

Digital Innovation Development for Entrepreneurs

The background features abstract, overlapping geometric shapes in various shades of purple, ranging from light lavender to dark indigo. These shapes are primarily located on the left and right sides of the frame, creating a modern, layered effect. The central area is a clean white space where the title text is positioned.

Online Design

Digital Innovation Development for
Entrepreneurs

navigation - general

Navigation design for websites

- ▶ The design of navigation mechanisms is the second main pillar of information architecture.
- ▶ There are three key features of a good navigation design for websites:
 - ▶ labelling,
 - ▶ navigation support and
 - ▶ searching mechanisms.

Navigation design for websites

Labeling –

- ▶ Labels are used for internal and external links,
- ▶ headings and sub-headings,
- ▶ titles and related areas.
- ▶ Paying attention to good, consistent, relevant labels is a critical part of information architecture.
- ▶ Information architects must develop a clear and unambiguous preferred vocabulary.

Navigation design for websites

Navigation support –

- ▶ many of the signs and labels on a website are deliberately placed in order to support navigation - global navigation and local navigation.

Navigation design for websites

Searching -

- ▶ One of the significant features of the Web as an information space is that many sites support searching.
- ▶ The first is knowing exactly what sort of documents the search engine is searching.
- ▶ The second is how to express combinations of search criteria.

How people navigate

- ▶ Omniscience:
 - ▶ Users have perfect knowledge and make no mistakes – provide short, efficient paths.
- ▶ Optimal rationality:
 - ▶ Users reason perfectly, but only know what they have seen – make sure links provide adequate cues to the content they lead to.

How people navigate

- ▶ Satisficing:
 - ▶ Users avoid remembering and planning and make decisions on what is immediately perceptible
 - ▶ organize the page to make the most important content and links available immediately.
- ▶ Mental maps:
 - ▶ Users actively use the cues available to try to infer the structure of a website
 - ▶ organize the site simply so that users can easily conceptualize it.
 - ▶ Design the navigation bar and site maps to reinforce this mental map.
- ▶ Information foraging:
 - ▶ Users try to get as much as possible at one location
 - ▶ enable spontaneous discovery by providing context, structure and related topics

How people navigate

- ▶ Rote memorization:
 - ▶ When users find a path that works, they tend to remember and repeat it
 - ▶ make sure the most obvious solution is also efficient.
 - ▶ Use distinctive landmarks and orientation cues to help people recognize where they have been before.
- ▶ Information costs:
 - ▶ Users have limited knowledge and reasoning ability
 - ▶ minimize the mental costs of sense making, decision making, remembering and planning.

Navigation

- ▶ An essential feature of the navigation features of any website is to provide a 'you are here' sign..
- ▶ A site map should be made available that can be called up when needed.
- ▶ Using breadcrumbs is a common way of showing people where they are.

Navigation

- ▶ Navigation bars – both local and global – are essential for supporting easy navigation around a site.
- ▶ Site maps and good feedback on where people are in the structure will also help.
- ▶ Another alternative is to provide a clear path through a part of the site.
- ▶ A site 'wizard' can help here that guides people and explains what each activity is for.



navigation - design

Navigation

People won't use your web site if they can't find their way around it

Navigation

- ▶ Analogy - a shopping mall
- ▶ go to the relevant shop
- ▶ look for the relevant section - signposted
- ▶ look for the signs relevant for your goal
- ▶ look for your item
- ▶ what do you do if you are in the wrong place?

Navigation

- ▶ you may just be browsing
- ▶ use the mall & store's navigation system - signage
- ▶ you may ask for help

Navigation

- ▶ Web navigation
 - ▶ trying to find something
 - ▶ information, product or service
 - ▶ ask or browse?
 - ▶ no one to ask
 - ▶ search box

Navigation

- ▶ Web navigation
 - ▶ search-dominant
 - ▶ always look for the search box as soon as they enter a site
 - ▶ link-dominant
 - ▶ will always browse first, only use the search when run out of links

Navigation

- ▶ Web browsing
 - ▶ look for the main sections
 - ▶ like the store's department signs
 - ▶ then the subsections
 - ▶ navigate to the goal
 - ▶ if you can't find it, you leave

Navigation

- ▶ Web browsing
 - ▶ similar to looking for something in real life
 - ▶ but has differences
 - ▶ no sense of scale
 - ▶ web site could be hundreds of pages
 - ▶ no sense of direction
 - ▶ no sense of location

Navigation

- ▶ Web browsing
 - ▶ when returning we need to remember the conceptual location
 - ▶ many users use bookmarks
 - ▶ the back button accounts for 30 to 40% of all web clicks
 - ▶ why the home page is so important

Navigation

- ▶ Web Navigation
 - ▶ navigation involves 2 parts:
 - ▶ getting from one place to another, and
 - ▶ figuring out where you are

Navigation

- ▶ Web Navigation
 - ▶ users of your site need to know
 - ▶ how to get from one place to another,
 - ▶ and figuring out where they are

Navigation

- ▶ Web Navigation
 - ▶ also tell use 'what is here'
 - ▶ what the site contains
 - ▶ the navigation tells us the content
 - ▶ it is a guide to what is in the site, where to go, and how to get there
 - ▶ it also gives use positive feelings about the site/company/provider

Navigation

- ▶ Web navigation conventions
 - ▶ navigation systems have conventions
 - ▶ street signs are at street corners, we look up, they are written horizontally
 - ▶ books & magazines have table of contents and page numbers

Page name

JEANS

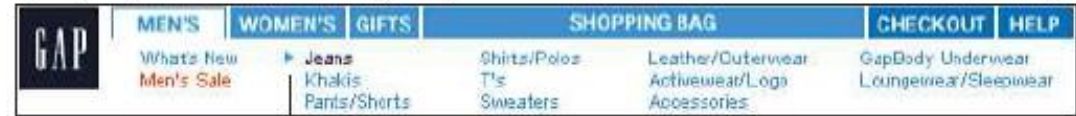
Local navigation
(Things at the current level)

- [jeans](#)
- [worker jeans](#) [twill new](#)
- [slim fit jeans](#)
- [original fit zip fly jeans](#)
- [original fit jeans](#)
- [easy fit jeans](#)
- [boot fit jeans](#)
- [dark wash boot fit jeans](#)
- [boot fit cords](#)
- [leather boot fit jeans](#)
- [loose fit jeans](#)
- [vintage cut jeans](#)
- [relaxed fit jeans](#)
- [baggy fit jeans](#)
- [wide leg jeans](#)
- [worker jeans](#)
- [carpenter jeans](#)
- [easy fit jean shorts](#)
- [carpenter jean shorts](#) [sale](#)

Site ID

Sections

Utilities



"You are here" indicator

Subsections

Small text version

sites: [[gap](#) | [gapkids](#) | [babygap](#)]
 services: [[help](#) | [store locator](#) | [site directory](#) | [company](#) | [gift services](#)]

Navigation

- ▶ Web navigation conventions
 - ▶ navigation stays in the same place
 - ▶ same style, format, consistency
 - ▶ persistent navigation has 5 elements
 1. site ID
 2. a way home
 3. a way to search
 4. sections
 5. utilities

Navigation

- ▶ Site ID
 - ▶ user knows they are still at your site
 - ▶ same as a shop's name over the entrance
 - ▶ top left
 - ▶ top right if in a country that reads from right to left
 - ▶ needs to look like a site ID

Navigation

- ▶ Sections
 - ▶ links to the main sections
 - ▶ top level of the navigation hierarchy
 - ▶ can also display secondary navigation or subsections

Navigation

- ▶ Utilities

- ▶ links to other elements not in the content hierarchy

- ▶ e.g. how to buy, help, site map, contact us, FAQs, downloads, register, order tracking, your account, about us, etc.

- ▶ top level of the navigation hierarchy

- ▶ can also display secondary navigation or subsections

Navigation

- ▶ A way to go home
 - ▶ essential
 - ▶ site ID doubles as a back to home button
 - ▶ still include a 'home' button

Navigation

- ▶ A way to search
 - ▶ unless a site is very small and very well organized, it should have a search facility
 - ▶ normally a search box
 - ▶ a box, a button, the word 'search'



A search box consisting of a white rectangular input field with a thin black border, followed by a grey rectangular button with the word "Search" written in white text.

Navigation

- ▶ A way to search
 - ▶ don't use find, quick find/search, keyword search
 - ▶ if you use search as a label you can name the button 'go'
 - ▶ you don't need instructions
 - ▶ an area that web sites could improve, despite it's importance

Navigation

- ▶ A way to search
 - ▶ don't try to give options with the search
 - ▶ confuses users
 - ▶ Amazon dropped the title/author/keyword - very successful
 - ▶ other booksellers who still use the options have confused users

For instance, when I went looking for the “Stinking badges” quote from *Treasure of the Sierra Madre* on the Internet Movie Database site, my search for “badges” using the default scope “All” found only one match—an old TV show.



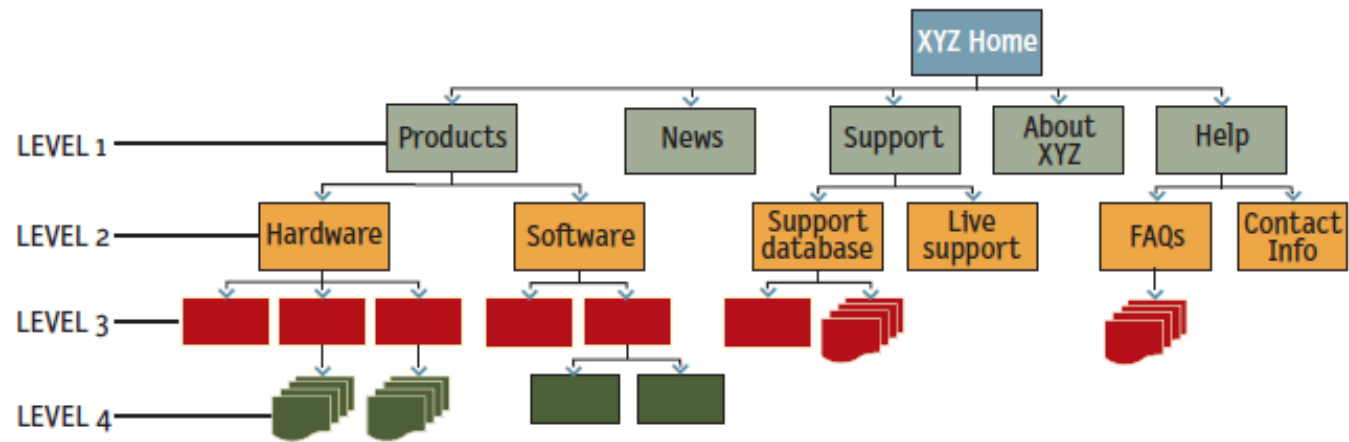
But when I changed the scope to “Quotes,” there it was.



Care to take a guess what the effect was on my confidence in IMDB.com?

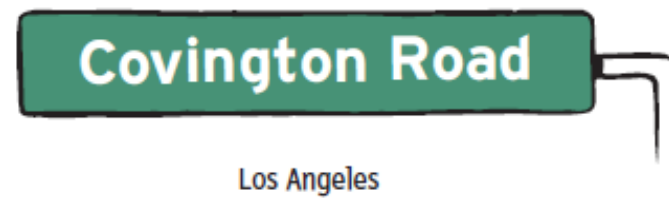
Navigation

- ▶ Lower levels
 - ▶ designers show several levels (level 3 and 4)
 - ▶ but don't take the same care in navigation



Navigation

- ▶ Names
 - ▶ whilst driving, is it better to have
 - ▶ easily to see large, well-placed street signs (e.g. LA)
 - ▶ small street signs
 - ▶ page names are the equivalent of street names



Navigation

- ▶ web navigation
 - ▶ every page needs a name
 - ▶ it needs to be in the right place
 - ▶ it needs to be prominent
- it needs to match what the user's just clicked
 - same name = same thing, different name = different thing

WHAT I CLICK...

[Lug nuts](#)

WHAT I GET...

Lug nuts

Names match. Comfort, trust, no thought required.

Nuts

Spare parts
(No mention of
Lug Nuts on
the page)

Error 404
Page not found

Names don't match. Frustration, loss of trust.



You are here



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Navigation

- ▶ You are here
 - ▶ highlight the current location in the navigation bar, list, menus
 - ▶ problems occur if the difference is too subtle
 - ▶ different / reverse text

Navigation

- ▶ Breadcrumbs
 - ▶ show you the path from the home page
 - ▶ used only in very large sites
 - ▶ now used more
 - ▶ better to use breadcrumbs, but not alone

● You are here: [Home](#) > [Hobbies](#) > [Book Collecting](#) > **Welcome**

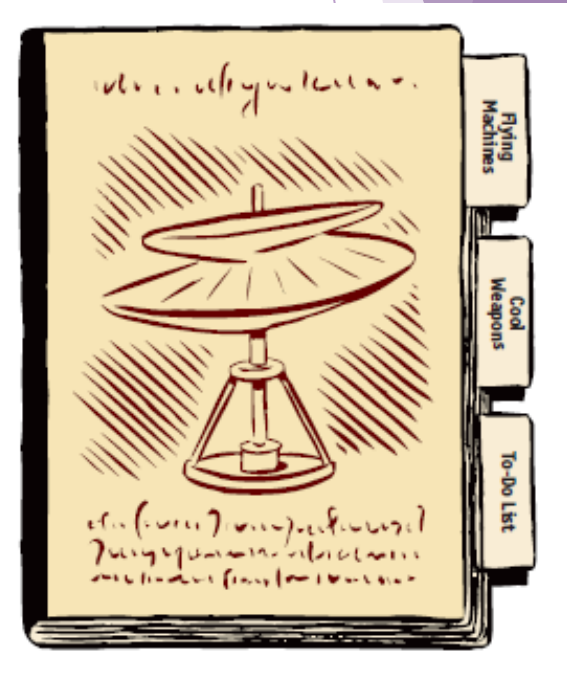
Navigation

- ▶ Breadcrumbs
 - ▶ put at the top
 - ▶ use ‘>’ as a separator between levels
 - ▶ use bold for the current page
 - ▶ don’t use them as an alternative to the page name

● You are here: [Home](#) > [Hobbies](#) > [Book Collecting](#) > **Welcome**

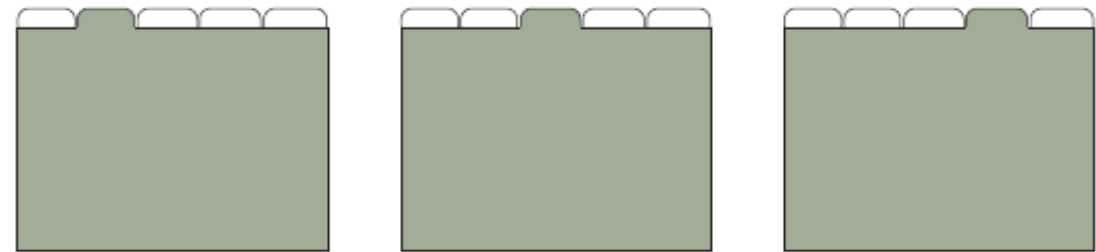
Navigation

- ▶ Tabs
 - ▶ a physical metaphor that actually works!
 - ▶ self-evident
 - ▶ hard to miss
 - ▶ they're slick

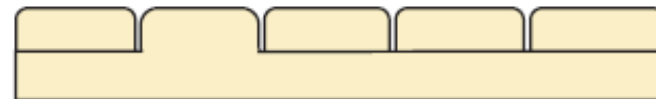


Navigation - tabs

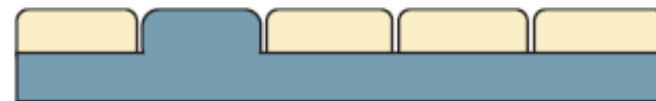
- ▶ create an illusion that the active tab moves to the front
- ▶ used well by Amazon
- ▶ use colour as an additional help
- ▶ pre-select a tab
 - ▶ helps users 'get it'



BAD: No connection, no pop.



BETTER: Connected, but no contrast.
Limited pop.



BEST: Duck! It's coming right at you.

Navigation test

- ▶ Test web sites
 - ▶ what site is this?
 - ▶ what page am I on?
 - ▶ what are the major sections of the site?
 - ▶ what are my options at this level?
 - ▶ where am I in the scheme of things?
 - ▶ how can I search?

**Annuities
Step by Step****[Annuities Home](#)****[Intro](#)**

What is an annuity?

[Step 1](#)

Fund other plans first

[Step 2](#)

Is an annuity right for you?

[Step 3](#)

Compare annuities to funds

[Step 4](#)

Before thinking about annuities, fully fund the tax-deductible and tax-deferred savings plans (other than annuities) that you're qualified to take part in. Individual- and employer-sponsored plans are great ways to squirrel away money for the post-work years. They're more effective than annuities because they usually have lower fees and most give you a bigger break on taxes. For example, both a 401(k)'s principal and earnings grow tax-deferred, whereas only an annuity's earnings do so. Also, most plans give you a wide variety of investment options.

The following chart shows contribution limits, advantages, and other comparison points for the different plans.

Retirement Plans At A Glance			
Plan	Sponsor	Annual Contribution Limit	Advantages
401(k)	Corporations with more than 25 employees	Maximum employee contribution is \$10,000	You choose how to allocate your investments

DEPARTMENTS

- [Audio/Video](#)
- [Business/Education](#)
- [Camera](#)
- [Children](#)
- [Communications](#)
- [Computers](#)
- [Electronics](#)
- [Factory Service](#)
- [Gift Shop](#)
- [Golf Shop](#)
- [Hi-Fi/Hi-Resolution](#)
- [Housewares](#)
- [Outdoors](#)
- [Sports/Recreation](#)
- [Tools](#)
- [Telephones](#)



CLICK HERE To View Our Home Appliance Selection



DVD Players
Audio/Video Main



Toshiba DVD Players



Go.Video DVD Players



JVC DVD Players



Pioneer DVD Players



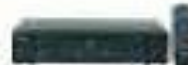
Samsung DVD Players



Sharp DVD Players



Philips DVD Players



Panasonic DVD Players



Surge Suppressors

CNET | News | Hardware | Downloads | Trends | Games | Jobs | Applications | Prices | Tech Help | Free Email

CNET Builder.com Search

Advanced - Site:

FedEx ShipAPI™ **FedEx TrackAPI™** [Click to learn more about our developer tools.](#)

[Click here!](#)

CNET Web Design: Design Critique of the Week

Looking for Web Services?

Sponsored links: [Port \(Xon Pro 6.0\) PC Database](#) | [Free email address](#)

CRITIQUE of the Week

Design Dispatch
Sign up for our free newsletter for Web designers.

Fool.com
Sometimes it pays to be foolish. This week's critique examines the success of Fool.com's innovative branding and design techniques. (11/10/99)

More Critiques From Builder.com

Adobe.com (5/30/99)	ITVS (4/14/99)
Star Witch Project (8/18/99)	The Internet Movie Database (4/7/99)
Backup.Dif (7/14/99)	Labsruska Interactives (8/23/99)

ADVERTISEMENT
[Click here](#)

Enter Keyword: Browse:



Blues

Browse Blues

- [General](#)
- [Blues Rock](#)
- [Christmas Blues](#)
- [Delta Blues](#)
- [Female Vocal Blues](#)
- [Independent](#)
- [Modern Blues](#)
- [Regional Blues](#)
- [Traditional Blues](#)

Blues Editor's Picks

- [Can't-Miss Classics](#)
- [10 Under \\$10](#)
- [Blues in a Box](#)
- [Best of the Best](#)
- [Personal Favorites](#)
- [Emerging Artists](#)
- [Blues on the Road](#)
- [Romantic Blues](#)
- [Blues for Rock Fans](#)
- [Blues for the Holidays](#)

New and Notable



[Live At 33](#)
Pinetop Perkins



[Better Sweet Blues](#)
Gaye Adegbalola



[Let The Good Times Roll](#)
Louis Jordan
B.B. King



[These Blues Are All Mine](#)
Tab Benoit

[More new releases](#)

WHAT'S WRONG WITH THIS PICTURE?

"Annuities Step by Step" looks like the page name, but it's not.

The page name is actually "Fund other plans first," but you wouldn't know it because (a) there's no page name, and (b) there's no "You are here" indicator in the list on the left.

And there's no search box or search button, which is amazing for a site as large and varied (and full of useful content) as Quicken.com.

The screenshot shows the Quicken.com website interface. At the top, there is a navigation bar with the Quicken.com logo and several menu items: Home, Investing, Mortgage, Insurance, Taxes, Banking, Retirement, Shopping, and Small Business. Below this, a secondary navigation bar lists: Retirement Home, 401(k), IRAs, Planning, Annuities, Wills & Estates, and Boards. The main content area is titled "Annuities Step by Step" and contains a list of links: Annuities Home, Intro, Step 1, Step 2, Step 3, and Step 4. The "Intro" link is selected, leading to a page with the heading "Annuities Step by Step". The page content includes a paragraph about funding tax-deferred savings plans and a table titled "Retirement Plans At A Glance".

Annuities Step by Step

Annuities Home

Intro
What is an annuity?

Step 1
Fund other plans first

Step 2
Is an annuity right for you?

Step 3
Compare annuities to funds

Step 4

Before thinking about annuities, fully fund the tax-deductible and tax-deferred savings plans (other than annuities) that you're qualified to take part in. Individual- and employer-sponsored plans are great ways to squirrel away money for the post-work years. They're more effective than annuities because they usually have lower fees and most give you a bigger break on taxes. For example, both a 401(k)'s principal and earnings grow tax-deferred, whereas only an annuity's earnings do so. Also, most plans give you a wide variety of investment options.

The following chart shows contribution limits, advantages, and other comparison points for the different plans.

Retirement Plans At A Glance			
Plan	Sponsor	Annual Contribution Limit	Advantages
401(k)	Corporations with more than 25 employees	Maximum employee contribution is \$10,000	You choose how to allocate your investments

Quicken.com Home Investing Mortgage Insurance Taxes Banking Retirement +Credit +Shopping +Small Business

Retirement Home 401(k) IRAs Planning Annuities Wills & Estates Bonds

Step 1: Fund other plans first

Before thinking about annuities, fully fund the tax-deductible and tax-deferred savings plans (other than annuities) that you're qualified to take part in. Individual- and employer-sponsored plans are great ways to squirrel away money for the post-work years. They're more effective than annuities because they usually have lower fees and most give you a bigger break on taxes. For example, both a 401(k)'s principal and earnings grow tax-deferred, whereas only an annuity's earnings do so. Also, most plans give you a wide variety of investment options.

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Retirement Plans At A Glance			
Plan	Sponsor	Annual Contribution Limit	Advantages
401(k)	Employer	Maximum employer	You choose how

Step 1 Fund other plans first

Step 2 Is an annuity right for you?

Step 3 Compare annuities to funds

Step 4

< MY VERSION

I've added...

- > A page name at the top of the content space,
- > A "You are here" indicator in the list on the left, and
- > A search link, in the Utilities list.

Current Specials Customer Service Order Tracking Site Directory View Cart/Checkout

DEPARTMENTS

- Audio/Video
- Business/Education
- Cameras
- Clothing
- Communications
- Computers
- Electronics
- Factory Special
- Gift Shop
- Golf Shop
- SEA Navigation
- Housewares
- Outdoors
- Sports/Recreation
- Toys
- Telephones

 **Global Mart**[®]
Products for all horizons

CLICK HERE To View Our Home Appliance Selection 

DVD Players
[Audio/Video Main](#)

 Toshiba DVD Players	 Go.Video DVD Players	 JVC DVD Players
 Pioneer DVD Players	 Samsung DVD Players	 Sharp DVD Players
 Philips DVD Players	 Panasonic DVD Players	 Surge Suppressors

WHAT'S WRONG WITH THIS PICTURE?

The Site ID is below the navigation, and hard to spot. It looks too much like the internal promo next to it, and because the Site ID isn't in the upper left corner, it ends up looking like an ad.

The heading DVD is positioned above the link Audio/Video Main, but it is lower in the hierarchy. And there's no search, which is baffling in a large e-commerce site full of products.



< MY VERSION

I moved the link to Audio/Video above the page name, so the visual hierarchy matches the logical hierarchy. I also made the page name a little more prominent, and moved it flush left instead of centered. (In most cases, I find left or right alignment is more effective than centering in “telegraphing” a visual hierarchy.)

For the same reason, I moved the search button next to the search box, instead of centered below it.

WHAT'S WRONG WITH THIS PICTURE?

The navigation is spread out all over the page, making it much harder to tell what's navigation and what isn't. The navigation, ads, promos, and content all run together.

There is no list of major sections. The list at the top looks like sections, but it's actually a list of other sub-sites of CNET.com. What makes it particularly confusing is that Builder.com (the site I'm in) doesn't appear in that list.

The only navigation that tells me where I am in Builder.com is the Breadcrumbs.

It's also hard to tell where the content actually starts. This is one of those pages that seems to keep starting over, forcing you to scroll down just to find out what it is.

The screenshot shows the CNET Builder.com website. At the top, there is a navigation bar with links for CNET, News, Hardware, Downloads, Journals, Games, Jobs, Auctions, Prices, Tech Help, and Free Email. Below this is a search bar and a dropdown menu for "Builder.com". A large advertisement for FedEx ShipAPI and TrackAPI is prominent. Below the ad, there is a breadcrumb trail: "CNET > Web Hosting > Design > Critique of the Week". A section for "Looking for Web Services?" includes buttons for "Find a Web Host", "Find a Web Designer", and "Find an ISP". Below this is a "Sponsored links" section with links to "Port Scan Pro 6.0", "PC Database", and "Free email address". The main content area is titled "CRITIQUE of the Week" and features a "Design Dispatch" newsletter sign-up form. To the right, there is a critique for "Fool.com" with a small thumbnail image. Below the critique, there is a section for "More Critiques From Builder.com" listing various websites and their critique dates.

CNET | News | Hardware | Downloads | Journals | Games | Jobs | Auctions | Prices | Tech Help | Free Email

CNET Builder.com Search Go! Advanced Site Builder.com

FedEx ShipAPI FedEx TrackAPI Click to learn more about our developer tools.

Click here!

CNET > Web Hosting > Design > Critique of the Week

Looking for Web Services? Find a Web Host Find a Web Designer Find an ISP

Sponsored links: Port Scan Pro 6.0 PC Database Free email address

CRITIQUE of the Week

Design Dispatch
Sign up for our free newsletter for Web designers.

ADVERTISEMENT
Click here!

Fool.com
Sometimes it pays to be foolish. This week's critique examines the success of Fool.com's innovative branding and design techniques. (1/10/99)

More Critiques From Builder.com

Adobe.com (5/30/99)	IWE (4/14/99)
Blair Witch Project (8/18/98)	The Internet Movie Database (4/7/99)
Backup.Dat (7/14/99)	Lakeside Interactive (6/29/99)



< MY VERSION

This is one of those pages where you have to have the gumption to say, "This is beyond tweaking." There are underlying dilemmas here that need to be resolved before you even think about the page layout.

All I did was tighten up the top a little and try to make the content space easier to spot by adding a background to the column on the left.

At the same time, I made sure that the page name was positioned so it was clearly connected to the content space.

amazon.com

WELCOME BOOKS MUSIC VIDEO TOYS & GAMES ELECTRONICS e-CARDS AUCTIONS SHOPPS

SEARCH MUSIC BROWSE STYLES CLASSICAL TOP SELLERS NEW & FUTURE RELEASES FREE DOWNLOADS RECOMMENDATION CENTER

Enter Keyword: Popular Music Browse: Rock

Blues

Browse Blues

- [General](#)
- [Blues Rock](#)
- [Chicago Blues](#)
- [Delta Blues](#)
- [Female Vocal Blues](#)
- [Independents](#)
- [Modern Blues](#)
- [Regional Blues](#)
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- [Blues for Rock Fans](#)
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Gaye Adegbalola

[Let The Good Times Roll... Louis Jordan](#)
B.B. King

[These Blues Are All Mine](#)
Tab Benoit

▶ [More new releases](#)

WHAT'S WRONG WITH THIS PICTURE?

Not much. Did you have trouble finding anything?

I rest my case.



< MY VERSION

There's really almost nothing to improve here.

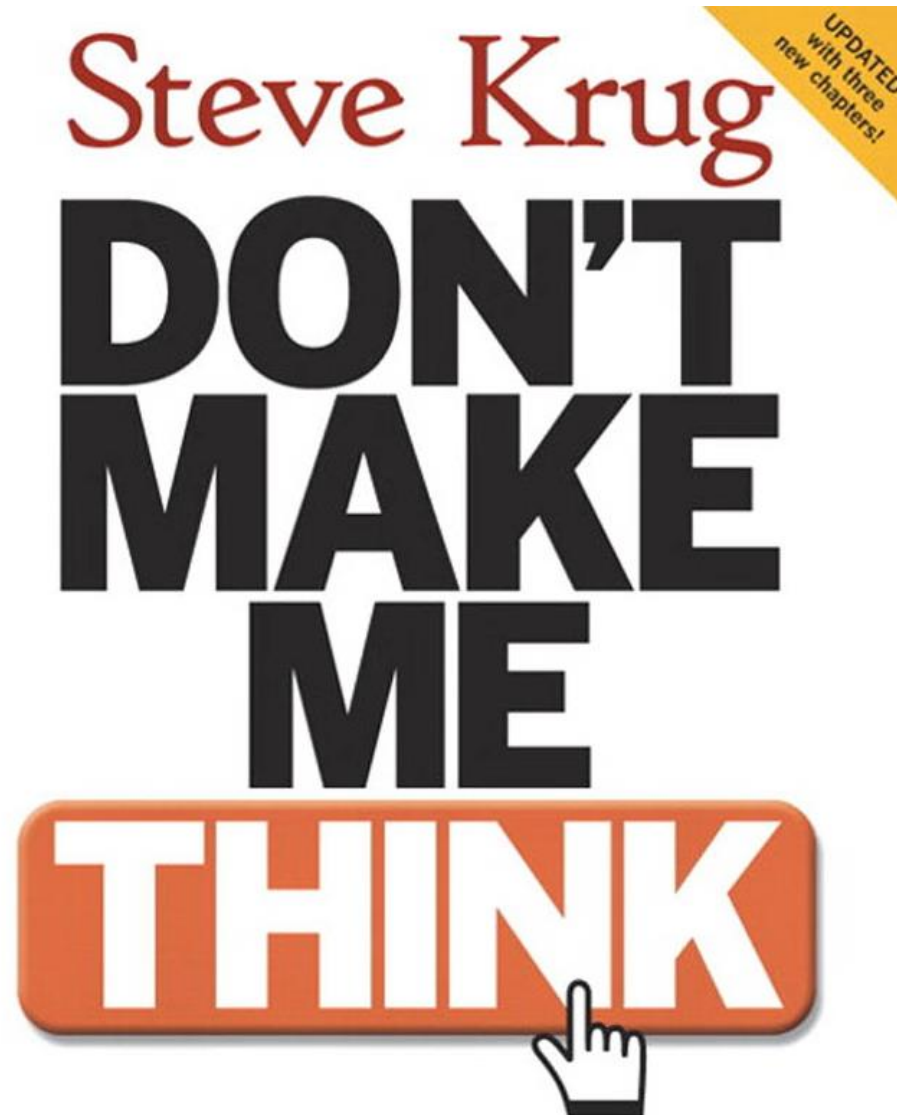
I did redo the search. (I don't know why they used "Enter Keywords" here when they use just plain "Search" almost everywhere else in the site.)

And if you're going to scope a search, it's worth adding the word "for" so it reads like a sentence: "Search ___ for ___."

I also made the page name a little more prominent to help make the division between the content and navigation spaces even clearer.

Summary

- ▶ As with the design of all interactive systems, the design of web sites understanding, envisionment, design and evaluation and a clear view of the purpose of the system.
- ▶ Web site design needs to follow sound design principles and will include the development of personas, scenarios and a clear design language.
- ▶ Information architecture is concerned with understanding the structure and organization of the content of the site
- ▶ Navigation concerns how people move around the site and how they get to know what is on the site and where it is.



A Common Sense Approach to Web Usability

SECOND EDITION

Lesson notes based on:

Krug S. (2006) *Don't make me think: A Common Sense Approach to Web Usability*, 2nd Edition, New Riders, Berkeley, California, USA

References

- ▶ Krug S. (2006) *Don't make me think: A Common Sense Approach to Web Usability*, 2nd Edition, New Riders, Berkeley, California, USA
- ▶ Benyon D. (2010) *Designing Interactive systems*, 2nd Edition, Addison Welsey, Harlow



Thank you!
any questions?