

A story of web pages & design

Raghav V. Sampangi, Ph.D.

Instructor, Faculty of Computer Science, Dalhousie University

raghav@cs.dal.ca



<http://theworldsworstwebsiteever.com/>



<http://worlds-worst-website.com/>

Assignments

- Available on Brightspace.
- Choose one of the 5 websites, and ...
 - Critique it
 - Choose 2 pages, develop wireframes for their re-design
 - Code the websites yourselves

Labs

- Reminder: Gitlab tutorial this week
- Get your CSIDs (CS Help Desk)

Exercise – from last class – include in appropriate place

Work with your neighbours – groups of 2 or 3

Brainstorm on how useful the **Gates and Fences** website seems based on the heuristic guidelines

On a first glance, how many heuristic guidelines does it seem to fail/pass?

Perform an evaluation on Gates and Fences website based on the guidelines in the handout.

Three things for today

- How do we begin a website's design & development?
- Design elements
- Content organization and design

How do we begin a website's design and development?

So, you tell me...

- Where do we start?
- Suppose you have a client who wants you to design and develop a website for them: how would you begin?
- Suppose your client wants you to “fix” their website. They *think* they know how to develop websites, and they have created one using Microsoft Frontpage or Publisher or something else (in early 2000s). They want you to help *tweak* their website.
Where would you begin?

Begin by understanding the user

“Once the product's task is known, design the interface first; then implement to the interface design..... As far as the customer is concerned, the interface is the product. ”

Jef Raskin



www.interaction-design.org

Begin by understanding the user

- As discussed in our example, understanding your target users provides:

- **Requirements of the website (or, parameters for starting a web project), which include:**

Wireframes, information architecture, usability, colour scheme,	content strategy, user habits, context, purpose,	needs, limitations, and geographic locations
--	---	--

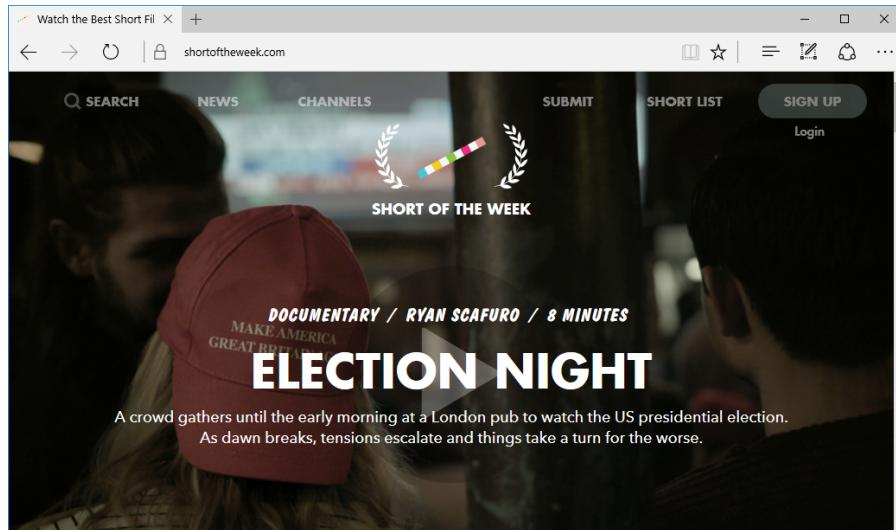
- **Design and structural conventions:**

- Header, persistent navigation, content areas, sidebars, footer navigation

Begin by understanding the user

What else does the user need?

A web application that **lacks clutter**: *a simple, usable interface, with clean layout, consistent colour scheme, and useful content (and functionality)*



shortoftheweek.com

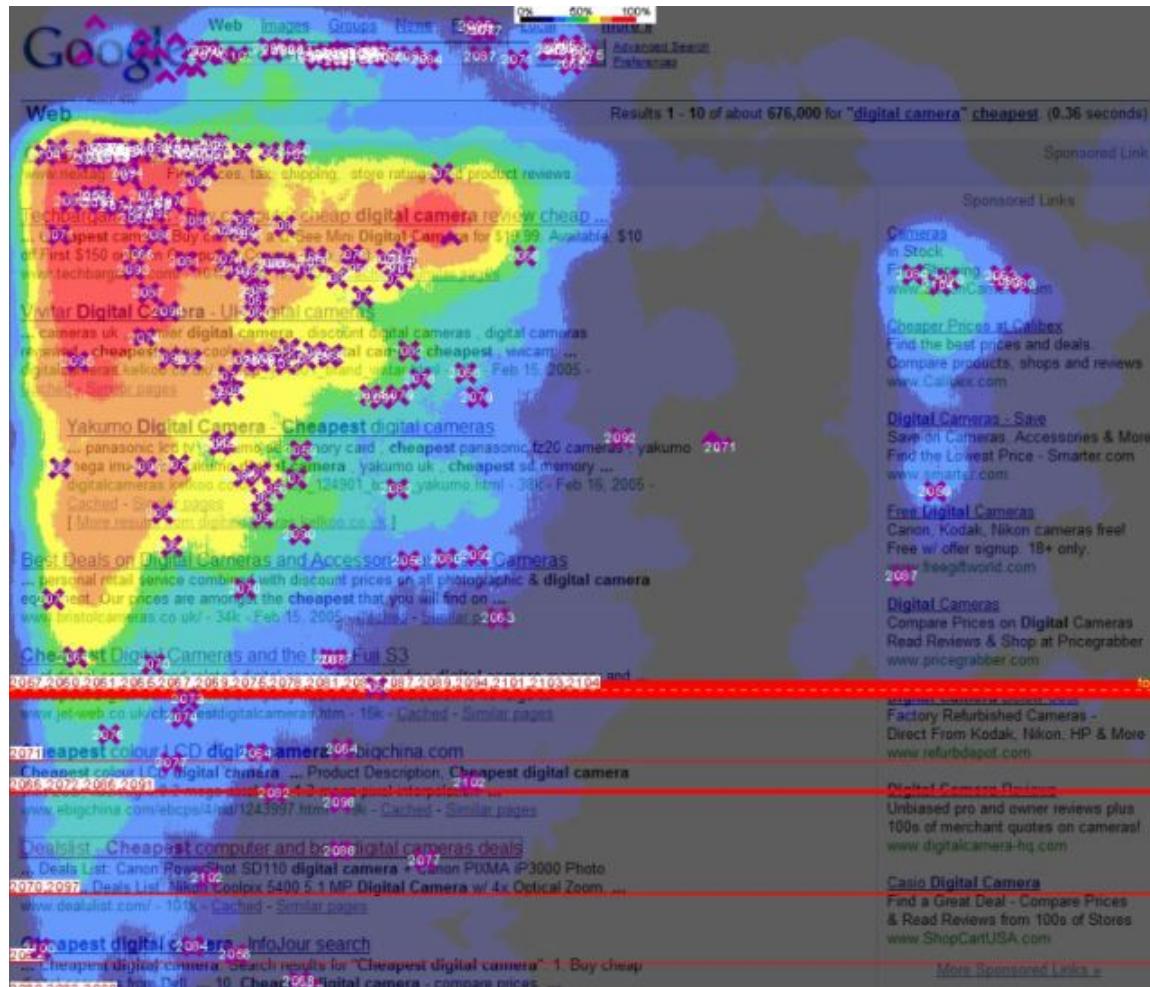
So, if we have understood our users, what next?

Next, we must strive to understand why certain types of designs (or certain placements of design elements) work...

Placement of design elements

- Why are some design decisions successful (or unsuccessful)?

(Image: Heat map showing users viewing search results – created using eye trackers)



Placement of design elements

- Consider how users view web pages...
- Depends on:
 - Device used
 - The mode in which a device is used – landscape v. portrait
 - Culture
- Examples:
 - In western cultures, content is read from left to right
 - If content is being viewed on a mobile phone, interaction tends to be top to bottom

DANS, KÖN OCH JAGPROJEKT

På jakt efter ungdomars kroppsspråk och den "symmetriska dansen", en sammansättning av olika kulturers dans har jag i mitt fältarbete under hösten rört mig på olika arenor inom skolans värld. Nordiska, afrikanska, syd- och osteuropeiska ungdomar gör sina röster hörda genom sång, musik, skrik, skratt och gestaltar känslor och uttryck med hjälp av kroppsspråk och dans.

Den individuella estetiken framträder i kläder, frisyrer och symboliska tecken som förstärker ungdomarnas "jagprojekt" där också den egen stilens i kroppsrörelserna spelar en betydande roll i identitetsprövningen. Uppehållsrummet fungerar som offentlig arena där ungdomarna spelat upp sina performanceliknande kroppssaker.

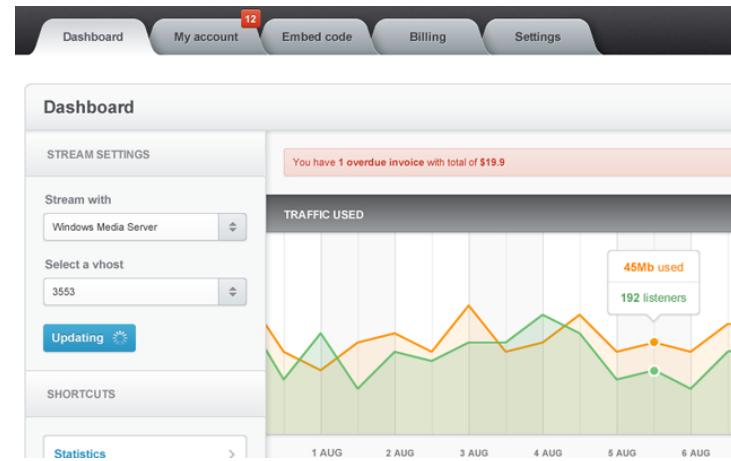
Placement of design elements

- Borrowed design conventions:
Consistency with real world items...

- Print design
 - Important content should be placed “above the fold”
 - Helps with SEO



- Real-world organization information management techniques
 - Tabbed file organization (in the real world)
v.
Tabbed navigation on the browser

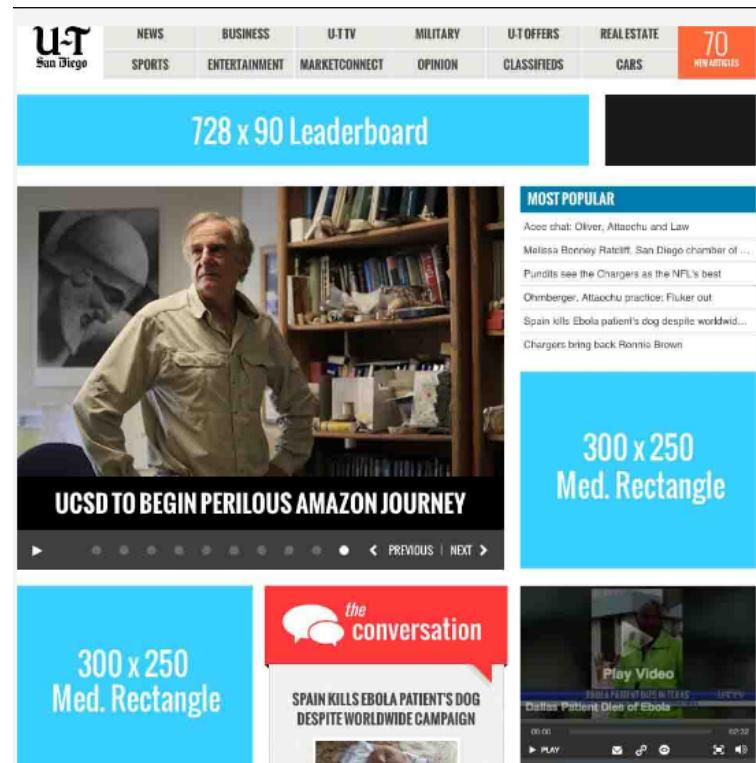


Placement of design elements

- Borrowed design conventions (cont'd)

- **Advertising standards**

- Dimensions of advertisements on websites are determined similar to real-world printed ad spaces
- E.g. banner, leaderboard, med. rectangle, etc.



Design Elements

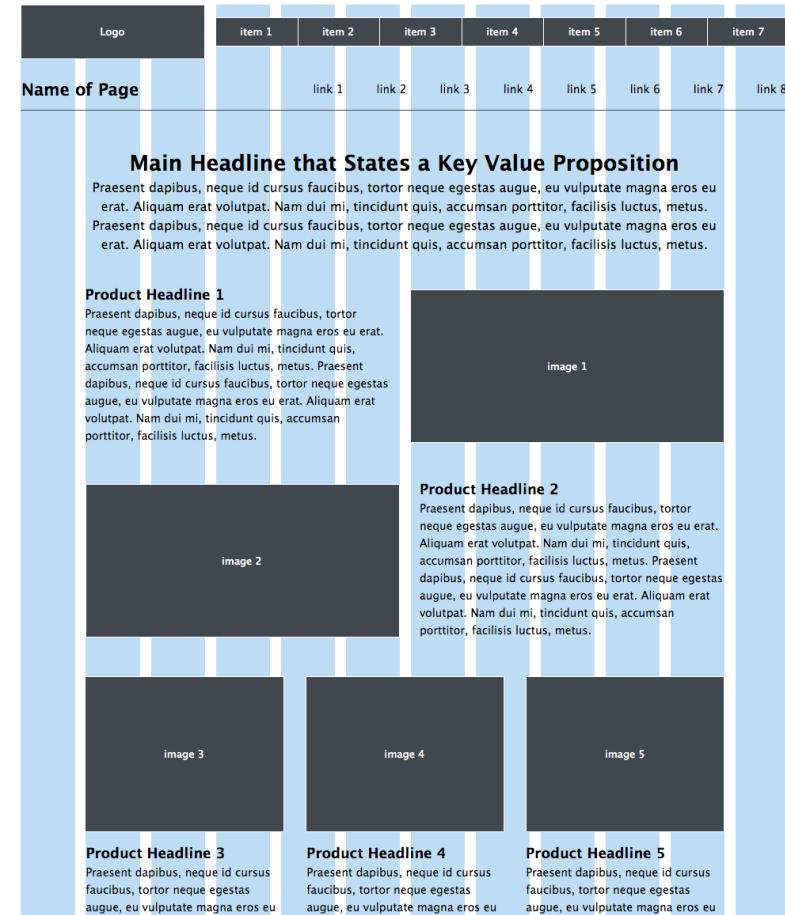
SEO: Search Engine Optimization

- Ultimately, your website needs to “look good” to the search engine
- How you design and develop your website will influence its ranking by a search engine
- Design factors that influence page-rank:
 - Text links in main navigation
 - Multiple keyword-rich text links
 - Limited use of text images
 - Proper markup (HTML tags)
 - Proper “above the fold” content
- More on SEO towards the end of the course

Structural Design Elements

Header

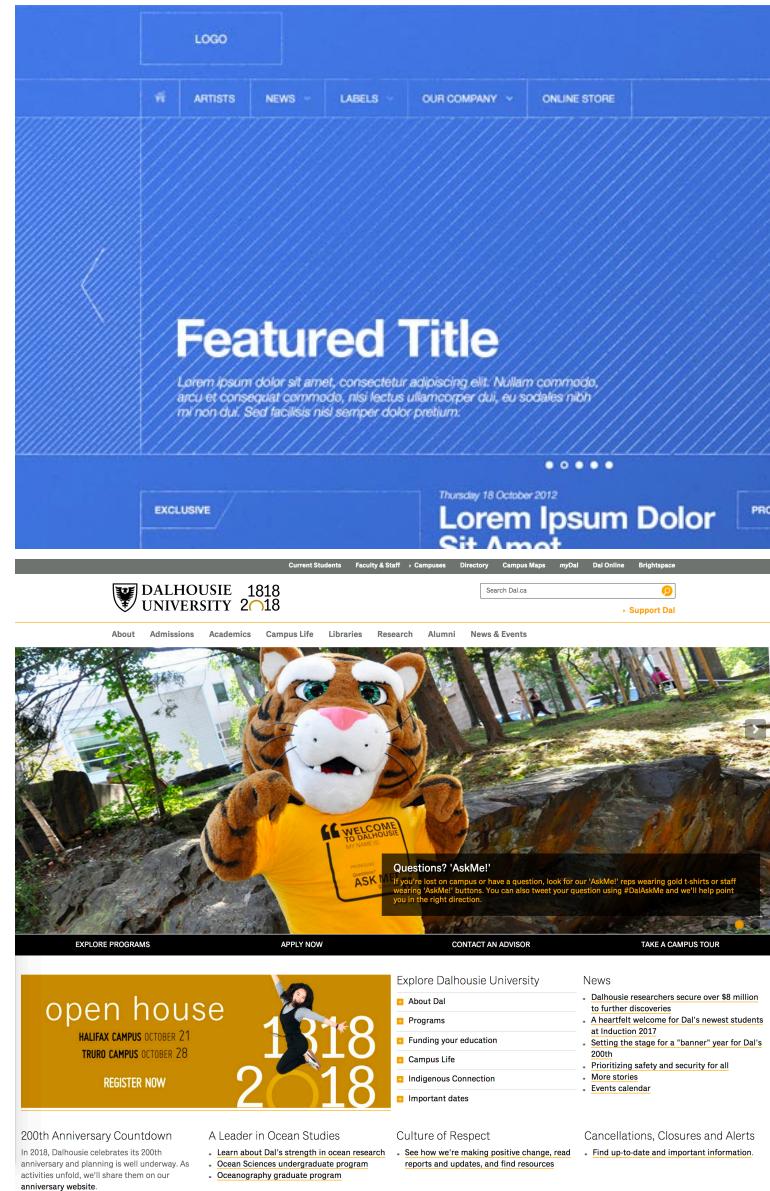
- Identifies and unifies a website (branding)
- Often presents a call to action (e.g. “Register Today”, “Sign Up”, “Buy”, etc.)
- A vital component of **SEO** due to important coding elements (e.g. HTML markup, metadata, CSS filters)
- An important component of **usability** (e.g. navigation, user admin – sign in, etc.)



Structural Design Elements

Feature Area

- Indicates information hierarchy
- Provides a focal point for the page/site
- Typically presented as a main part of home pages
- Example of visible elements used:
 - Colour schemes
 - Typography
 - Animation



Structural Design Elements

Body and Content

- Users spend most of their time here, interacting with content/features
- Clarity and legibility are critical
- Do not create large sections of (text) content – break it down into smaller sections
- Make proper use of subheadings and white space
 - Subheadings are also important for SEO
- Make it possible for users to scan content quickly

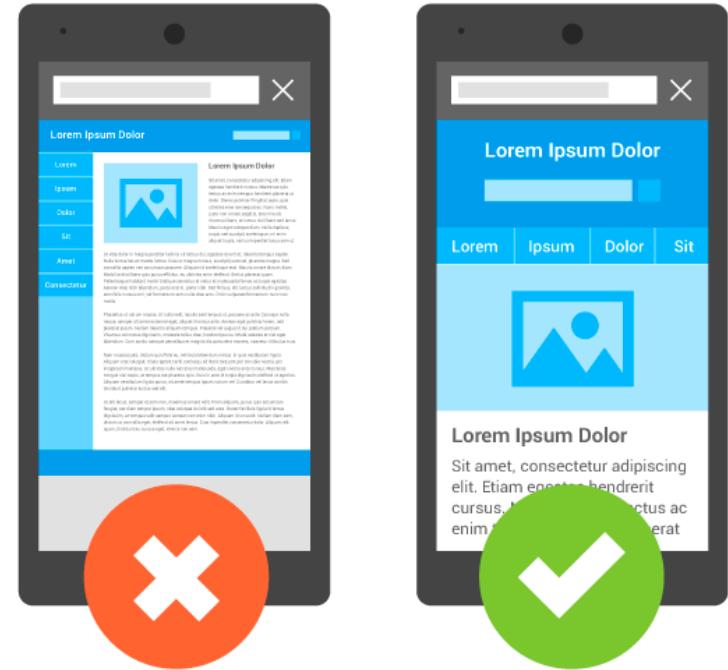


A screenshot of the Dalhousie University website's 200th Anniversary Countdown page. The page features a large yellow banner with the text "open house" and "HALIFAX CAMPUS OCTOBER 21 TRURO CAMPUS OCTOBER 28 REGISTER NOW". To the right of the banner is a graphic of a person jumping with the years "1818" and "2018". On the left, there is a section titled "200th Anniversary Countdown" with a brief description. In the center, there is a section titled "A Leader in Ocean Studies" with a list of three items. On the right, there is a sidebar titled "Explore Dalhousie University" with a list of categories like "About Dal", "Programs", and "Campus Life". Further down, there are sections for "Culture of Respect" and "News".

Structural Design Elements

Body and Content

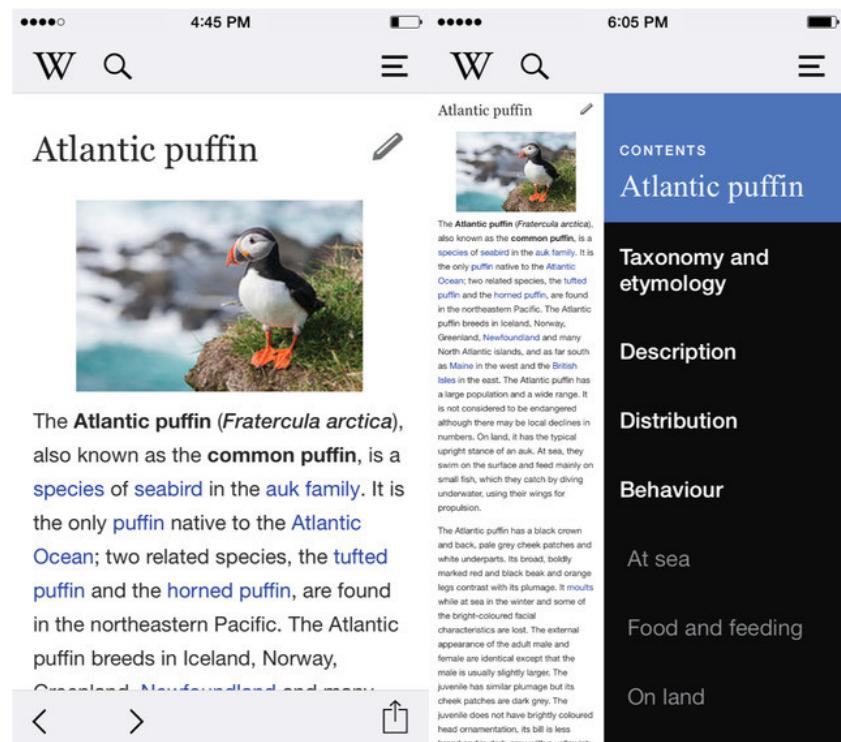
- Traditional design used:
 - Fixed width layouts with fluid heights
- Responsive design:
 - Often a “mobile-first” design
 - Careful planning required
 - Focused on usability, user satisfaction, mobility
 - Some issues that need to be addressed:
 - Eye fatigue
 - The “fat finger” problem



Structural Design Elements

Sidebar

- Holds secondary information
- Supports main content
- Directs users to related content (e.g. sub-navigation)
- Also used as advertising space



Structural Design Elements

Footer

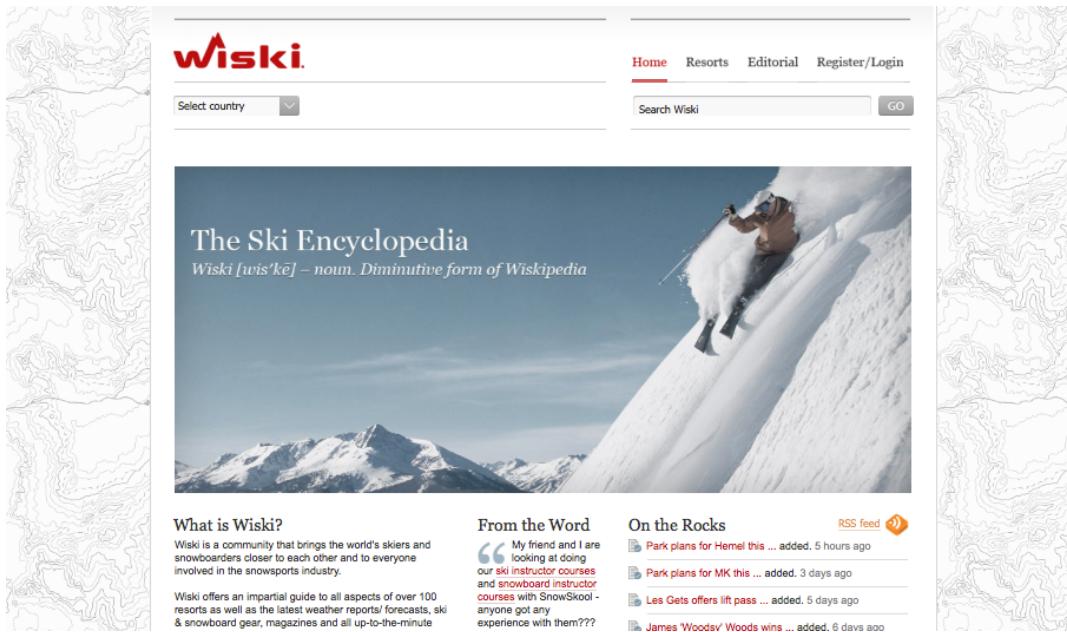
- Very important for SEO and website's usability
- Can be considered to be a mini-sitemap
- Helps search engines index the site
- Improves page rank
 - E.g. higher value on words contained within links
- Contains tracking code and JavaScript functions (*why?*)
- Used differently on smartphones

The screenshot shows the footer section of the CSS-Tricks website. At the top, there is a form for signing up for the newsletter with fields for email and a 'Subscribe' button, followed by a link to the RSS feed. Below this, there are two main columns. The left column contains a section titled 'Go explore CodePen!' with text encouraging users to create an account, a 'Go PRO on CodePen' button, and a 'Listen to ShopTalk!' section with a description of the weekly audio podcast and a 'Subscribe on iTunes' button. The right column contains a section titled 'Let's be friends!' with links to various social media platforms, and a 'Subscribe to The Lodge!' section with a description of the members-only video learning area and a 'Signup for The Lodge' button. At the bottom of the footer, there is a note about the creation and maintenance of the site, followed by a horizontal menu with links to Contact, About, Advertise, Guest Posting, License, Store, Jobs, and Subscribe. A small disclaimer at the bottom right states: "May or may not contain any actual "CSS" or "Tricks".

Structural Design Elements

Background

- Complements the content
- Can be considered to be a mini-sitemap
 - Dimension
 - Richness
 - Texture
 - E.g. wiski.com uses a topographical map to give a sense of snow



Content Organization and Design

C.R.A.P!

How C.R.A.P.y is your design?

C: Contrast

R: Repetition

A: Alignment

P: Proximity