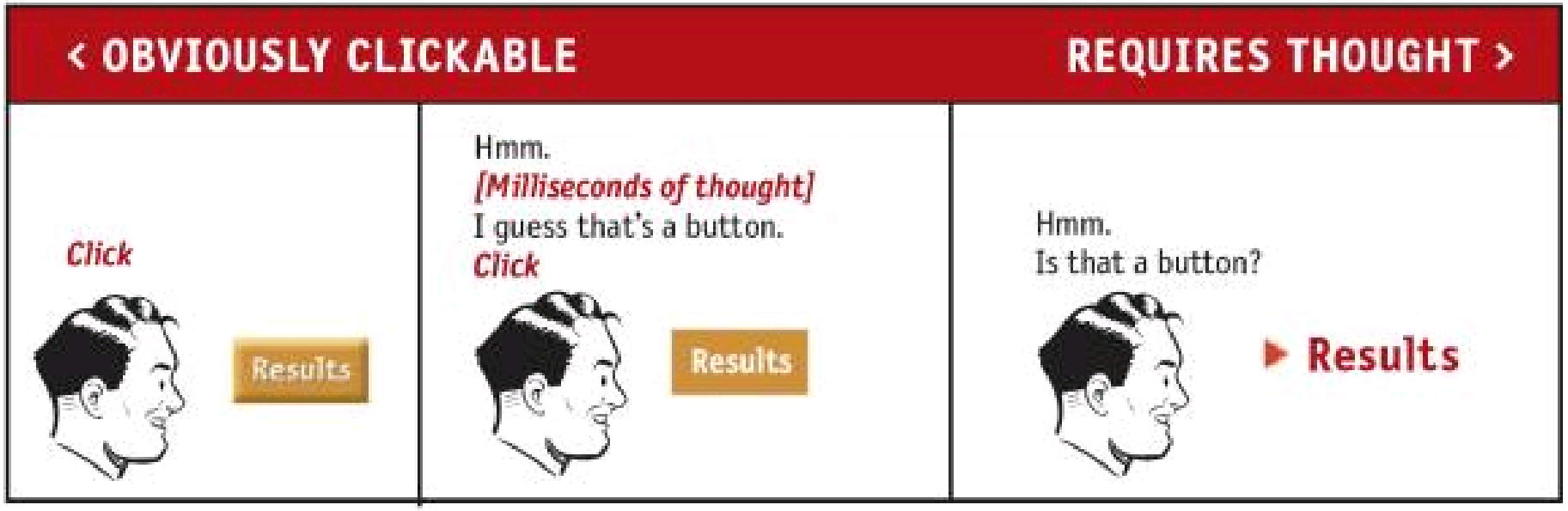
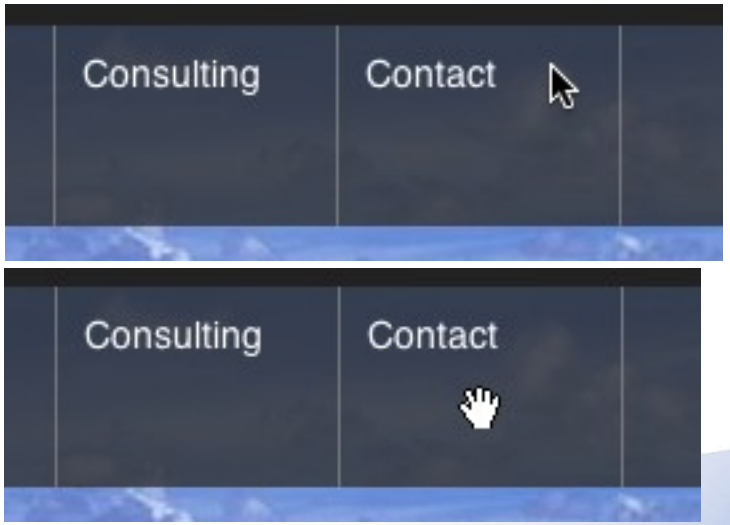


From "Don't make me think" by Steve Krug

"If you point the cursor at it, it'll change from an arrow to a pointing hand. What's the big deal?"



Every question mark adds to our cognitive workload.

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As a rule, people don’t like to puzzle over how to use things.

MOST BOOKSTORE SITES

Let's see. "Quick Search." That must be the same as "Search," right?

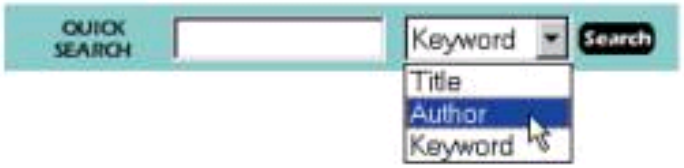
Do I have to click on that drop-down menu thing?

All I know about the book is that it's by Tom Clancy. Is Clancy a keyword?

(What *is* a keyword, anyway?)

I guess I have to use the menu.

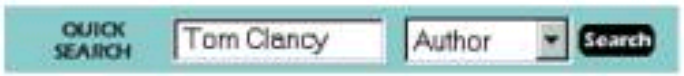
Clicks on the arrow



"Title. Author. Keyword."

OK. I want "Author."

Clicks "Author"



Types "Tom Clancy"

Clicks "Search"

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From "Don't make me think" by Steve Krug

Amazon.co.uk

Search
All Departments
Tom Clancy
GO
Search suggestions
tom clancy
tom clancy in Books
tom clancy in Kindle Store

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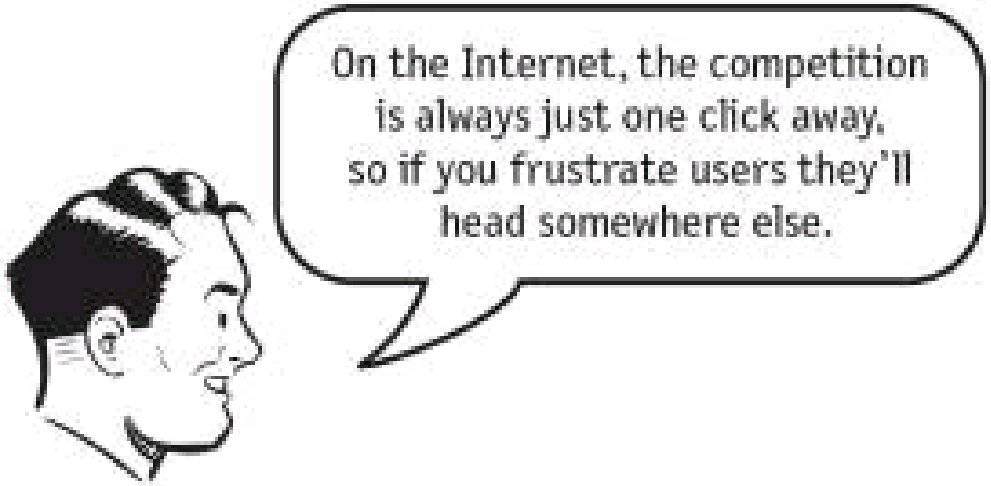
The most important principle of web design is to work toward eliminating question marks.

However, you cannot make everything self-evident.

Sometimes you need to settle for self-explanatory

Why is this so important?

Oddly enough, not for the reason you usually hear cited:



From "Don't make me think" by Steve Krug

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"I've waited ten minutes for this bus already, so I may as well hang in there a little longer."

So why bother then?

Making pages self-evident is like having good lighting- makes everything seem better = happy user.

So why bother then?

Puzzling over things zaps energy, enthusiasm and time = unhappy user.

Recap from last week

If web pages are going to be effective, they have to work most of their magic at a glance.

We're thinking: "Let's write some 'great literature' (or at least 'product brochure')"

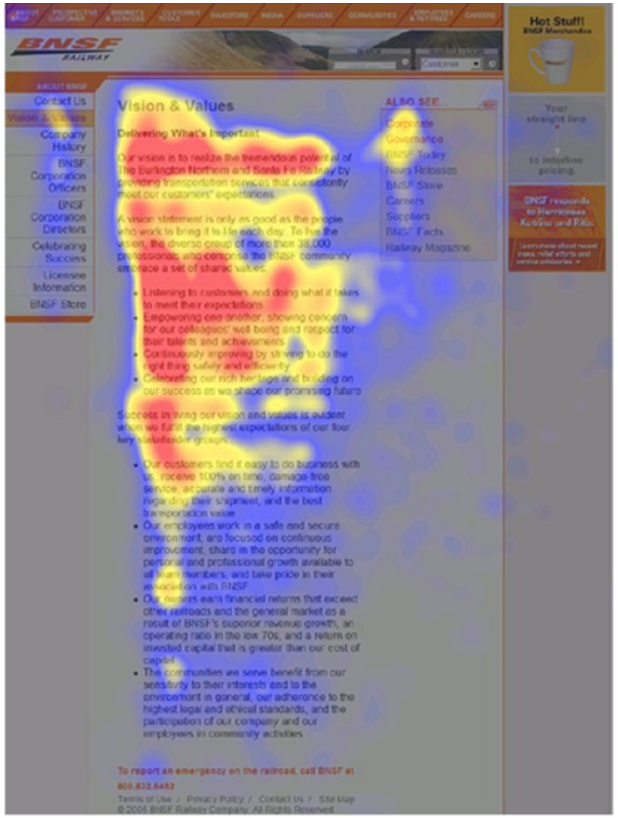
The user's reality is much closer to: "billboard going by at 60 miles an hour."

Today's Class

- How to create websites that are user-friendly- removing the question marks.
- What users do compared to what we think they do?
- Creating a billboard in 5 steps
- Navigation and browsing
- Usability testing

Activity

- Read article
- Shrestha & Lenz (2007). Eye Gaze Patterns while Searching vs Browsing a website. In Usability News Vol 9(1)



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Discussion points

1. Left or right-hand side? Which side do users concentrate on?
2. What shape do people use for scanning according to Nielson?
3. What are the implications of this in terms of important content?
4. What is the purpose of the study? What are the two experimental conditions (Figures 2a/2b)
5. Website with pictures (answer in terms of hotspots and paths)
   - How do people browse?
   - How do people search?
   - How did people search for the non-existent category?
6. Websites with text (answer in terms of hotspots and paths)
   - How do people browse?
   - How do people search?

Findings

- Text: F-shape for text based web pages (Figure 8) in accordance with Neilson (2006)
  - Browsing more dispersed than search

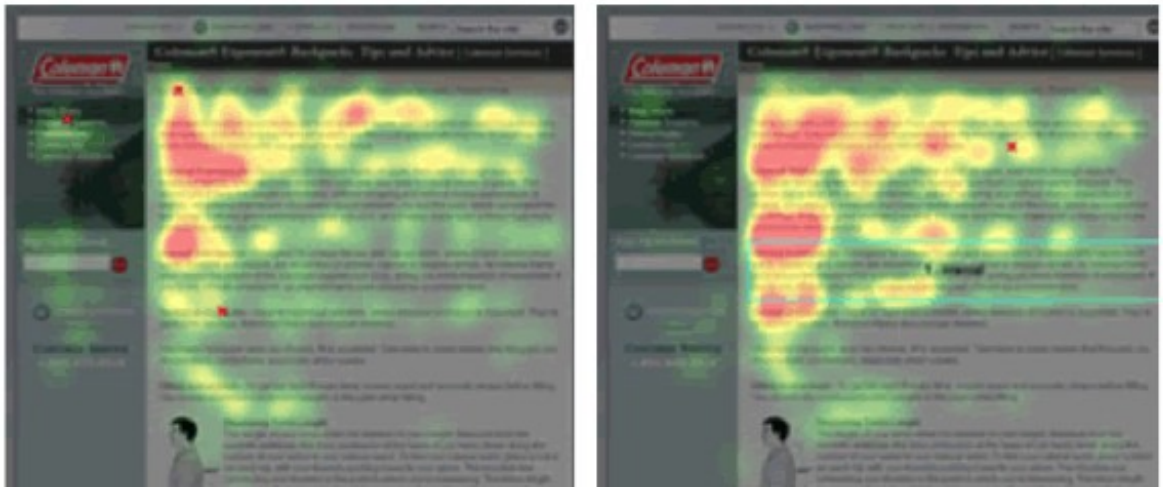
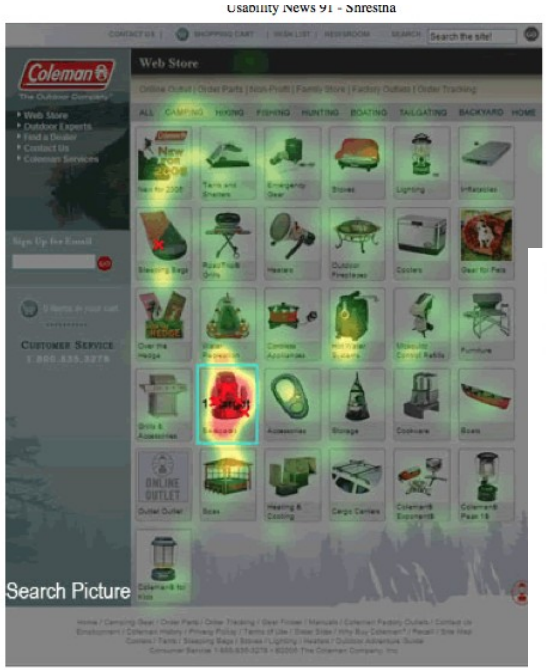
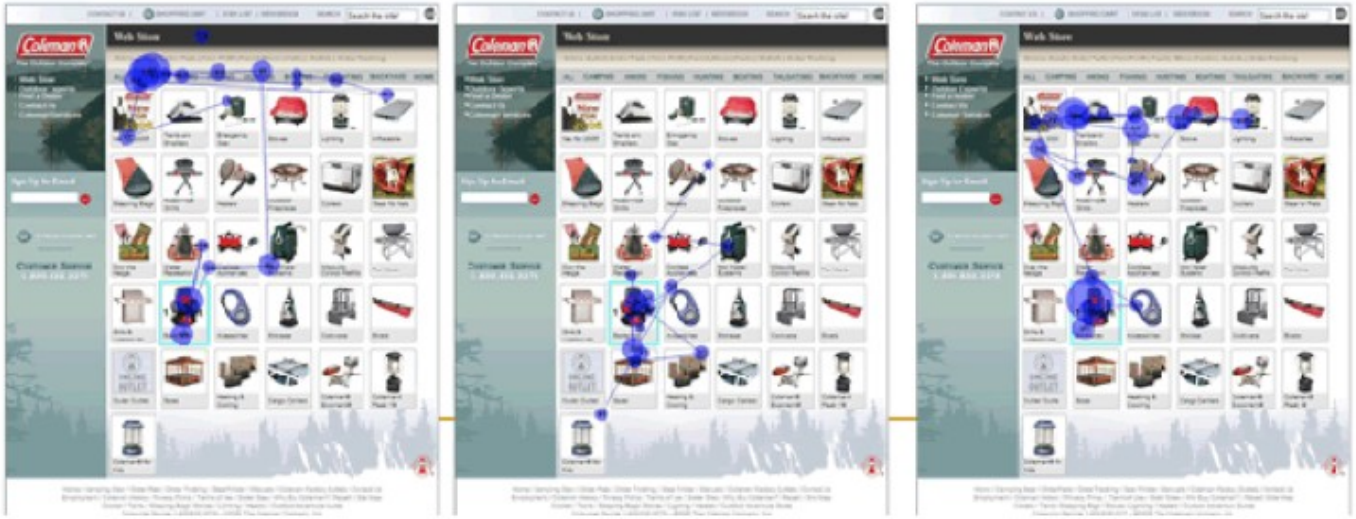


Figure 8. Hotspot plot while performing the browsing (left) and searching (right) task for the text page.

Findings cont

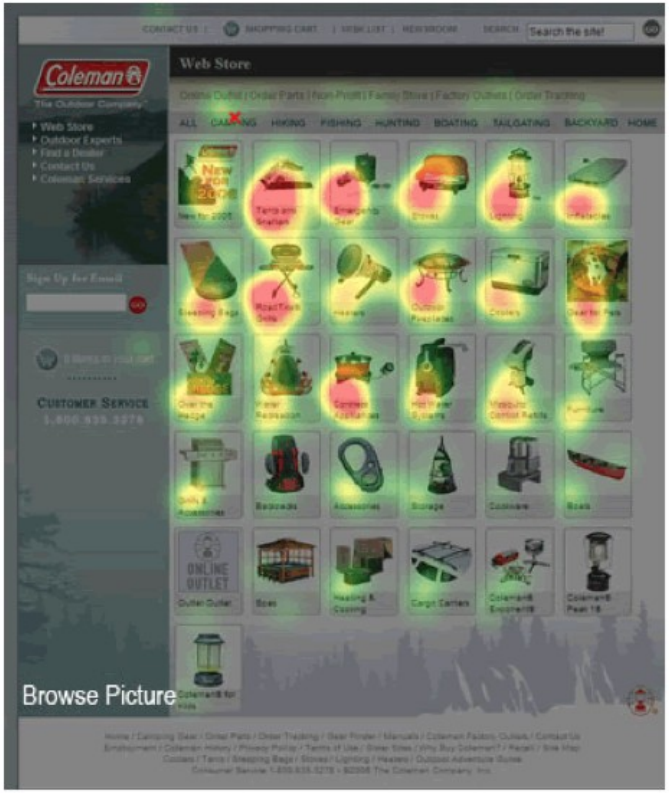
- Pictures: F-shape doesn't hold up here
  - Users are efficient at searching for a category but patterns are unique to an individual (Figures 4 and 5 bottom)





Findings cont

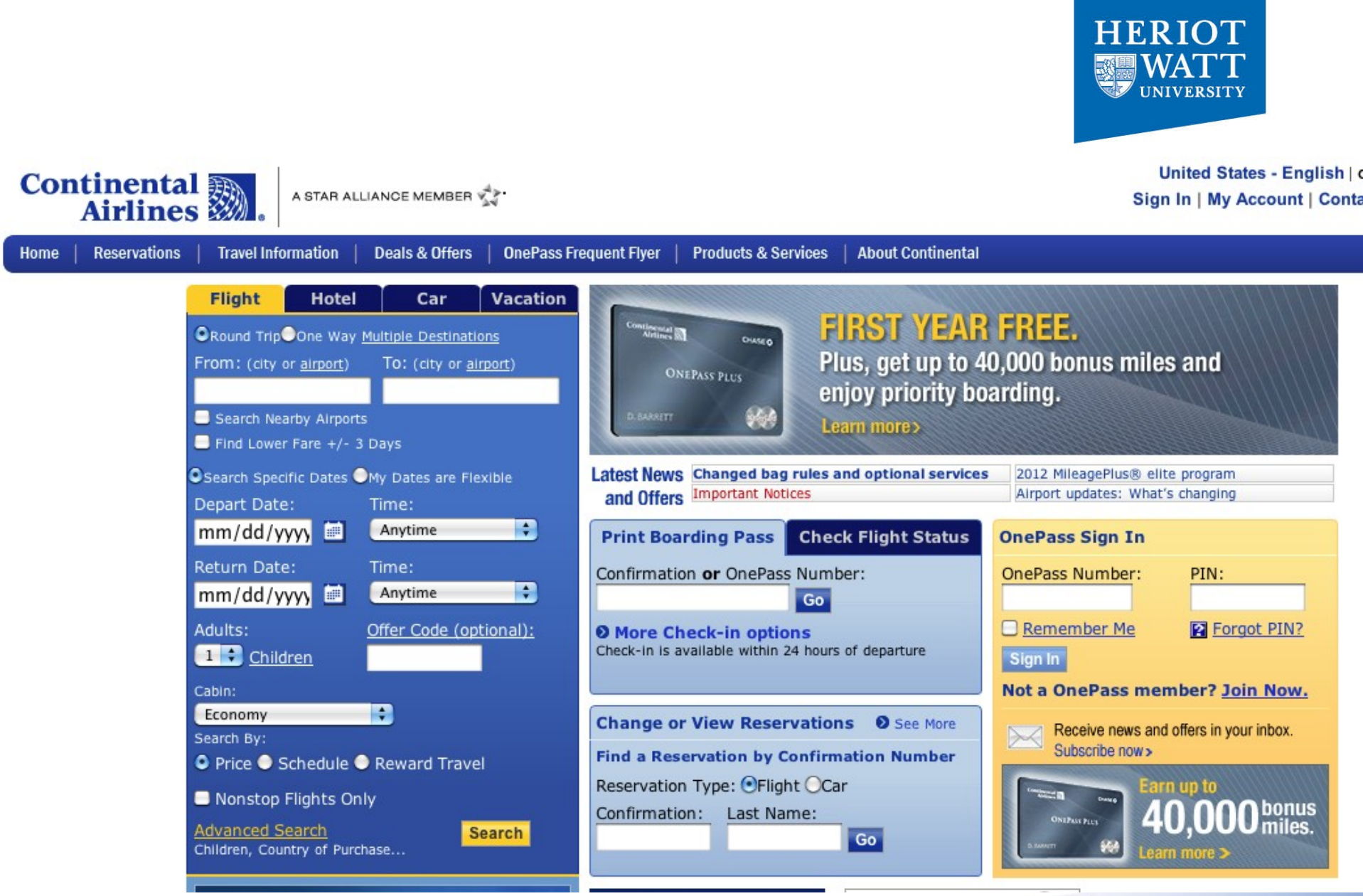
- Browsing- mostly above the fold (Figure 3)



Takeaway: put your important stuff on the left hand side and above the fold

Fact of Life #1

- Unless we are searching for specific item of information- we don't read pages; we scan them.
  - We ignore sections of websites
  - We're usually in a hurry
  - We don't *need* to read everything.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One Way
Multiple Destinations
From: (city or airport)
To: (city or airport)
Search Nearby Airports
Find Lower Fare +/- 3 Days
Search Specific Dates
My Dates are Flexible
Depart Date:
mm/dd/yyyy
Time:
Anytime
Return Date:
mm/dd/yyyy
Time:
Anytime
Adults:
1
Children
Offer Code (optional):
Cabin:
Economy
Search By:
Price
Schedule
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Nonstop Flights Only
Advanced Search
Children, Country of Purchase...
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Check-in is available within 24 hours of departure
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See More
Find a Reservation by Confirmation Number
Reservation Type: Flight Car
Confirmation:
Last Name:
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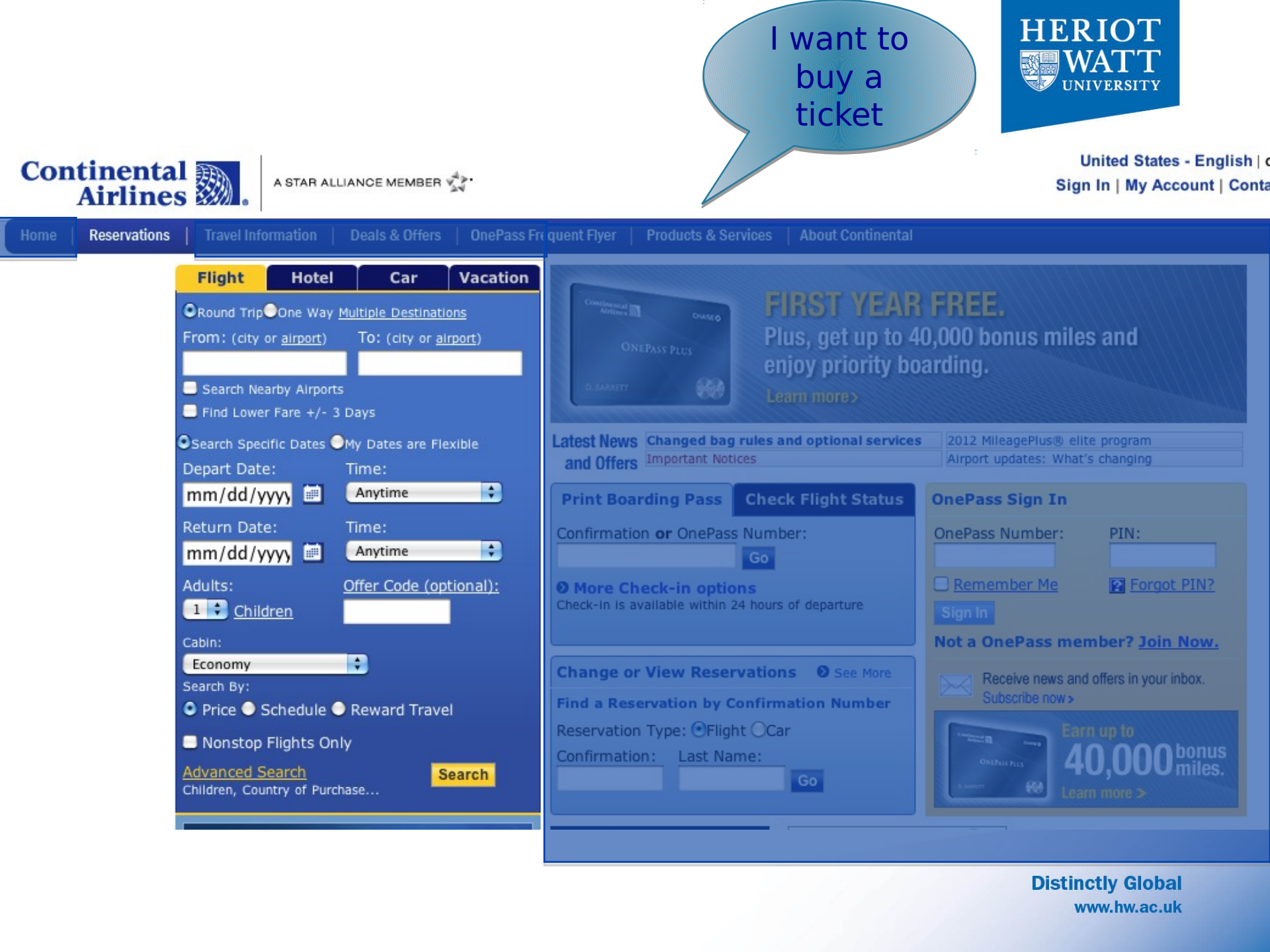
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Car
Vacation
Round Trip One Way Multiple Destinations
From: (city or airport)
To: (city or airport)
Search Nearby Airports
Find Lower Fare +/- 3 Days
Search Specific Dates My Dates are Flexible
Depart Date:
Time:
mm/dd/yyyy
Anytime
Return Date:
Time:
mm/dd/yyyy
Anytime
Adults:
Offer Code (optional):
1
Children
Cabin:
Economy
Search By:
Price Schedule Reward Travel
Nonstop Flights Only
Advanced Search
Children, Country of Purchase...
Search
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Check-in is available within 24 hours of departure
Change or View Reservations
See More
Find a Reservation by Confirmation Number
Reservation Type: Flight Car
Confirmation:
Last Name:
Go
OnePass Sign In
OnePass Number:
PIN:
Remember Me
Forgot PIN?
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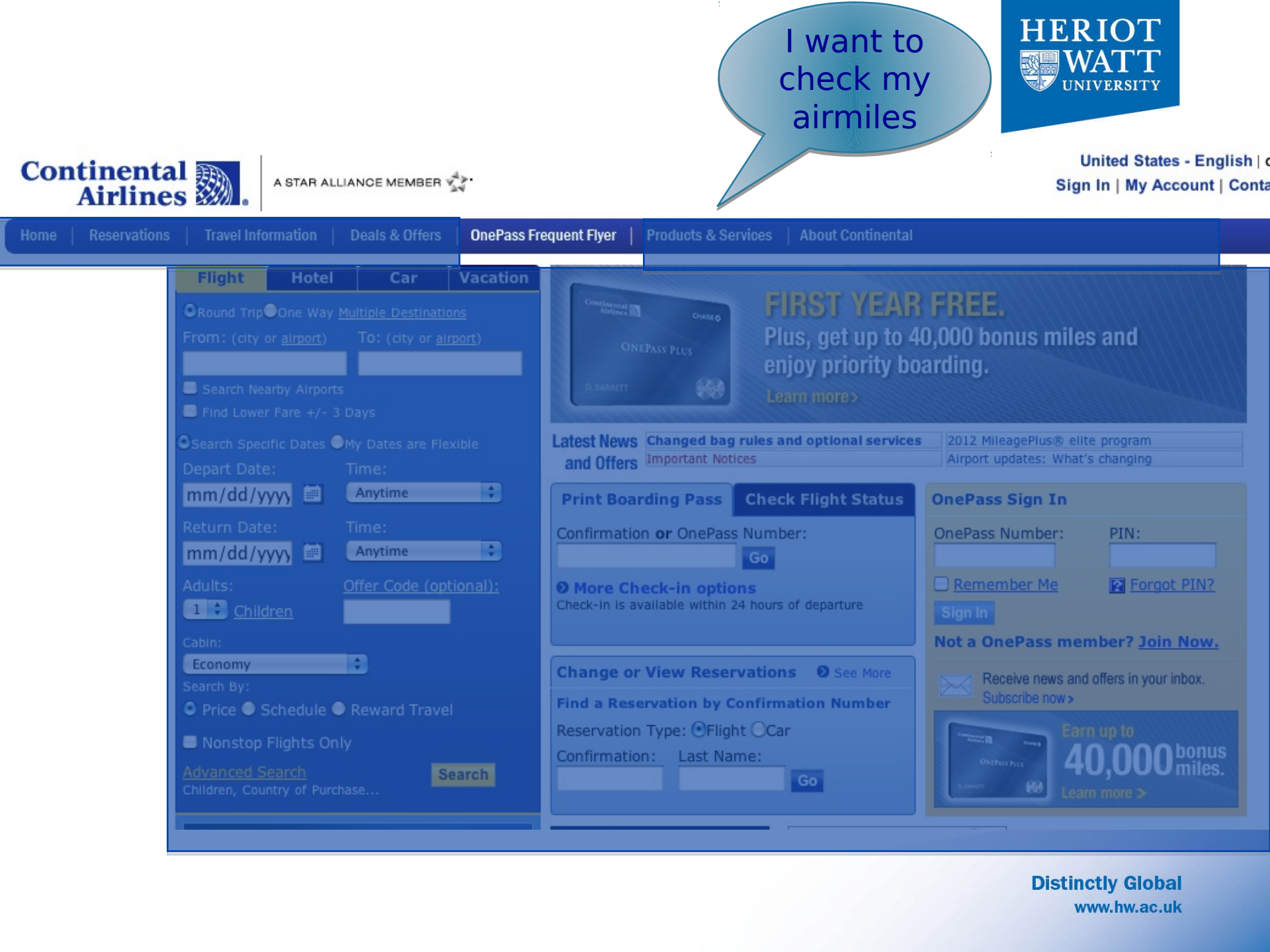
I want to check my airmiles
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Home | Reservations | Travel Information | Deals & Offers | OnePass Frequent Flyer | Products & Services | About Continental
Flight Hotel Car Vacation
Round Trip One Way Multiple Destinations
From: (city or airport)
To: (city or airport)
Search Nearby Airports
Find Lower Fare +/- 3 Days
Search Specific Dates My Dates are Flexible
Depart Date:
Time:
mm/dd/yyyy
Anytime
Return Date:
Time:
mm/dd/yyyy
Anytime
Adults:
Offer Code (optional):
1 Children
Cabin:
Economy
Search By:
Price Schedule Reward Travel
Nonstop Flights Only
Advanced Search
Children, Country of Purchase...
Search
FIRST YEAR FREE.
Plus, get up to 40,000 bonus miles and enjoy priority boarding.
Learn more
Latest News and Offers
Changed bag rules and optional services
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Important Notices
Airport updates: What's changing
Print Boarding Pass
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Go
More Check-in options
Check-in is available within 24 hours of departure
Change or View Reservations
See More
Find a Reservation by Confirmation Number
Reservation Type: Flight Car
Confirmation:
Last Name:
Go
OnePass Sign In
OnePass Number:
PIN:
Remember Me
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Fact of life #2

- We don’t make optimal choices. We satisfice.
  - We don’t choose the best option – we choose the first reasonable option.
  - As soon as we find a link that seems like it might lead where we want, we click it.

Why don't web users look for the best choice?

- We're usually in a hurry
- "Optimising is hard, and takes a long time. Satisficing is more efficient" (Gary Klein)
- There's not much of a penalty for guessing wrong
- Weighing options may not improve our chances

Finally

- Guessing is more fun
  - Less work
  - If you're right it's faster
  - Introduces an element of chance - serendipity

Fact of life #3

- We don’t figure out how things work. We muddle through.
- What users actually do :
  - glance at each new page
  - scan some of the text,
  - click on the first link that catches their interest or vaguely resembles the thing they’re looking for.
- There are usually large parts of the page that they don’t even look at.

Summary: what users do

1. We scan not read
2. We don’t choose the best option – we choose the first reasonable option
3. We muddle through- there are usually large parts of the page that they don’t even look at.

If people manage to muddle through……

……does it really matter whether they get it?

- Muddling tends to be inefficient and error-prone
- If they get it:
  - Better chance they'll find what they're looking for.
  - Understand the full range of what your site has to offer
  - You have a better chance of steering them where you want them to go
  - They'll feel smarter and more in control

Today's Class

- How to create websites that are user-friendly- removing the question marks.
- What users do compared to what we think they do?
- Creating a billboard in 5 steps
- Navigation and browsing

What's a girl to do?

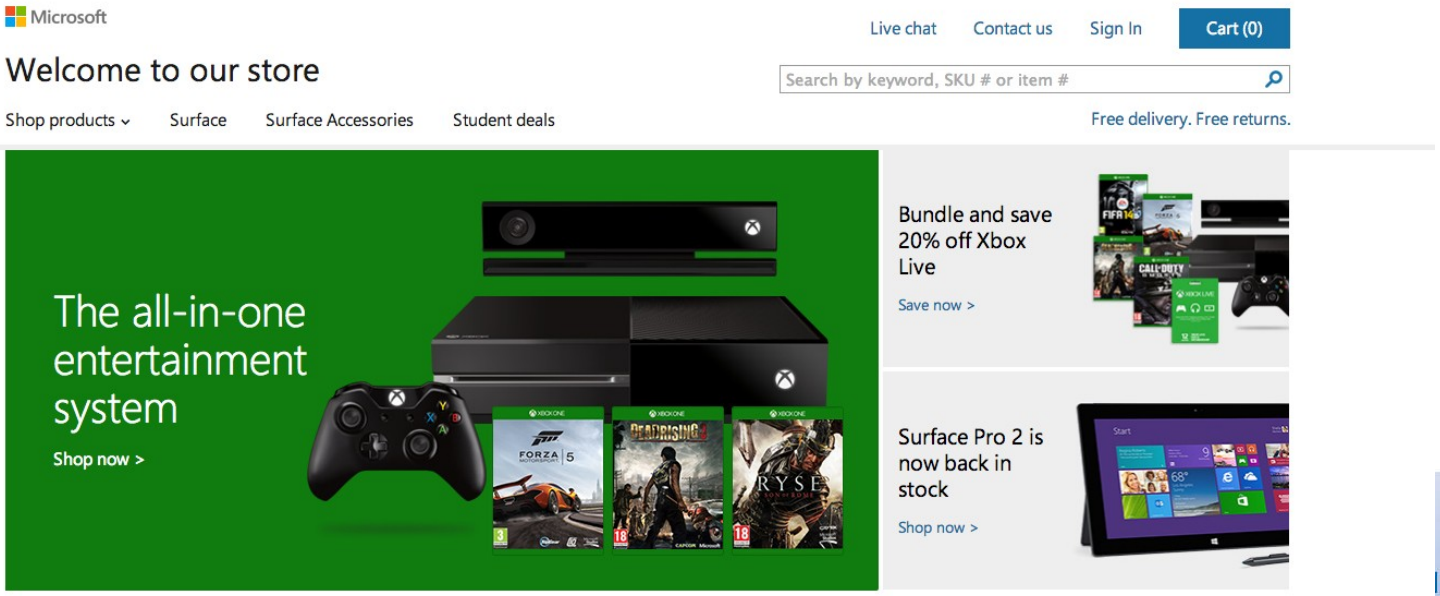
- If your audience is going to act like you're designing billboards, then design great billboards.

Billboard Design

1. Create a clear visual hierarchy
2. Take advantages of conventions
3. Break up pages into clearly defined areas
4. Make it obvious what's clickable
5. Minimize noise

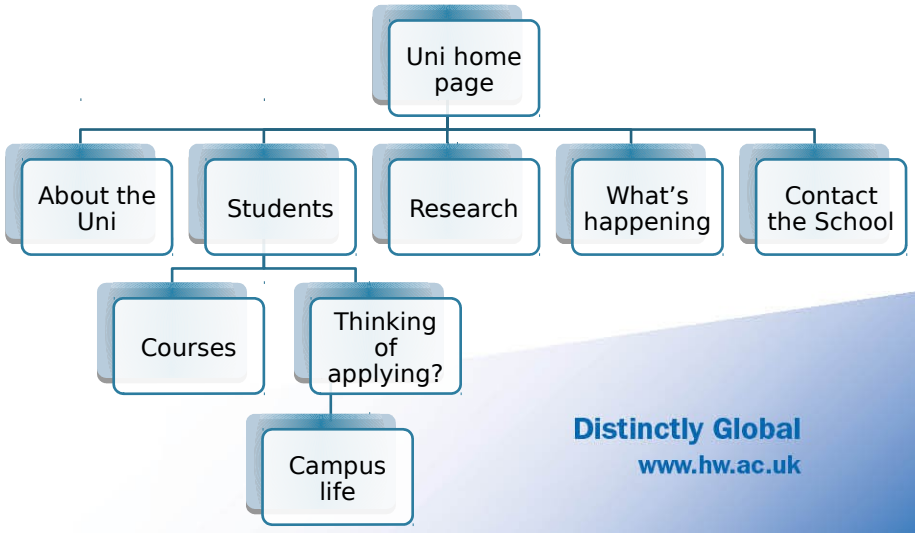
1. Visual Hierarchy

- Design pages for scanning:
  - The more important something is, add more visual weight to it (see last class notes)
  - Don’t put important stuff on the right hand side or below the fold



1. Visual hierarchy cont..

- Things that are related logically are also related visually.
- From your Information Architecture:
  - group things that are similar together under a heading and display them in a similar style,
  - display categories on the same level of your IA in a similar way,
  - put groups of items in a clearly defined area.



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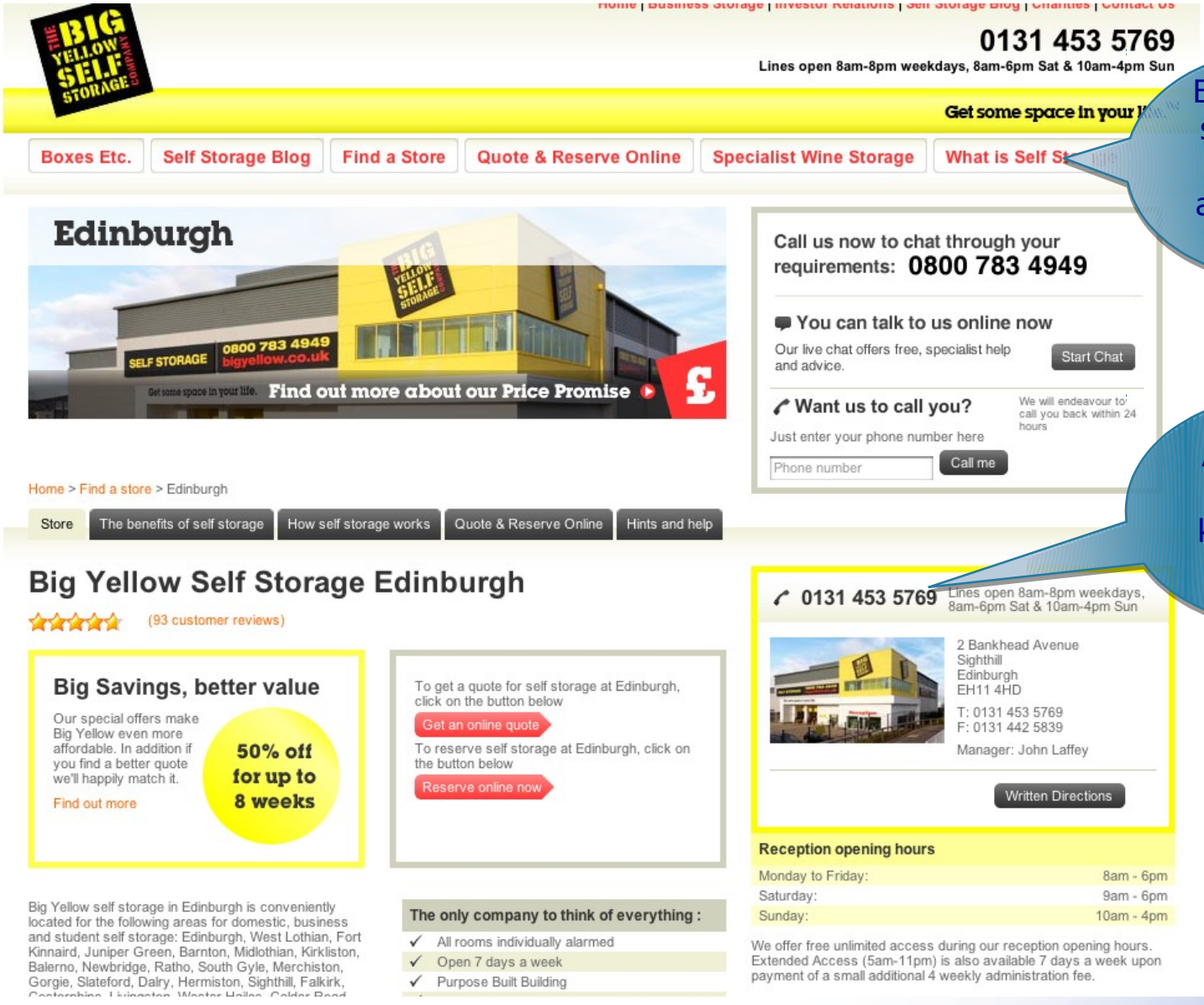


Elements in same level of the IA are visually the same

All contact info are kept in one area

2. Take advantage of conventions

Take advantage of conventions- things users are familiar with.

- They are useful: help users move from one site to the next easily
- Reassuring sense of familiarity
- Don't fall into the trap: don't reinvent the wheel!
- Innovate when you get a "wow" from your friends- otherwise stick to conventions

'I swear to God that America will never dream of security or see it before we live it and see it in Palestine, and not before the infidel's armies leave the land of Muhammed, peace be on him.' Osama bin Laden, Page 3

THE SCOTSMAN

SCOTLAND'S NATIONAL NEWSPAPER

US and Britain bomb Afghanistan ■ Cruise missiles rain on Taleban ■ Fate of British journalist unclear

War against terrorism begins

LIVE

AFGHANISTAN

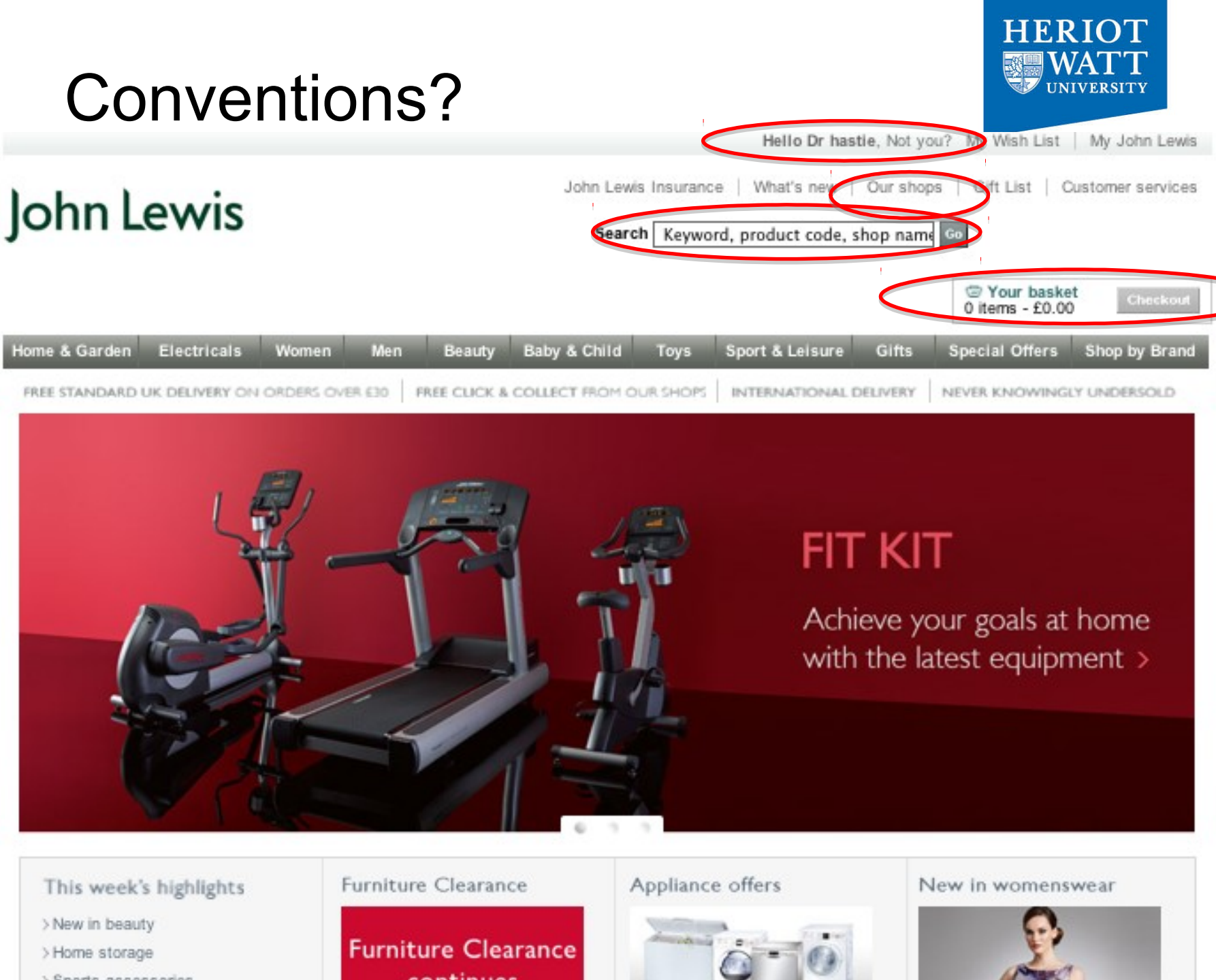
AMERICA STRIKES BACK

U.S. LAUNCHES MILITARY ACTION AGAINST TALIBAN

Chorus of blasts ushers in conflict

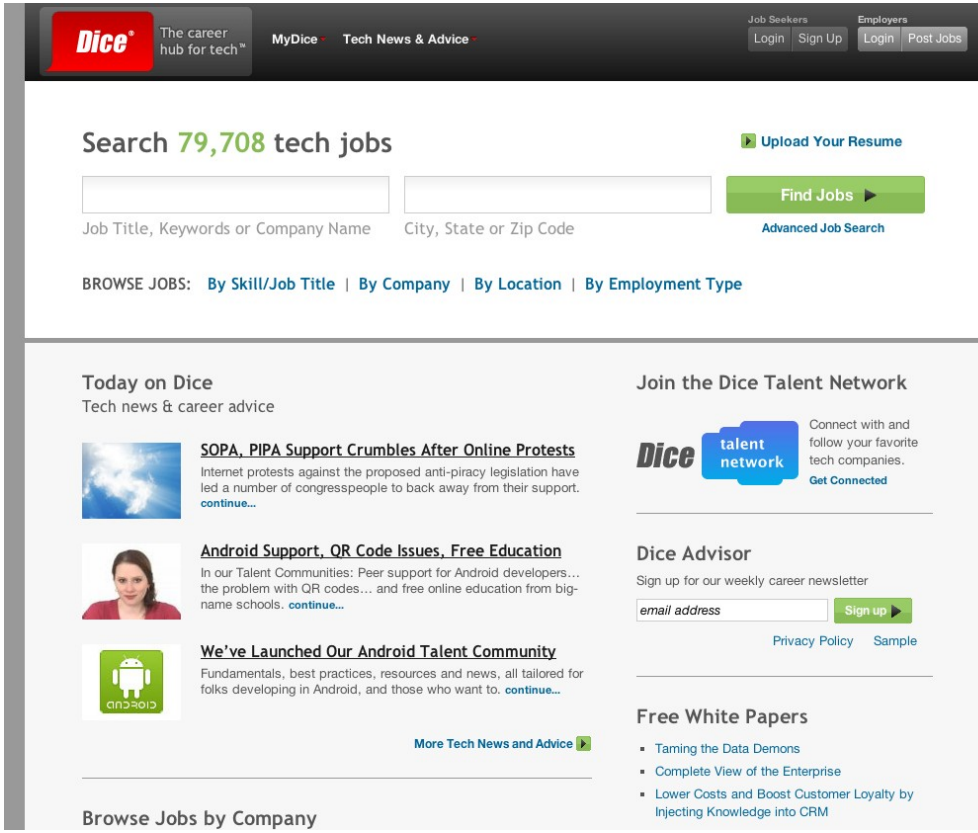
Northern Alliance rejoices as news of attacks spreads

Conventions?

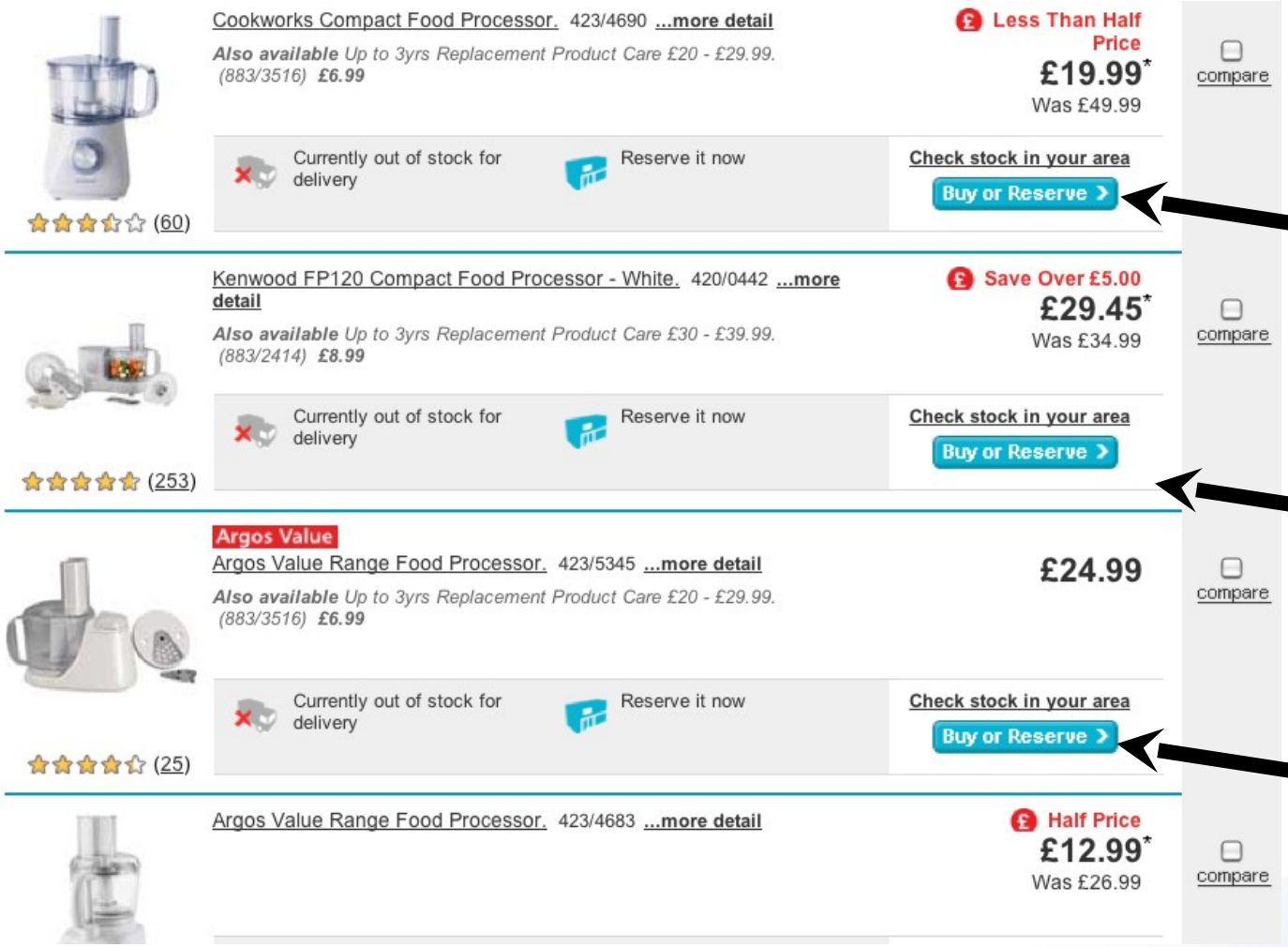


3. Break up pages into clearly defined areas

- Divide the page into clearly defined areas
- Allows users to decide quickly which areas of the page to focus on and which areas they can safely ignore.

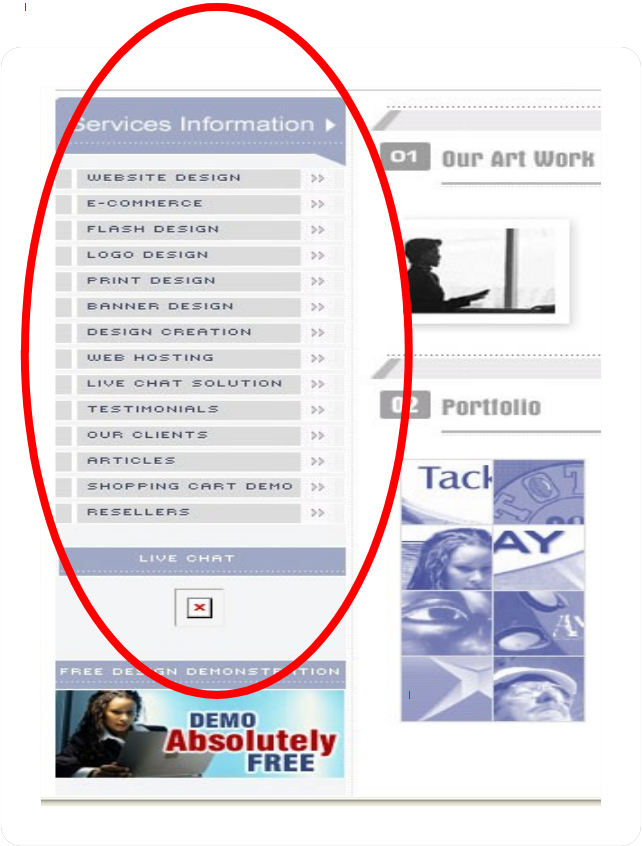


4. Make it obvious what's clickable

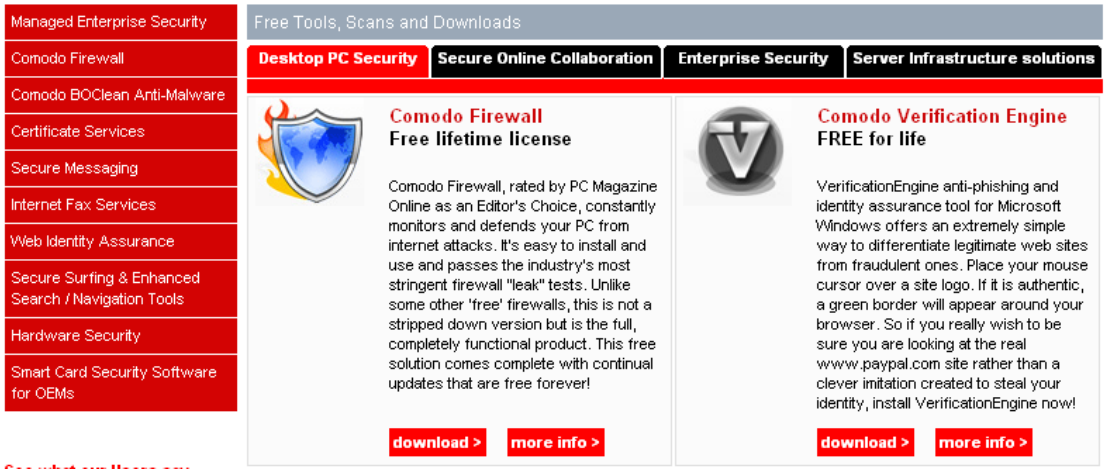


5. Minimize noise

Minimize background noise and busy-ness



Spacing between links



High contrast colours like red and black together

Oh and don't forget….

The art of writing for the web- see last week's slides.

Billboard Design: Summary

1. Create a clear visual hierarchy
2. Take advantages of conventions
3. Break up pages into clearly defined areas
4. Make it obvious what's clickable
5. Minimize noise
6. Write for the web

Today's Class

- How to create websites that are user-friendly- removing the question marks.
- What users do compared to what we think they do?
- Creating a billboard in 5 steps
- Navigation and browsing

The unbearable lightness of browsing

- No sense of scale
  - num of pages in the site?
- It's hard to know:
  - whether you've seen everything of interest in a site
  - when to stop looking.
  - links that we've already clicked onto display in a different colour (e.g. Google)-- gives us some sense of how much ground we've covered.

The unbearable lightness of browsing

- No sense of direction.
  - There is no up and down in hierarchy – to a more general or more specific level.
- No sense of location.
  - We don’t develop a sense of where things are spatially (and where the shortcuts are)

Purpose of navigation:

- To help us find whatever it is we're looking for, and
- To tell us where we are.
- It gives us something to hold on to.
- It tells us what's here.
- It tells us how to use the site.
- It gives us confidence in the people who build it.

Animal, mineral or vegetable

- How many times can you expect a user to click to get somewhere?
- Less important is how many but rather how *hard* the choice is.

Why users like mindless choices?

- RECAP: Users don't mind a lot of clicks as long as each click is painless and they have continued confidence that they're on the right track.

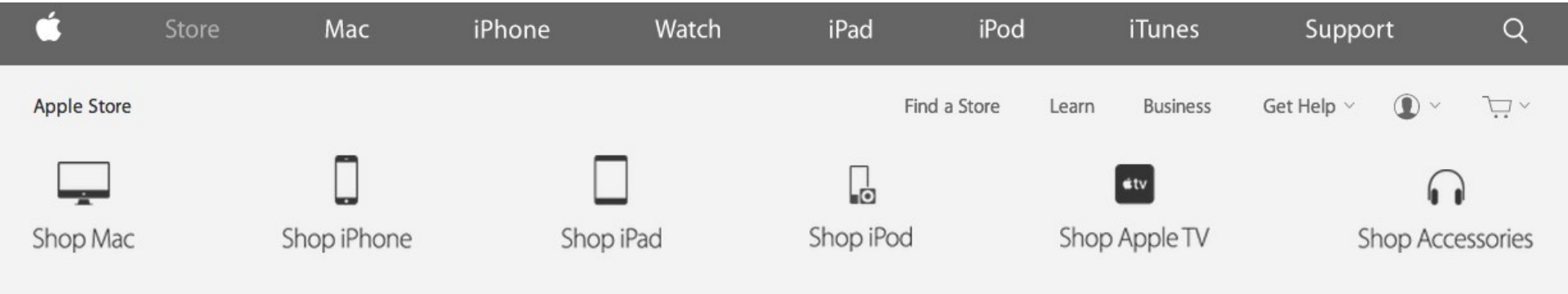
- Rule of thumb might be something like " three mindless, unambiguous clicks equal one click that requires thought."

Make your choices clear

Street signs and Breadcrumbs

Designing Navigation: see week 1's slides on Information Architecture.

Make it easy to get around your website



Web navigation conventions

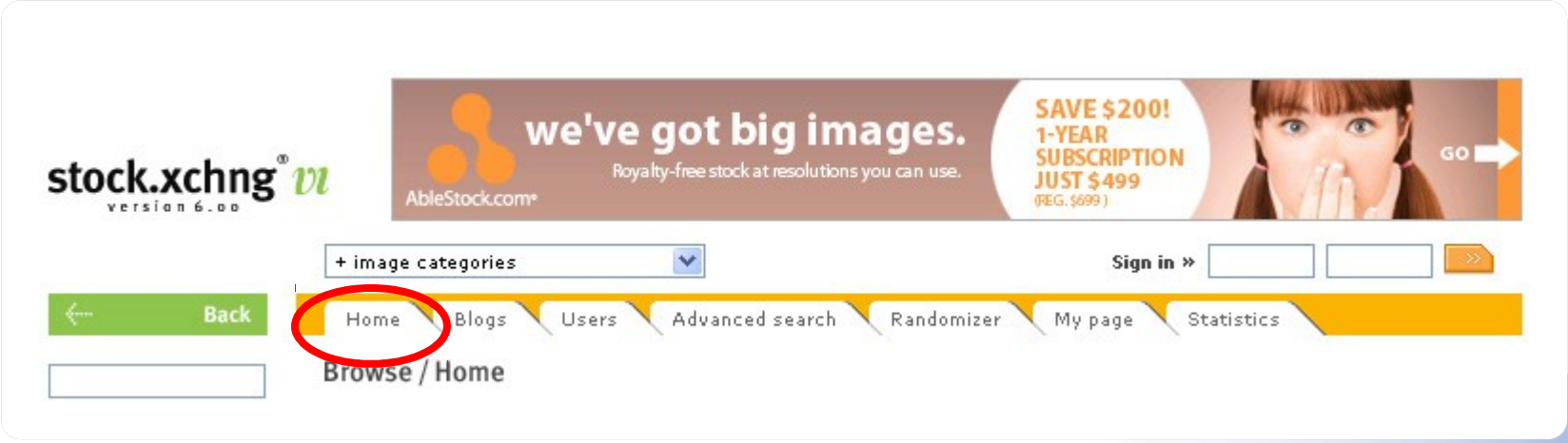
- Don’t look now, but I think it’s following us…..
- Have navigation appear in the same place on every page with a consistent look
  - instant confirmation that you’re still in the same site.

Web navigation conventions

- Navigation should include the five elements you most need to have on hand at all times;
  1. Site ID
  2. Utilities
  3. A way to search
  4. Sections
  5. A way home

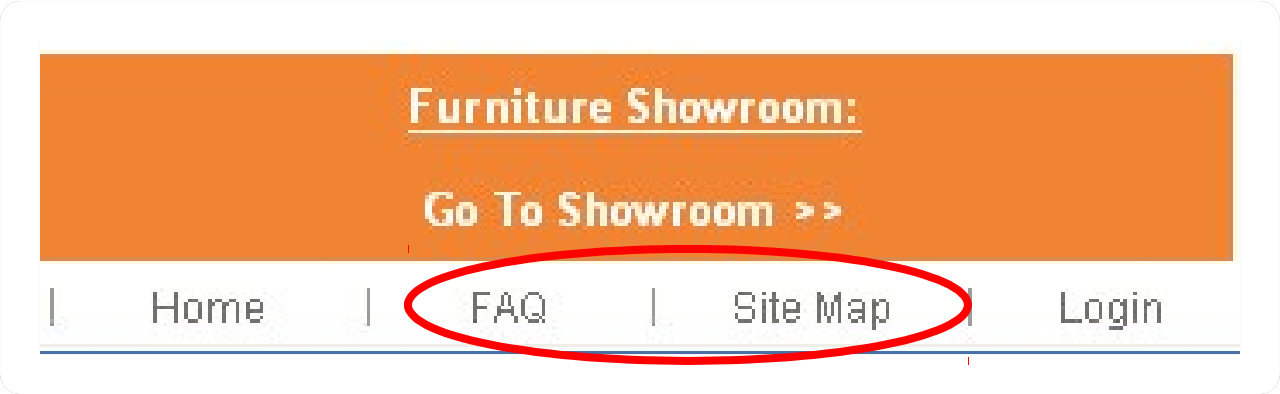
1. Site ID: There is no place like Home

- Having a Home button in sight at all times offers reassurance that no matters how lost I may get, I can always start over.
- Site ID doubles as button that can take you to Home page.



2. The Utilities

- Utilities are the links to important elements of the site that aren't really part of the content hierarchy (like help, sitemap etc).



3. Search

- Unless a site is very small and very well organized, every page should have either a search box or a link to search page (don't worry about implementing search for your coursework).
- Large percentage of users their first official act when they reach a new site will be to scan the page for search option.

You don't need to implement search for your assignment

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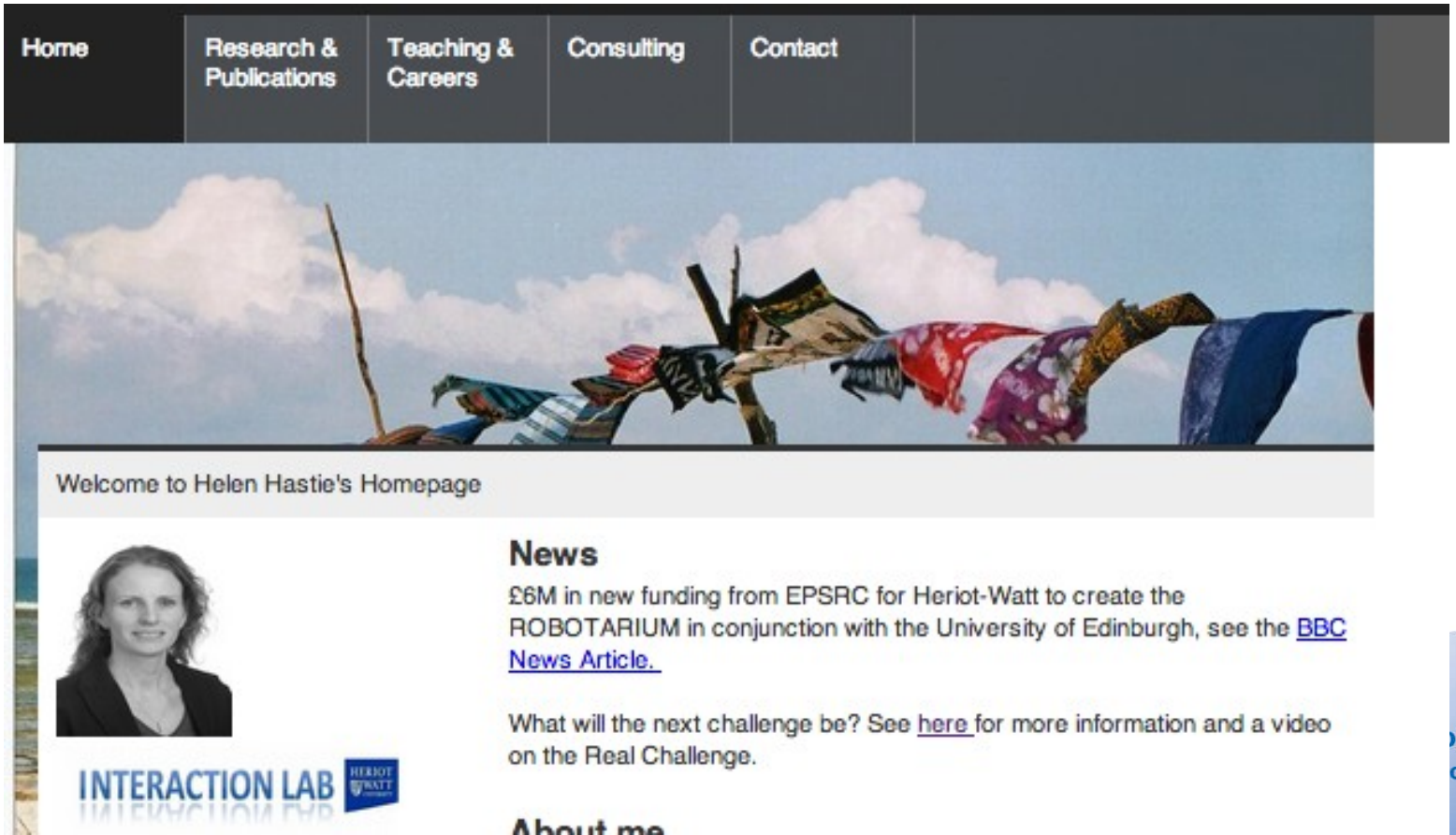
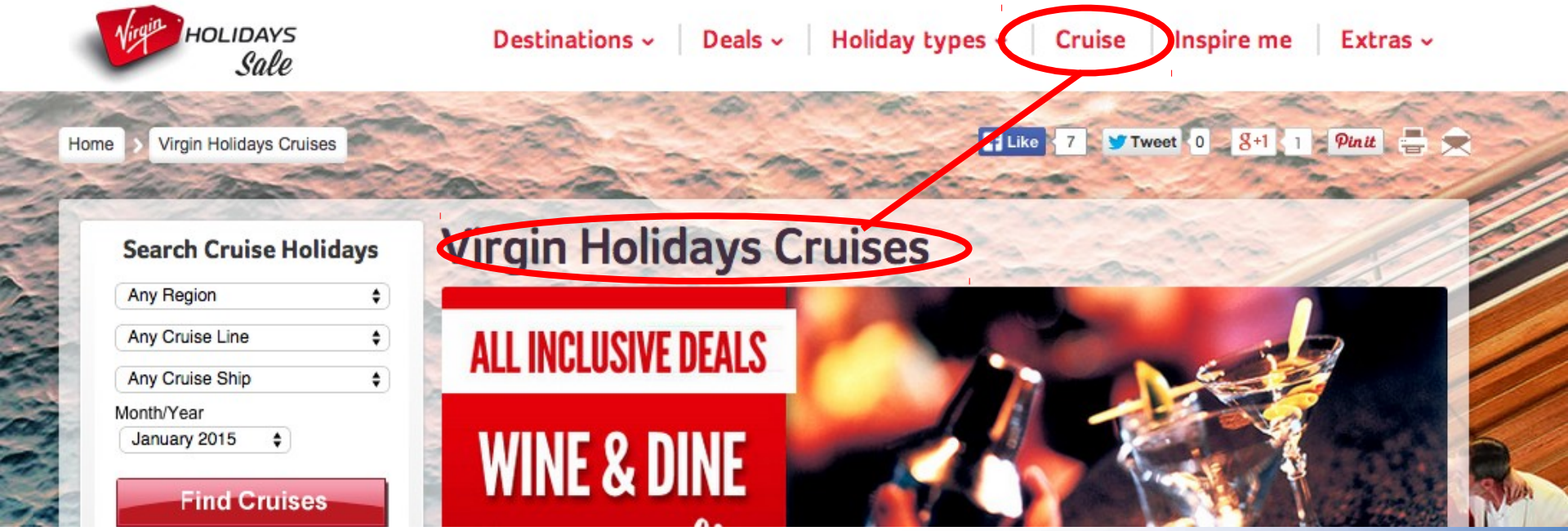
4. Sections

- Primary navigation- are the links to the main headers/sections of your Information Architecture



4. cont: make sure the names match

- There are 4 things you need to know about page names:
  - Every page needs a name
  - Name needs to be in right place
  - The name needs to be prominent
  - Name needs to match what I clicked

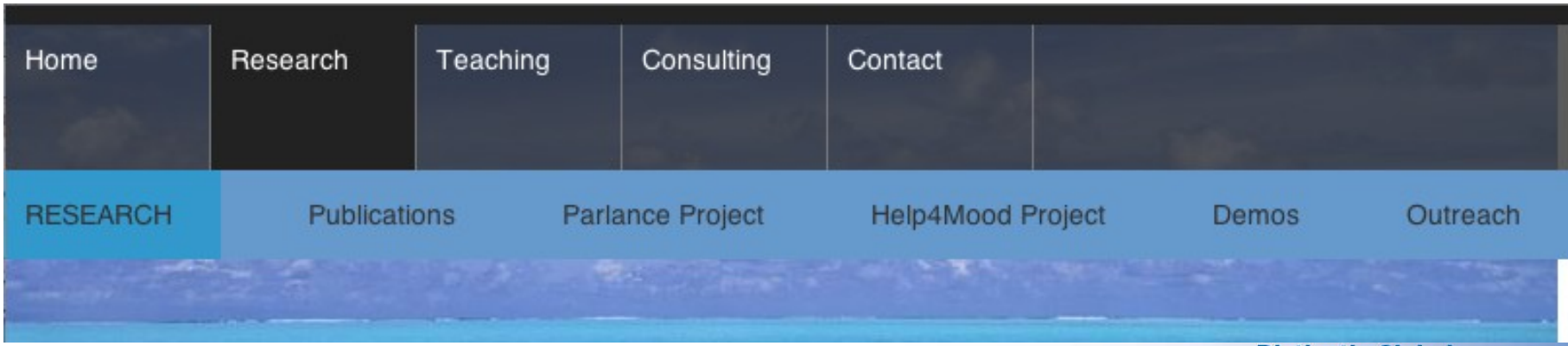


5. A way home: Breadcrumbs

- Put them at the top
- Use>between levels
- Use tiny type
- Boldface the last item.
- Don't use them instead of page name

5. Cont Tabs

- They are self-evident
- They are hard to miss
- They are slick
- They suggest a physical space



Summary: Web navigation conventions

- Navigation should include the five elements you most need to have on hand at all times;
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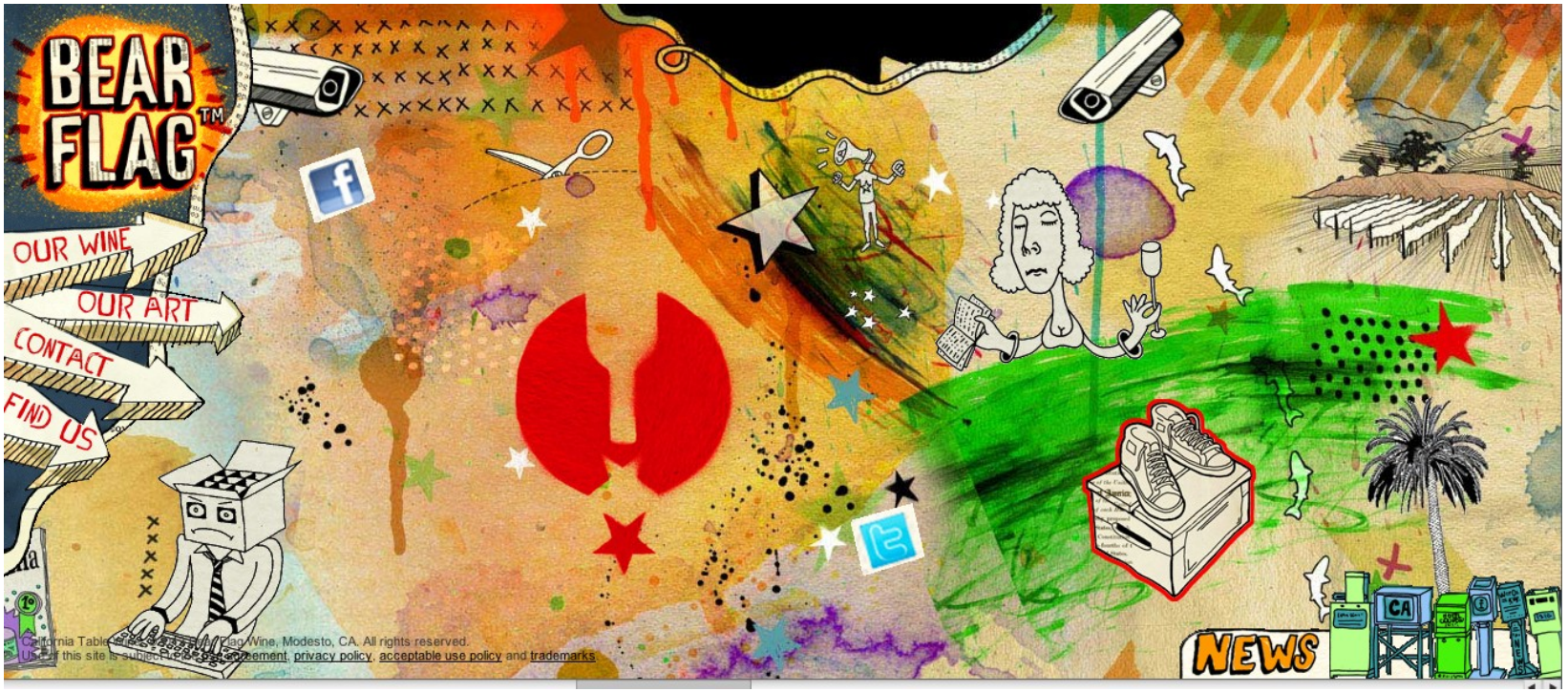
Activity: the trunk (boot) test

- What site is this? (Site ID)
- What page am I on? (Page name)
- What are the major sections of the page? (Sections)
- What are my options at this level? (Local navigation)
- Where am I in the scheme of things? ("you are here" indicators)
- How can I search?

- Let's try it for this website

Home page navigation can be unique

- Section descriptions
- Different orientation
- Everywhere else the same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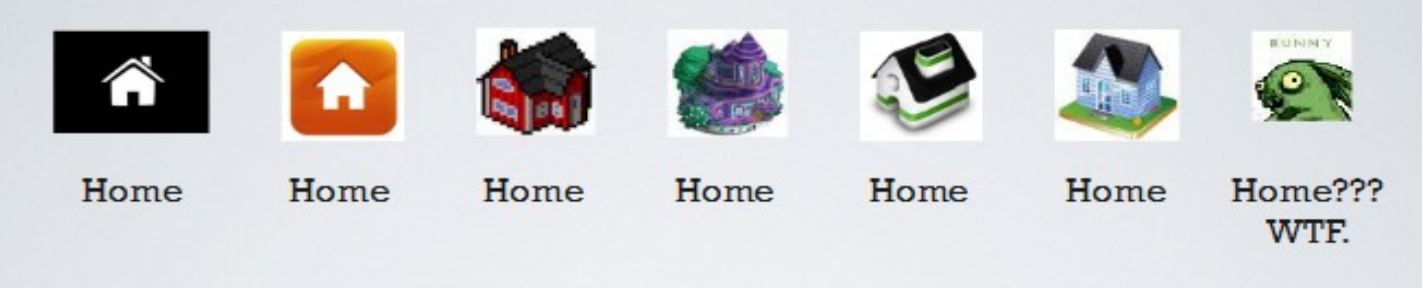
Summary: don’t make me think!

- Create a billboard
  1. Create a clear visual hierarchy
  2. Take advantages of conventions
  3. Break up pages into clearly defined areas
  4. Make it obvious what’s clickable
  5. Minimize noise
- Lots of clicks is ok as long as they are “easy” clicks
- Make navigation easy

Remember...

- Design is not decoration. It is communicating the objective in the clearest, fastest way possible.

- Use knowledge in the world and the head.



Homework

- Homework: find 3 bad websites
- Think about how user-friendly they are
- How could they be improved
- Put links to them on the vision discussion board by Sunday 8pm

Next Time

<HTML>

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