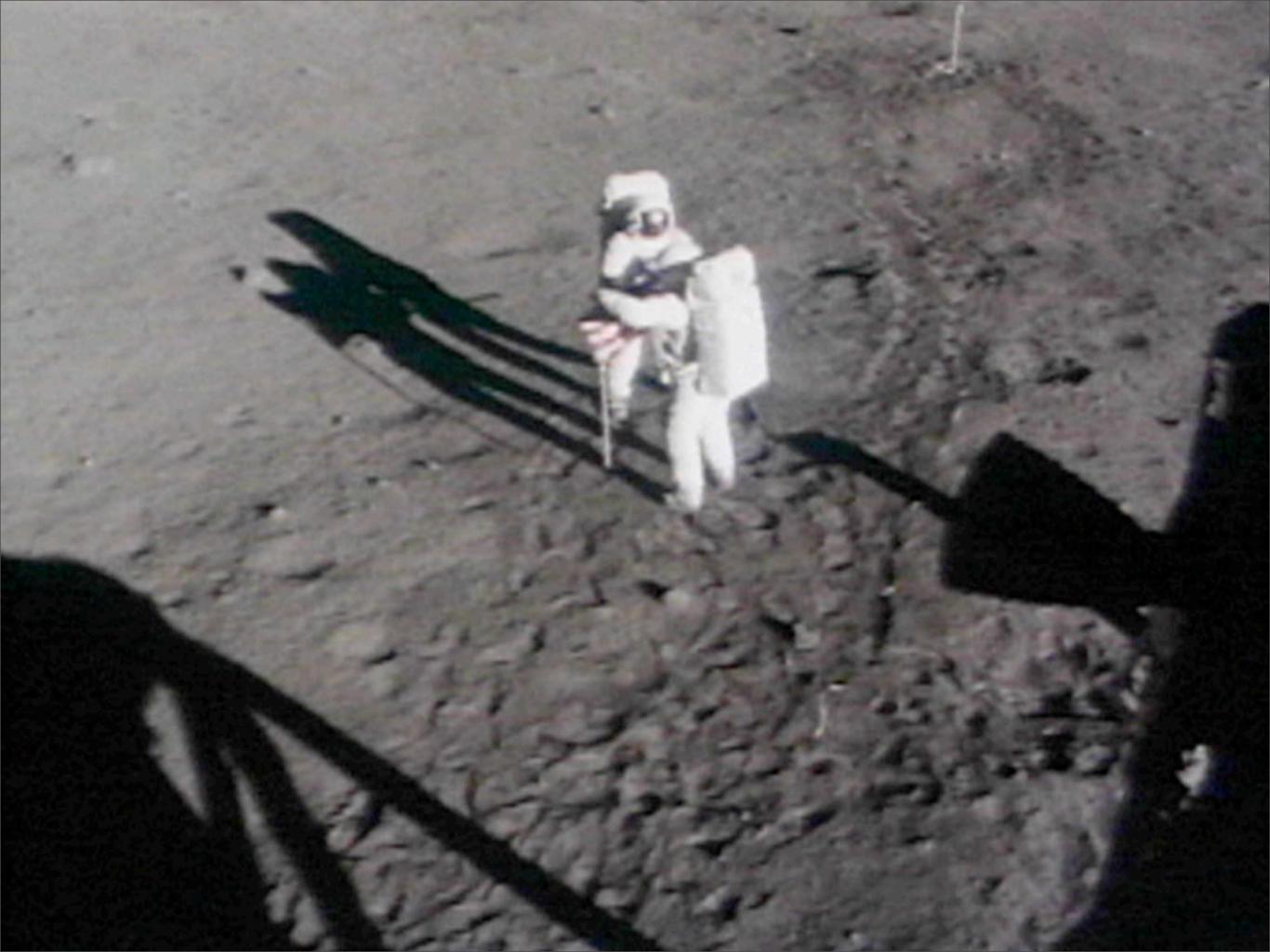
# Professional Frontend Engineering

Nate Koechley Senior Frontend Engineer Yahoo!

natek@yahoo-inc.com | developer.yahoo.com/yui nate.koechley.com/blog | "natekoechley"



- Reiterate our values.
- Advocate the discipline.
- Nurture a healthy Web.





# Beliefs & Principles

# Beliefs & Principles

Knowledge Areas & Best Practices

# Beliefs & Principles

Knowledge Areas & Best Practices

Why It All Matters

### Yahoo

[ What's New? | What's Cool? | What's Popular? | A Random Link ]

### [ Yahoo | Up | Search | Suggest | Add | Help ]

- <u>Art</u> (619) [new]
- <u>Business</u> (8546) [new]
- <u>Computers</u> (3266) [new]
- <u>Economy</u> (898) [new]
- <u>Education</u> (1839) [new]
- Entertainment (8814) [new]
- Environment and Nature (268) [new]
- <u>Events</u> (64) [new]
- Government (1226) [new]
- <u>Health</u> (548) [new]
- <u>Humanities</u> (226) [new]
- Law (221) [new]
- <u>News</u> (301) [new]
- Politics (184) [new]
- <u>Reference</u> (495) [new]
- <u>Regional Information</u> (4597) [new]
- <u>Science</u> (3289) [new]
- Social Science (115) [new]
- Society and Culture (933) [new]

There are currently 31897 entries in the Yahoo database

There are currently 31897 entries in the Yahoo database

- Society and Culture (933) [new]
- Social Science (115) [new



[ Text-Only Yahoo | New Features and Changes to Yahoo! ]

Search Options

- Aits Literature, Photography, Architecture, .....
- Business and Economy [Xtra!] Directory, Investments, Classifieds, ....
- Computers and Internet Internet, WWW, Software, Multimedia, ....
- <u>Education</u> <u>Universities, K-12, Courses, ....</u>
- Entertainment [Xtral] TV, Movies, Music, Magazines, Books, ....
- <u>Health</u> <u>Medicine</u>, Drugş, Diseases, Fitness, ....

- <u>News</u> [Xtra!] World [Xtra!], Daily, Current Events, ....
- <u>Recreation</u> Sports [Xtra!], Games, Travel, Autos, ....
- Reference Libraries, Dictionaries, Phone Numbers, .....
- <u>Regional</u> Countries, Regions, U.S. States, ....
- Science CS, Biology, Astronomy, Engineering, ....
- Social Science History, Philosophy, Linguistics, ....
- Society and Culture People, Environment, Religion, ....

Thanks to <u>Netscape Communications</u> for hardware and network resources. ... and other <u>contributors</u>

### Thenks to <u>Metscape Communications</u> for herd were and network resources ... and other <u>contributors</u>



Yellow Pages - People Search - Maps - Classifieds - News - Stock Quotes - Sports Scores

- Arts and Humanities Architecture, Photography, Literature...
- Business and Economy [Xtra!] Companies, Investing, Employment...
- Computers and Internet [Xtra!] Internet, WWW, Software, Multimedia...
- Education Universities, K-12, College Entrance...
- Entertainment [Xtra!] Cool Links, Movies, Music, Humor...
- <u>Government</u> <u>Military</u>, <u>Politics</u> [Xtral], Law, <u>Taxes</u>...
- Health [Xtra1] Medicine, Drugs, Diseases, Eitness...

- <u>News and Media [Xtra!]</u> Current Events. Magazines. TV. Newspapers...
- Recreation and Sports [Xtra!] Sports, Games, Travel, Autos, Outdoors...
- <u>Reference</u> Libraries, Dictionaries, Phone Numbers...
- <u>Regional</u> <u>Countries, Regions, U.S. States</u>...
- Science CS, Biology, Astronomy, Engineering...
- Social Science Anthropology, Sociology, Economics...
- Society and Culture People, Environment, Religion...

<u>My Yahoo!</u> - <u>Yahooligans!</u> for Kids - <u>Beatrice's Web Guide</u> - <u>Yahoo!</u> Internet Life <u>Weekly Picks</u> - <u>Today's Web Events</u> - <u>Chat</u> - <u>Weather Forecasts</u> <u>Random Yahoo!</u> Link - <u>Yahoo!</u> Shop

National Yahoos Canada - France - Germany - Japan - U.K. & Ireland Yahoo! Metros Atlanta - Austin - Boston - Chicago - Dallas / Fort Worth - Los Angeles Get Local Minneapolis / St. Paul - New York - S.F. Bay - Seattle - Washington D.C.

How to Include Your Site - Company Information - Contributors - Yahoo! to Go

How to Include Your Site - Company Information - Contributors - Yakeel to Go

Yatheel Metres Atlanta - Austra - Boston - Shouge - Dallas Fort Worth - Los Angeles Get Local Mannespols St Paul - New York - S.F. Bay - Seattle - Washington D.C.



Shepping - Auctions - Yellow Pages - People Search - Maps - Travel - Classifieds - Personals - Games - Chat - Clubs Mail - Calendar - Messenger - Companion - My Yahoo! - News - Sports - Weather - TV - Stock Quotes - more...

Yahool Shopping - Theus	ands of stores. MR	lions of products.	In the News
Departments         Still           · Appart         · Elements         · Sill           · Bath Brauty         · Eeed Drink         · Go           · Computers         · Munic         · Elements	ores ports Authority	Products Digital cameras Pokemon MP3 players D/D players	Scores killed in Nigerian nieta     Austria's Haider resigns as party leader     Eloads trap thousands in Mozambique
Arts & Humanities Literature, Photography-	News & Med Full Correspondence		Marketplace
Business & Economy Companies, Einance, Jobs-	Recreation & Sports, Travel, Ar		YLAuctions - Peanuts, Pokemon, computers     Free SSK Internet Access
Computers & Internet Internet, WWW, Seffware, Games-	Reference Libraries, Diction	aries. Quetations	- Yahoo! Bill Pay - free 3- month trial
Education College and University, K-12	Regional Countries, Region	us. US States_	Inside Yahoo! • Yahoo! OroCitira - build
Entertainment Cool Links, Movies, Humor, Music-	Science Animals, Astrono	any. Engineering-	your free home page • Play free <u>Fantasy Soccer</u> • <u>Yahoo!</u> Clubs - create your
Government Elections, Military, Law, Taxes	Social Scien Archaeology, Eco	ce menics. Languages	own <u>11 Oceetings</u> - free greeting cards
Health Medicine, Diseases, Drugs, Eitness-	Society & Cu People, Environm		mart
World Yakoots Europe : Denmark - Er Pacific Rim : <u>Asia</u> - Au Americas : <mark>Brazil - Can</mark>	stulia & NZ - Chie	na - Chinese - HK - Japa	reden - UK & Ireland n - Kerea - Singapore - Taiwar

Yahoo! Get Local LA - NYC - SF Bay - Chicago - more ...

.

Enter Zip Code

Other Autos - Careers - Digital - Entertainment - Greetings - Health - Invites - Local Events - Net Events Message Boards - Movies - Music - Real Estate - Small Business - Yl Internet Life - Yabooligans!

Yabool prefers 🕞

How to Suggest a Site - Company Info - Privacy Policy - Terms of Service - Contributors - Openings at Yahoo!

Copyright © 2000 Yahoo! Inc. All rights reserved. Copyright Policy

Copyright Felicy

Copyright © 2000 Yahoo! Inc. All rights reserved.

Here in Suggest a Site - Company Infe - Privacy Policy - Terms of Service - Contributors - Operands at Values'

shoel prefers [1]



### Search advanced search

### Yaboo! Careers - Find a Job, Post Your Resume, Research Salaries

Shop Auctions - Anton - Canadich - Shopping - Tarrel - Tellew Pga - Maga - Media - Enance Quetes - News - Sports - Weather Connect Careners - Chats - One-Chies - One-Chies - Mell - Monthers - Messenger - Meble - Personals - Pengle Enach - Photos Personal - Adde Beeck - Beefrace - Calendar - My Tabael - Penglement - Fon Games - Kels - Mexics - Manie - Radio - IV - marea-

Make a Connection	with Yahoo! Personals	in the News
The Albert of	seeking a Woman 💌	- Camp X-Eay draws more critician
fim a Man		- Ceart contricts Onagh honiber
VV Enter City, State or 2	P. 000	<ul> <li>Knart film for bankruptcy;</li> </ul>
End	Ay Match	· Thi set to enter Incom 20
- red	ny march	<ul> <li>AOUs Netscape uses Microsoft</li> </ul>
Take a Tour of Yahoo! Persona	a - where millions of singles meet!	<ul> <li>Band mapts at Types Lexis news, conference</li> </ul>
		BETT LOTATION AND A DOCT
Arts & Humanities	News & Media	Marketplace
Literature, Theriography-	Full Coverage, Newspapers, TV-	- Yahoo! Trevel - Airfare Specials
		- 5 three DVDs plus five shipping on
Business & Economy	Recreation & Sports	Sony DID Dream Systems
828. Enance. Shopping. Jobs-	Sports, Toront, Autor, Outdoors-	- New on DVD - Rack Star, Kass of
Computers & Internet	Reference	the Dragon, American Dr. 2
Internet, WWW, Software, Camer-	Libraties, Dictionaties, Osciations	<ul> <li>Liquidation - Kodak Advantix</li> <li>Zoom Camera, \$40.99 - Save 67%</li> </ul>
ARTIST PLACE PROPERTY AND ADDRESS		Broadcast Events
Education	Regional	
College and University, K-12	Countries, Regions, US States	<ul> <li>Beiney Spears - music videos, metric perview, fan station</li> </ul>
Entertainment	Science	Inside Yahoo!
Diks, Metters, Humer, Marie-		- Marries - Black Hawk Down.
TICKS SHEETS DAMAGE SAME	Animals, Actronomy, Engineering-	Snow Dogs, Lord of the Rings
Government	Social Science	- TaxCenter - forms, tips, celline
Dections, Military, Law, Taxes-	Archaeology, Economics, Languages-	filing
		- TComes - pool, literati, spades, chess, dominoes, eucher
Health	Society & Culture	- Attelegy - what's your sign?
Medicine, Diseases, Drags, Eitness-	People, Excitonment, Lekpion	- Make Values' your home page
B2mi	and by	and a second sec
20	MUHVILL	

### Local Yahoo's

Burepe : Dennark - Erance - Germany - July - Narmay - Jpain - Stenden - UK & Jedand Acta Paceffe : Asia - Azartula & SZ - China - BK - Judia - Japan - Kerna - Simpapere - Taiman American : Argentina - Bould - Canada - Chinase - Menica - Spanish U.S. Center : Atlanta - Bouton - Chicago - Dallas TW - LA - NUC - SE Bay - Wash, DC - mere...

### More Yahoo's

Outdor : Base Index - Education - Health - Catalogues - Peta - Real Estate - Tabaoliganal Determinement : Basencopes - Beadcast - Gamas - Mexico - Maxie - Badie - Takarta - TY - more Phonese : Baseling - Bill Pay - Menery Manager - Instanceste - Lanna - Taxes - France/Vision - more Power : Taxo - Canoni - Chandleda - Events - Ledging - Maya - Yalew - Papas - more News : Tay Staries - Basimess - Externationent - Laters - Takes - Taxes - Taxes Publiching : Bioliness - Externationent - Laters - Specia - Technology - Weather Publiching : Bioliness - Canoni - Canoni - Invites - Thotas - Honta - Honta Papas - Mexago Boarda Swalf Bastones : Domain Registeration - Small Big Center - Store Building - Web Harring Accuse Takeo/ vis : Pagers, PDAs, Web-mabled Phones and <u>Voice (1-800-My-Takeo</u>)

### Make Yahoo' your home page

Here to Suggest a Site - Company Infe - Copyright Policy - Terms of Service - Jobs - Advertise with Us

Copysight @ 2002 Yahoo? Inc. All sights reserved.

Copyright © 2002 Values' line. All sights reserved.

Her in Suggest a Site - Company Info - Cognight Publy - Doma of Society - July - Advantanceshild.

### Middle Values' Since Sensor yang

Antisting Souther that there into these stars that the same that a start the same interest in the same interest of the same the same interest of the same the same the same interest of the same inter





### Year = 2001

YAHOO! S) ۵. 8 0 Coatros Macazone Dauk Erra Get your own email address **Yahoo!** Personals free\_ematl@yahoo.co find the one for you you'd claim-your-name.com Search advanced search Yahoo! Careers - Find a Job. Post Your Resume, Research Salaries Shop Auctions - Anna - Causafieda - Shopping - Tarvel - Tallow Pga - Maga - Media - Enances Ouvies - Newa - Sporta - Weather Connect Causers - Chat - Chata - DesChies - Deschies - Deschies - Media - Menters - Messenger - Mebbe - Personals - Pergle Search - Photos Personal - Adde Beeck - Briefman - Calendar - My Yahard - PergDeres - Fon Games - Kels - Mexico - Music - Radio - TV - marea Make a Connection with Yahoo! Personals In the News Camp X-Ray draws more criticism Tm a Man 💌 seeking a Woman 💌 Ceart convicts Onagh bomber 00 ₩ V Enter City, State or ZIP: Knat files for baskraptcy TBI set to enter Loron 202 Find My Match AOU's Netscape uses Microsoft BeenLiments at Tyson-Levis news conference Take a Tour of Yahool Personals - where millions of singles meet! News & Media Arts & Humanities Marketplace ture, Photography-Full Coverage, Newspapers, TV-**Business & Economy** Recreation & Sports 828. Einance, Shopping, John ets, Tearrel, Autors, Outdoors Computers & Internet Reference Intemet, WWW, Software, Games Libraries, Dictiaties, Quotations Education Regional College and University, K-12 Countries, Regions, US States Inside Yahoo! Entertainment Picks Merces Hames Marie Science uls, Astronomy, Engines Government Social Science Bections, Military, Law, Taxes Archaeology, Lonnes sice. Languages chess, dominoes, ruches, Health Society & Culture

Medicine, Diseases, Drags, Ettness. People, Environment, Religion сомена

Yabor! Travel - Airfare Specials 5 free DVDs plus five shipping on Sony D1D Dream Systems New on D1D - Eack Star, Kiss of the Dragon, American Pre 2 Liquidation - Kodak Advantix Zoom Camera, \$49.99 - Save 61% Broadcast Events Britney Spears - music videos, mexic preview, fan station

Mexing - Black Hank Down, Snow Dogs, Lord of the Rings Tax Center - forms, tips, colline filing <u>11 Comes</u> - pool, literati, spades, Asteology - what's your sign?

Make Yahoo! your home page

Local Yahee's

Burepe : Denmark - France - Germany - Italy - Narway - Spain - Sweden - UK & Jerland Ania Parifie : Ania - Anatonia & NZ - China - HK - India - Japan - Korea - Singapore - Taiwan American | Argentina - Benil - Canada - Chinese - Mexico - Spanish U.S. Celler : Adapta - Benton - Chicago - Dallas TW - LA - NEC - SF Bay - Wash, DC - mere...

### Mare Value's

Guider ( Burg Index - Education - Health - Outdoors - Pets - Real Estate - Yabooligans) Entertaisment : Hereacopes - Broadcast - Games - Mexico - Music - Radio - Tickets - TV - more Fourier | Barking - Bill Pay - Money Manager - Insurance - Leans - Tates - Finance/lision - more Local : Autor - Carson - Classifieds - Events - Lodging - Maps - Yellow Paper - more News : Top Stories - Business - Extertainment - Lattery - Sports - Technology - Weather Publiching : Intefrate - Clubs - Esperts - Invites - Photos - Hone Papes - Message Bourds Swall Buckwar: Domain Registration - Small Ric Conter - Stare Building - With Heating Access Fabreet via: Pagers, PDAs, With-mabled Phones and Voice (1-800 My/Tahoo)

### Make Yahoof your home page

How to Suggest a Site - Company Infe - Copyright Policy - Terms of Service - Jobs - Adventise with Us

Copyright @ 2012 Yahoo! Inc. All rights reserved. Privacy Policy

PERSONAL PROPERTY. coblette a test passe, not vy offer second

### Age = 7 years

Shop Auctions - Antes - Classifieds - Sho Connert Careers - Chat - Chds - DesCriter	Inversional (@ yahoo.com Search adv rs - Find a Job. Post Your Resume, R pring Tantel Tales.Page Mells pring Tantel Tales.Page Mells of Dentings Mell Mells Messionage ar My Yahoz - PagDant Two Gauss - K	esearch Salaries Einance Quotes - News - Sports - Weather Metale - Personals - People Search - Parties
Make a Connection	with Yahool Personals	In the News
Ten a Man av	seeking a Woman M	· Camp X-Ray draws more oriticism
a - 64	Di	- Creat consists Omagh bomber
V VO Enter City, State or 2		Kmart files for bankraptcy     TBI set to enter Innon HQ
Find	My Match	<ul> <li>AOU's Netscape sizes Microsoft</li> </ul>
Take a Tour of Yahool Persona	g - where millions of singles meet!	- Beaul mapts at Tyson-Lexis
		news conference
Arts & Humanities	News & Media	Marketplace
Literature, Photography	Full Coverage, Newspapers, TV-	
		Yahoo! Travel - <u>Airfart Specials</u> 5 free DVDs plus free shipping on
Business & Economy	Recreation & Sports	Yahoo! Torvel - Aidler Specials     Stee DVDs plus fire shipping on Seny DVD Draw Systems
Business & Economy 828. Energy, Stepping, Sets-		Yahoo! Travel - Aidler: Specials     Sites DVDs plan five shipping on     Serg.DVD.Deam.Systems     New on DVD - Reck.Star. Kins. of
Business & Economy 828 Energy http:// Computers & Internet	Recreation & Sports Sports Touril Autor, Outleas- Reference	Yuhoo! Torvel - Airfact Specials     S free DVDs plus free shipping on     Sony DVD - Real Systems     Nore on DVD - Real Star, Kons of     the Dragon, American Pre 2     Lippidmon, K-Ank Advants
Business & Economy 828. Energy, Stepping, Sets-	Recreation & Sports Sports, Transi, Autor, Outdoors-	Yuhool Tervel - Airfan Ipenials S free DVDs plan free shipping on Song DVD Iphan Systems New on DVD - Rack State, Kans of the Deapen, American Fie 2 Liquidation - Kodek Advants Zoom Canten, 548:59 - Save 61%
Business & Economy 828 Energy http:// Computers & Internet	Recreation & Sports Sports Touril Autor, Outleas- Reference	Yuheel Terrel - Alefan Specials S free DVDu plus free shipping on Sony DVDu plus free shipping on Sony on DVD- Red Stress the Despon Annue on Annuar Pre 2 Lippidation - Koduk Advantu Zoom Camera, 548.59 - Erre STV Broadcast Events
Business & Economy 828. Enance. Shepping. Jobs- Computers & Internet Internet. WWW, Software, Const-	Recreation & Sports Sports, Starvel, Autors, Condeens	Yuhool Tervel - Airfan Ipenials S free DVDs plan free shipping on Song DVD Iphan Systems New on DVD - Rack State, Kans of the Deapen, American Fie 2 Liquidation - Kodek Advants Zoom Canten, 548:59 - Save 61%
Business & Economy 828. Enance. Shepping. Jobs Computers & Internet Internet. WWW, Software, Cames Education College and University, 5-12	Recreation & Sports Sports, Starvel, Autors, Condenss- Reference Libraries, Dictionation, Occutions- Regional Countries, Regions, US States-	Yuhoo! Torvel - Airfler: Specials S free DVDs plus fires shipping on Song-DVD Planas Systems New on DVD - Eack Star. Koss. of the Dwapen, American Pre 2 Liquidations - Kodak Advants Zoem Camera, 540-59 - Save 57% Broadcast Events Sethery Spears - maar videos.
Business & Economy 828. Enance. Shepping. Inte- Computers & Internet Internet. WWW, Softman. Commu- Education	Recreation & Sports Sports Trans Autos Outdoon- Reference Libraries Dictionation Outdoon- Regional	Yuhool Terrel - Alefter Specials     S fire DVDs plus fire shipping on     Serve of DVD - Red Stress Systems     New on DVD - Red Stress Kins of     the Deaper, American Pre.2     Liquidation - Kodak Advants,     Zeore Cares, 543-59 - Serve STV     Broadcast Events     Instacy, Spears - mass, videos,     matrix plants     Instacy Broadcast Events     Instacy - Stress
Business & Economy B28. Emails. Shepping. Jobs Computers & Internet Internet, WW, Software, Cames Education College and University, K-12 Entertainment Data, Marsies, Hames, Masie	Recreation & Sports Sports, Travel Autors, Outdeers, Reference Libraries, Dictionation, Outstations Regional Countries, Explore, US States Science Animals, Automoury, Engineering	Yubool Torvel - Airfan Iperials     Stree DVDs plus fires shipping on     Song DVD - flack fires shipping on     Song DVD - flack files, Kons of     the Drapin, American Pie 2     Lippidings - Kodek Avbants     Zoom Camera, 548-59 - Save 67%     Broadcast Events     India graving, fan statum     Inside Yahool     Marins - Black Bank Dores,     Snew Dog, Lond of Marins
Business & Economy Bill Ensein, Shepping, John- Computers & Internet Internet WWW, Software, Commu- Education College and University, K-12- Entertainment John, Mexico, Hames, Massin- Government	Recreation & Sports Sports, Transf, Autors, Catalons, Reference Libraries, Dictionaties, Outstations, Regional Countries, Explore, U.S. States, Science Animals, Automatry, Engineering, Social Science	Yuhool Torvel - Airfler: Iperials     S free DVDs plus fires shipping on     Sony, DVD Ensan, Dyntoms     Nore on DVD - Rack Star, Koss of     the Dargon, American Pre 2     Lippidings, Koski Advants,     Zeem Camers, 340.99 - Save 67%     Broadcast Events     Inside Yahool     Inside Yahool     Moreins - Black Hank Dreves,     Snew Poge, Lond of the Range     Tim Credit - forms, type, celline     fling     Tim Credit - forms, type, celline     fling
Business & Economy B28. Emails. Shepping. Jobs Computers & Internet Internet, WW, Software, Cames Education College and University, K-12 Entertainment Data, Marsies, Hames, Masie	Recreation & Sports Sports, Travel Autors, Outdeers, Reference Libraries, Dictionation, Outstations Regional Countries, Explore, US States Science Animals, Automoury, Engineering	Yuhool Terrel - Aufler Iperials     Steve DVDv plus fire shipping on     Sony DVD- plus fire shipping on     Sony DVD - Rack Music     New on DVD - Rack Music     Zoom Camera, 548:59 - Save 63%     Broadcast Events     Broadcast Events     Inside Yahoot     Mexics - Back Hark Down,     Sony Dogs, Lord of the Raigs     Tax Camit - forms, tys, collar     fing     1)(Same - pool, literati, upades,
Business & Economy Bill: Ensuin: Shepping, John- Computers & Internet Internet WWW, Software, Games- Education College and University, K-12- Entertainment Parks, Mexico, Hames, Massin- Government Bioclean, Millary, Lee, Tono- Health	Recreation & Sports Sports, Tarrel Autors, Catheers Reference Libraries, Dictionative, Outstations Regional Countries, Regions, U.S. States Science Animals, Automatery, Engineering Social Science Archaeology, Toonemics, Languages Society & Culture	Yuhool Terrel - Alefan Specials     Sine DVDu plus fire shipping on     Sony DVD Plus fire shipping on     Sony DVD - Rack State     The on DVD - Rack State     The Drapon - American Pre 2     Liquidation - Kodak Advantiz     Zoom Cansen, 548-30 - Error 61%     Broadcast Events     Broadcast Events     Inside Yahool     Marries - Black Hank Down,     Soney Dogs, Lood of the Blags     Tat Cantar - Form, typ, collar     Bing     Yu Comma - Pool, Break, spades,     chest, downoost, sucher.
Business & Economy Bill: Ensain: Shepping, John- Computers & Internet Internet WWW, Software, Games- Education College and Detromaty, K-12- Entertainment Boks, Merses, Hames, Massie- Government Bestions, Military, Lee, Tana- Health Medicine, Dessaes, Drugs, Ethersa-	Recreation & Sports Sports, Tarrel Autors, Catheers Reference Libraries, Dictionative, Outstations Regional Countries, Regions, U.S. States Science Animals, Automatery, Engineering Social Science Archaeology, Toonemics, Languages Society & Culture	Yuhool Terrel - Aufler Iperials     Steve DVDv plus fire shipping on     Sony DVD- plus fire shipping on     Sony DVD - Rack Music     New on DVD - Rack Music     Zoom Camera, 548:59 - Save 63%     Broadcast Events     Broadcast Events     Inside Yahoot     Mexics - Back Hark Down,     Sony Dogs, Lord of the Raigs     Tax Camit - forms, tys, collar     fing     1)(Same - pool, literati, upades,

Local Yabee's

Leven Faberer Rowspor : Denmark - Erance - Germany - Judy - Nermany - Jpain - Erenden - UK & Jerland Asia Paraple : Asia - Asartsika & NZ - China - HX - India - Japan - Korna - Singapore - Tairsan Awaritest : Argentine - Board - Canada - Chinese - Menico - Spanish U.S. Crise : Arlanta - Boardo - Chicago - Dalan TW - LA - NTC - ST Jay - Wash, DC - merea.

### More Yahoo's

Orieldo Thurz Indez - Education - Health - Contocers - Pets - Enal Estate - Yaberliganal Deterintower: Barracoper - Brandcart - Games - Marsie - Manie - Eader - Dickets - Til - more Prosewer: Barling - Bit Pay - Money Manaper - Incomer - Lanna - Tanza - Emanchine - more Devel - Autos - Garcens - Chandidat - Krents - Leding - Maps - Yellow Pages - more News : Tap Statist - Basimes - Extentionement - Lattery - Spents - Extincting - Wasther Publiching : Bits - Basimes - Extent - Leding - Maps - Message Board -Publiching : Bits - Basimes - Extent - Leding - Maps - Message Board Swall Publiching : Basimes - Registration - Small Bit Creater - Stress Fluiding - Westher Access Facher/vio : Pagers, FDAs, With-enabled Phones and Value (1-500-My/Tabara)

### Make Yahoo' your home page

How to Suggest a Site - Company Infe - Copyright Policy - Tema of Service - John - Advertise with Us

Copyright © 2012 Yahoo! Inc. All rights reserved. <u>Privacy Policy</u>

Copyright & 2022 Yaloov Inc. All sights reserved. Paperscy. Publicy

How to Suggest a Set - Company Selfs - Copyright Publicy - Lense of Section - Selfs - Advantate with Us

### Make Taken' Sweet Source State

Construction of the second sec

### Employees = 3000

Contra Manana Contra Get your com email address you@claim-your-aane com	Free email@yahoo.com	and the one for you
	Search M	mced search
Yahoo! Caree	rs - Find a Job, Post Your Resume, R	esearch Salaries
Shop Auctions - Antes - Chaudinds - Bo Connect Carriers - Chal - Chiles - DesCrites Personal Addr.Book - Briefrane - Calend	pping (Introl (InformEga (Maga Modia) - Ornetings (Mail) (Members) (Messenger) at (My Yahari) (PsyDirect Fun Games (K	Enance Quotes News Sports Weather Metale Personals People Search Phot ids - Mexics - Music - Radio - TV - more.
Make a Connection	with Yahoo! Personals	In the News
	seeking a Woman 💌	Comp X-Ray draws more criticism     Court convicts Onauth bomber
VV Enter City, State or 2		Kmart films for bankruptcy     TBI set to enter Leave HQ
Find1	My Match	<ul> <li>AOU's Netscape mes Microsoft</li> </ul>
Take a Tour of Yahoo! Persona	ts - where millions of singles meet!	- Beaul mapts at Typen-Levis
		mena conference
Arts & Humanities	News & Media	
		Marketplace
Literature, Photography	Full Coverage, Newspapers, TV	Yahoo! Travel - <u>Aiefare Specials</u>
Literature: Thetegraphy- Business & Economy 828, Ference: Shopping, Arts-		
Business & Economy	Pull Concept, Newspapers, TV Recreation & Sports	Yahoo! Trevel - Aidan: Ipecials     Sitee DVDs plus five shipping on     Sony DVD plusan Systems
Business & Economy 828. Enance Shepping, Mes- Computers & Internet Internet, WWW, Software, Canes-	Eul Coronage, Neuropapers, IV Recreation & Sports Sports, Energi Autors, Outdoors Reference Libraries, Dictionation, Oustations	<ul> <li>Yuboo! Trevel - Airfare Specials</li> <li>5 free DVDs plan five shipping on Sony (DVD-Dram Systems)</li> <li>New on DVD - Encl. Star. Kins. of the Drapos. Assessment Field</li> <li>Liggedrice - Koddie Advantis</li> </ul>
Business & Economy 828 Enset Shepping Sets- Computers & Internet	Pull Coromage, Neuropapers, TV Recreation & Sports Sports, Transi, Autor, Outdoors Reference	Yuhoo! Trevel - <u>Aiefart Specials</u> S free DVDs plan five shipping on Song DVD (Intern Systems New on DVD - <u>Eack States of</u> the Dragon, <u>American Dre 2</u> Lippidshool - Kodek Advants Zoom Camera, 148:99 - Save 81% Broadcast Events Biology, Spears - maxie, videos, matoric generates, Datation
Business & Economy B28, Emmes, Shepping, Mis- Computers & Internet Internet, WWW, Software, Dames- Education College and University, X-12- Entertainment	End Coromage, Newspapers, TV Recreation & Sports Sports, Trend, Autor, Outdeers Reference Litrates, Dictionation, Outdeers Regional Countries, Explore, US, Instea Science	Yuhool Torvel - <u>Aicfart Specials</u> S free DVDs plan free shipping on Song DVD Jhanan Systems Nore on DVD - <i>Rack Spectra</i> fin Daugen, American Dr. 2 Ligatistico, Kodak Advanta Zoon Camera, 349.99 - Barre 61% Broadcast Events Broadcast Events Intition Markation Inside Yahoo!
Business & Economy 828. Enance. Shepping. Sets- Computers & Internet Internet WWW, Software, Canes- Education College and University, X-12-	Eul Coronage, Neuropapers, TV Recreation & Sports Sports, Taxori Antes, Outdoors Reference Libraries, Dictionation, Outdations Regional Countries, Explore, US States	Yuhool Trevel - <u>Airfart Specials</u> S free DVDs plan flee shipping on Song DVD Intent Systems New on DVD - <u>Rick State</u> , <u>State</u> , <u>of</u> the Daugon, <u>American Iye</u> 2 Lippidingon - Kodik Advanta Zoom Camera, 148 99 - Save 81% Broadcast Events Britory, Spears - maxie, videos, matrice preview, <u>Ens</u> , <u>Intens</u> Inside Yahool Marins - <u>Illack Harek Down</u> , Snew Doyn, Lord of the Rags
Business & Economy B28, Ensers, Shepping, Nets- Computers & Internet Interest WWW, Software, Danes- Education College and University, K-12- Entertainment Poles, Merles, Hamer, Masie- Government	End Coromage, Newspapers, TV Recreation & Sports Sports, Trend, Autor, Outdeers Reference Litrates, Dictionation, Outdeers Regional Countries, Explore, US Inters Science Animals, Activitient, Explorenting Social Science	Yuhorel Torvel - <u>Airfart Specials</u> Sface DVDs plan five shipping on Sony DVD plan five shipping on Sony DVD - Reck Sone fitte Dagen, <u>American Dr. 2</u> Ligatotion - Koddi Advanta <u>Zoom Camera</u> , 549-59 - <u>Bave 61%</u> <u>Broadcast Events</u> <u>Broadcast Events</u> <u>Institutes</u> <u>Institutes</u> <u>Institutes</u> <u>Institutes</u> <u>Institutes</u> <u>Institutes</u> <u>Institutes</u> <u>Institutes</u> <u>Statutes</u> , <u>Institutes</u> <u>Institutes</u> , <u>Institutes</u> <u>Institutes</u> , <u>Institutes</u> <u>Institutes</u> , <u>Institutes</u> <u>Institutes</u> , <u>Institutes</u> <u>Institutes</u> , <u>Institutes</u> <u>Institutes</u> , <u>Institutes</u> , <u>Institutes</u> <u>Institutes</u> , <u>Institutes</u> , <u>Institutes</u>
Business & Economy B2B. Enance. Shepping. Sets Computers & Internet Internet. WWW. Software. Conso Education College and University. E-12 Entertainment Data. Matter. Hamat. Maxie Government Decision. Military. Law. Tunes	End Coromage, Newspapers, TV Recreation & Sports Sports, Transi, Autos, Custanes Reference Libraries, Dictionation, Oustations Regional Countries, Regions, US, States Science Annals, Automoury, Engineering Social Science Archaeology, Tomonics, Languages	Yuhool Turvel - <u>Airfart Specials</u> S free DVDs plan free shipping on Song JPD Davan Spateming on Song JPD Davan Spatemin New on DVD - <u>Eack Star. Kins.of</u> the Davane. Anennam Ne 2 Liquidation - Kadak Advanta Zoom Camers, 14139 - Save 51% <b>Broadcast Events</b> Inside Yahool Marking - Itack Hawk Dava. Snow Dogs. Lord of the Easy Sincer Jpont, for the Easy Sincer Jpont, Israit, spades, chems, down, type, celler fing The Compet. Jon Literation, spades, chems, open, literati, spades, chems, open, literati, spades, chems, downer, spates.
Business & Economy B28, Ensers, Shepping, Nets- Computers & Internet Interest WWW, Software, Danes- Education College and University, K-12- Entertainment Poles, Merles, Hamer, Masie- Government	End Community Networks, IV Recreation & Sports Sports, Transt Autor, Outdeen Reference Literates, Distinguist, Operations - Regional Countries, Explore, US Inter- Science Animals, Antoneous, Explorening - Social Science Antheology, Economics, Languages- Society & Culture	Yuhoo! Torvel - <u>Aicfart Specials</u> Sfree DVDs plan five shipping on Sony DVD Intern Systems New on DVD - <i>Reck Specials</i> New on DVD - <i>Reck Specials</i> Torpostion Pre 2     Ligadiation - K-ddia Advanta Zoom Camera, 349.99 - Bave 51%     Broadcast Events     Broadcast Events     Intole Yahoo!     Inside Yahoo!     Movins - Back Hark Down, Snew Dogs, Lord of the Bags - Tan Camiga - from, tips, celler filing     The Compt - form, tips, celler filing     The Compt - pool, literati, spades,

Local Yaheels

Reverges : Denmark - Erance - Germany - Judy - Narrany - Jpain - Structure - UK & Jordan Asia Parafe : Asia - Asartalia & SZ - China - ISK - India - Japan - Korra - Singapore - Tairan Awaritest : Argentine - Board - Canada - Chinase - Menice - Spanish U.S. Criter : Adapta - Boards - Chinage - Dalas ITW - LA - NIC - ST Jay - Wash, DC - merea.

More Yahoo's

Guodo: "Buer Index - Education - Health - Chatdeners - Pete - Ered Estate - Yahaniganed Descentionous: "Bereacoper - Brandeau - Games - Marsie - Manie - Eada - Tackets - TV - more Prosence : Banismg - Bit Pay - Money: Manaper - Instances - Lanno - Lanno - Estate / Tris-Coord: Autos - Garesso - Chausfields - Events - Lodging - Maga - Villew Payne - more News : Tag Statistics - Banismod - Events - Lodging - Maga - Villew Payne - more Publiching : Berlines - Banismod - Events - Longing - Maga - Villew Payne - Montage Boosts News : Tag Statistics - Banismod - Events - Lorenzy - Speets - Technology - Wanther Publiching : Berlines - Banismo - Events - Events - Home Pages - Manape Boosts South Publiching : Domain Registration - Small Bit Creater - Street Building - Wei Hearing Access Tackees / Ville : Pagera, PDAn, Web-enabled Phones and Yoko (1-300-My: Takee)

### Make Yahoo' your home page

Here to Suggest a Site - Company Infe - Copyright Policy - Terms of Service - Jobs - Adventise with Us

Copyright © 2012 Yahoo! Inc. All rights reserved. <u>Privacy Policy</u>

Copyreight @ 2002 Yathoo' line. All sugtes meanwell.

How to Suggest a Set - Company July - Copyright Filley - Toward Service - July - Advantas with Li-

### Make Taken' Sweet Source State

the proof of proof of the proof

### Frontend Engineers = 0

YAHOO! ۵. S 8 9 Managered Dauk Error Coatton Get your own email address **Yahoo!** Personals free\_ematl@yahoo.co find the one for you you'd claim-your-name.com Search advanced search Yahoo! Careers - Find a Job, Post Your Resume, Research Salaries Shop Auctions - Anna - Causafieda - Shopping - Tarvel - Tallow Pga - Maga - Media - Enances Ouvies - Newa - Sporta - Weather Connect Causers - Chat - Chata - DesChies - Deschies - Deschies - Media - Menters - Messenger - Mebbe - Personals - Pergle Search - Photos Personal - Adde Beeck - Briefman - Calendar - My Yahard - PergDeres - Fon Games - Kels - Mexico - Music - Radio - TV - marea Make a Connection with Yahoo! Personals In the News Camp X-Eay draws more critician Tm a Man 💌 seeking a Woman 💌 Ceart convicts Onagh bomber 00 ₩ V Enter City, State or ZIP: Knat files for baskraptcy TBI set to enter Loron 202 Find My Match AOU's Netscape rues Microsoft Take a Tour of Yahoo! Personals - where millions of singles meet! Beerl mapts at Typen Levis news conference Arts & Humanities News & Media Marketplace are. Photography. Full Coverage, Newspapers, TV-Yahoo! Travel - Aidare Specials 5 free DVDs plus five shipping on **Business & Economy** Recreation & Sports Sony D1D Dream Systems New on D1D - Eack Star, Kiss of 828. Einance, Shopping, John ets, Teacel, Autor, Outdo the Dragon, American Por 2 Liquidation - Kodak Advanta Computers & Internet Reference Internet, WWW, Software, Games Libraries, Dict ies. Oustations Zoon Camera, 548-99 - Save 615 Broadcast Events Regional Education Britney Spears - music videos, mexic preview, fan station College and University, K-12 Countries, Regions, US States Inside Yahoo! Entertainment Picks, Mexics, Hames, Maxie Science Marries - Black Hank Down. Snow Dogs. Lord of the Ring als, Astronomy, Engine Tax Center - forms, tips, cellere Social Science Government filing Dections, Military, Law, Taxes Archaeology, Loono sice. Languages VI Comes - pool, literati, spades, chess, dominoes, ruches, Health Society & Culture Asteology - what's your sign? dedicine, Diseases, Draza, Ethesa, People, Environment, Relation Make Yahoo! your home page

COMPAG

Local Yabou's

Barryre : Denmark - France - Gremany - Judy - Nermany - Jpanis - Javeden - UK & Jerland Anto Paryle : Anato - Anatolia & XZ - China - JK - Judia - Japan - Korea - Singapore - Taiwan American : Angentian - Bouton - Canada - Chinata - Marinia - Spanish U.S. China : Adapta - Bouton - Chicago - Dalan JW - LA - XXZ - SE Jay - Wash, DC - merea.

More Yahoo's

Guider : <u>Barr Inder</u> - Liberation - Health - Contoers - Petr - Eral Estate - Yabardiganal *Descriptionsen* :: <u>Barracoper</u> - Brandeau - Games - Marsie - Manie - Ender - Tickets - Till - more *Prosence* :: <u>Barling</u> - <u>Bit Pey</u> - Manager - Insummer - Lanne - Taura - Emander/Timon - more *Local* :: Autors - Carron - Collambed - Frynte - Lochpang - Maga - Yabardigan - more *News* :: <u>Englisheries - Barliness - Entertainment - Lettery - Sports - Technology - Weather</u> *Publishing* :: <u>Barliness - Barliness - Entertainment - Lettery - Sports - Technology - Weather</u> *Publishing* :: <u>Barliness - Barliness - Entertainment - Lettery - Sports - Technology - Weather</u> *Publishing* :: <u>Barliness - Danain</u> <u>Registrations - Smott Bit Center - Streen Balling - Wich Hesting</u> *Access Tobool* viso :: <u>Departs</u>, <u>EDAS</u>, <u>Wich</u>-mabled Phones and Visiot (L-100-My-Taboo)

Make Yahoo' your home page

How to Suggest a Site - Company Infe - Copyright Policy - Terms of Service - Jobs - Advertise with Us

Copyright © 2002 Yahoo! Inc. All rights received. Privacy Policy

Copyright of Josef Tables and Ad option reserved.

Here to Souther a Mer - Company Anto - Copyright Public - Lower of Society - Advantance with Un-

Make Taken's South Barry Parks

Construction of the second sec



## First frontend engineering specialists hired.

Shep Auctions - Antor Characteria Contention - Contention	Tree email (@ yahoo.com Search adv rs - End a Job. Post You Rename, R pring Tarof Tales Tar Managa Mola Territory Mal Mentaria Managa Mola	esearch Salaries
Personal Adde Book - Briefcare - Calendo	er - My Yahool - PayDirect Fan Games - K	ids (Mexics (Masic (Radie (IV)) mers
Make a Connection	with Yahool Personals	In the News
fm a Man ♥ ♥♥♥ Enter City, State or Z Find N	seeking a Woman M	Comp X-Exp down more obtainen     Court corricts Onagh bomber     Knart film for bankruptsy     TBL set to enter Exercis H0     AOC/X Network Microsoft     Bank regels at Typosoft.evis
100.0.100.0.100.00.100.000	a mere merere e anges mere	news conference
Arts & Humanities	News & Media	more_
Literature, Photography	Full Cevenage, Newspapers, TV-	Marketplace
Business & Economy 828. Ensers, Shepping, Sta-	Recreation & Sports Sports, Touris Autor, Outdoors-	Yuhee! Trevel - Aidar: Specials     Sitee DVDs plus five shipping on     Sony: DVD Dream Systems     New on DVD - Rock Star, Kiss, of
Computers & Internet Internet, WWW, Software, Games-	Reference Libraries Dictionaties Quotations	the Dragon, American Pre 2 - Liquidation - Koduk Advantu Zoom Camera, 540.99 - Save 61%
Education	Regional	Broadcast Events
College and University, K-12	Countries, Regions, US States	<ul> <li>Beitney: Spears - music videos.</li> <li>motion preview. East station</li> </ul>
Entertainment	Science	Inside Yahoo!
Paks Merzes Hanas Masic- Government	Animala, Astronomy, Engineering- Social Science	Marvins - Black Hank Doren, Snow Dogs, Lord of the Rings Tan Center - Forms, tips, online films
Bections, Military, Law, Taxes-	Archaeology, Teonomics, Languages-	- 31 Comes - pool, Sterati, spades,
Health Medicine, Diseases, Drags, Ethess	Society & Culture Propie. Environment, Eskpion	chers, dominors, rucher • <u>Autorlogy</u> - what's your sign? • <u>Make Yaboo! your home page</u>

Local Yabou's

Leven Yahooni Rowspor : Denmark - Erance - Germany - Jinly - Narmay - Jipain - Stenden - UK & Jedand Asin People : Asin - Australia & SZ - China - HK - Joola - Japan - Korea - Singapore - Tairan Awariton : Augustina - Board - Canada - Chinase - Menico - Spanish US - Criter : Adanta - Boardo - Chinago - Dalias TW - LA - STE - SE Bay - Wash, DC - morea.

### More Yahoo's

Gooder (Barr Inder - Education - Health - Conferen - Priz - Eral Estate - Yahenigana) Deventower: Herencoper - Brandcart - Gama - Marie - Manie - Eada - Takisti - TX - more Proseer: Barling - Bit Pay - Manager - Instance - Lama - Lama - Emanthisism - more Local - Anton - Careno - Chanofield - Fronto - Lochym - Mapa - Yahen Papa - Instance News : Tag Statistics - Barliness - Extentionment - Lattry - Sports - Technology - Wrather Publishing - Barlings - Chab - Experts - Instano - Phone Papa - Manage Booth Swall Faurence : Dominist - Registrations - Small IN Corest - Street Manage Booth Swall Patrones : Dominist - Registration - Small Network - Street - Street Manage Booth Swall Patrones : Dominist - Registrations - Small Network - Street - Street Manage Joseth Access Fadorol viz : Pagers, FDAs, With-mabled Phones and Yoice (1-100-My-Taheo)

### Make Yahoo' your home page

How to Suggest a Site - Company Infe - Copyright Policy - Terms of Service - Jobs - Adventise with Us

Copyright © 2012 Yahoo! Inc. All rights reserved. Privacy Policy

Copyreight @ 2002 Yanno' Bre. All region ressored.

How to Suggest a Set - Company Sells - Copyright Publicy - Down of Service - John - Advantan with Us

### Make Labora' Song Berne Rade

Construction of the second sec

~700 professional frontend engineers spread across Y! offices worldwide.

### And hiring!!!



Font tags & nested tables.

### Static interface.

Auctions - Anna - Classifieds - She of Careers - Chat - Clubs - DesCities	Free email @ yahoo.com Beach ab rs - Find a Job. Port Your Remone, F pring Tanol Tales, Park Maga Media Printing Mail Median Media	mind the one for you miced search lesearch Salaries Enames Quetes - Sena - Specta - W Mobile - Personals - Provide Joach
onal Addr Book - Briefrane - Calend	er My Yahoo! Personals	In the News
		· Camp X-Ray draws more critician
lim a Man 💌	seeking a Woman 🛩	- Ceart consists Onagh bomber
V V Enter City, State or 2	8P: 🔍 🖓 🖓 👳	- Knat files for bankriptcy
	My Match	- TBL set to enter Toron 312
		<ul> <li>AOUs Netscope uses Microsoft</li> </ul>
Take a Tour of Yahoo! Persona	a - where millions of singles meet!	<ul> <li>Beaul mights at Tysion-Lewis news conference</li> </ul>
		BETTA LOTATIONAL BOOM
Arts & Humanities	News & Media	Marketplace
Literature, Theorypaphy-	Full Coverage, Newspapers, TV-	Yahoo! Travel - Airfast Specials
Business & Economy	Recreation & Sports	- 5 free DVDs plus free shipping of
828, Emanos, Shopping, John-	Sports, Travel, Autor, Outdoors-	Sony D1D Dream Systems - New on D1D - Rock Star, Kins of
		the Dragon, American Pie 2
Computers & Internet Internet, WWW, Software, Canes	Reference Libraries, Dictionaties, Quotations	<ul> <li>Liquidation - Kodak Advantiz Zoom Camera, \$48.99 - Save 675</li> </ul>
ACCORD NO. 10 10 10 10 10 10 10 10 10 10 10 10 10	Contrast Decisional Contraster	Eroadcast Events
Education	Regional	Beitney Spears - music videos.
College and University, K-12	Countries, Regions, US States	motion preview, Day, stations
Entertainment	Science	Inside Yahoo!
Picks, Merries, Humer, Masie-	Animala Astronomy Engineering	- Movies - Black Hawk Down.
-		Snow Dogs, Lord of the Rings - Tax Center - forms, tips, online
Government Dections, Military, Law, Taxes	Social Science Archaeology, Economics, Languages	filing
Antonial Soliday, Life, 1985-	Secondards, reasoner randents-	- 31 Comes - pool, literati, spades,
Health	Society & Culture	chess, dominoes, suches - Autodogy - what's your sign?
	People Environment Relation	
Medicine, Diseases, Drags, Ethens-	Contraction and a second	- Make Yahoo! your home page

Local Yabou's

Leven Fateers Europe : Demands - Exence - Germany - Indy - Neuropy - Ipain - Exenden - UK & Jedand Actor People : Asia - Australia & NZ - China - EE - Josha - Japan - Keesa - Singapore - Taiwan American : Augustina - Board - Canada - Chinasa - Menico - Spanish US: Chine : Adanta - Board - Canada - Chinasa - Menico - Spanish US: Chine : Adanta - Boardo - Chicago - Dallas IW - LA - SUC - SE Bay - Wash, DC - meres...

### More Yahoo's

Guodo: "Buer Index - Education - Health - Chatdeners - Pete - Ered Estate - Yahaniganed Descentionous: "Berezeoper - Brandeau - Games - Marsie - Manie - Eada - Tackett - TV - more Prosence : Basiling - Bit Pay - Money: Manaper - Instances - Lanse - Lanse - Emandel'inion - more Descel : Autos - Garcens - Chanaffeds - Events - Ledging - Maps - Miles Paper - more News : Tag Statistics - Busilines - Extentionenes - Lettery - Speets - Technology - Monaper Boot News : Tag Statistics - Busilines - Extentionenes - Lettery - Speets - Technology - Wanther Publishing : Beneficas - Chada - Experts - Invitions - Home Papes - Manaper Boords Small Publishing : Dennik Registration - Small Bie Creater - States Hudding - Web (Resting Access Tackeel vito : Pagers, PDAs, Web-enabled Phones and Yoke (1-300-My: Takee)

### Make Yahoo' your home page

How to Suggest a Site - Company Infe - Copyright Policy - Terms of Service - Jobs - Advertise with Us

Copyright © 2012 Yahoo! Inc. All rights reserved. <u>Privacy Policy</u>

Copyreight © 2002 Yallood line. All regists resourced.

How to Suggest a New - Company July - Copyright Publicy - Down of Society - Julys - Advantase with Us

### your party have been party

Construction of the second sec

Semantic & accessible markup.

Rich DHTML & Ajax behavior.

More content. Same fast speed.



## Available and accessible to everyone.

Shop Acctions - Antes - Classifieds - Sho Connert Careers - Chat - Chats - DesCriter	Free email@yahoo.com Search ador rs - End a Job. Post Your Resume. R pring: Taxod: Taken Tyo Maga Media - Commag: Mail Mediam: Maga Media - Commag: Mail Media - Commag Med Media - Commag	essench Salaries Einance Quetes - Sens - Spots - Weather Mobile Personals - Propie Sensch - Paris
Make a Connection	with Yahool Personals	In the News
©© Enter City, State or Find	seeking a Woman W ZP: Wy Match gg - where millions of singles meet!	Comp X, Ray down meet colicium     Count constitu Omaph bomber     Kount files for basic aptry     Hill set to enter Toron 100     AOC's Sencept new Microsoft     Band reagts at Tyson-Lovis     mens conference
Arts & Humanities	News & Media	Marketplace
Literature, Photography	Full Coverage, Newspapers, TV	
Business & Economy 828. Enance. Shepping, Jets-	Recreation & Sports Sports, Executi Autors, Outdoors- Reference	<ul> <li>Yabori Tarvel - Airfant Ipecials</li> <li>5 free DVDu plan five shipping on Sony, DVD Dynam Systems</li> <li>New on DVD - Eack Star, Kiss, of the Dragon, American Dr. 2</li> </ul>
Computers & Internet		
Computers & Internet Internet, WWW, Software, Canes		Liquidation - Kodak Advantix     Zoom Camera Mil 99 - Seve 61%
Internet, WWW, Software, Cames-	Libraries, Dictionaties, Quotations-	Zoom Camera, \$49.99 - Save 61%
		Zeon Canera, 549.99 - Save 81% Broadcast Events Betwey Spratt - music videos, mexic preview, fan station
Internet, WWW, Software, Cames-	Libraries, Dictionaties, Quotations - Regional	Zeem Canena, 548.99 - Serve 51% Broadcast Events - Bettery Spear - music videos, metre green - Em Listeen Inside Yahoo!
Internet, WWW, Software, Games- Education Cellege and University, K-12-	Libraries, Dictionaries, Osciations Regional Countries, Ergions, US, States	Zoom Camera, 548,99 - Bave 61% Biroadcast Events - Beitory: Spears - music videos, mexic preview, Enustation Inside Yahoo! - Mexice - Black Rook Devs.
Internet WWW, Software, Connet Education College and University, K-12 Entertainment	Libraries. Dictionation. Oscitations - Regional Countries. Englists. US States- Science	Zeom Camera, 548.99 - Sarve 67% Biroadcast Events - Bethny: Spean - munic videos, metor provines, Em Justeen Inside Yahoot - Marvins - Black Hank Down, Snee: Dogs, Lood of the Zings - Em Camera - form, typ, celler filing - <u>Yi Genner</u> - pool, literati, spades, chens, downoes, reches
Internet, WWW, Software, Games- Education College and University, K.12 Entertainment Parks, Merten, Barnet, Manie Government Dections, Military, Law, Tanas	Libraries. Decisionates. Osociations Regional Countries. Engines. US States Science Animals. Activations: Engineering Social Science Archaeology. Economics. Languages Society & Culture	Zeom Canten, 548 99 - Sarve 51% Broadcast Events - Beiney: Spears - music videos, micros generas, fan, Istoso Inside Yahoo! - Mercies - Black Hawk Down, Saow Dogs, Lord of the Rings - Tax, Canter - Form, Sps, cellee filing - 17 Commer - pool, literati, spades,

Local Yahoo's

Leven Faterers Rowspor : Denmark - Erance - Germany - Judy - Narrany - Jpain - Stenden - UK & Jedand Asin People : Asin - Asserbin & S22 - China - HX - Joshi - Japan - Korna - Singapore - Tairan Awariton : Augustina - Boud - Canada - Chinase - Menico - Spanish US - Crise : Adanta - Bouton - Chinage - Dalas TW - LA - NEC - SE Jacy - Wash, DC - merea.

### More Yahoo's

Goode (Ener Index - Education - Health - Conferen - Priz - Erai Erant - Manie - Maleniane Determinence: Herencoper - Brandmart - Games - Manie - Manie - Ende - Tachti - TX - more Preserve (Hanimg - Bill Pay - Monry Manager - Instances - Lanno - Lanno - Eners - Emandellinian - more Decal' - Anton - Carron - Chamfields - Krents - Londing - Maga - Villey Pages - Instance/Timien - more News (Tage Statistics - Basimess - Entertainment - Lattery - Spaces - Technology - Monage Boord News (Tage Statistics - Basimess - Entertainment - Lattery - Spaces - Technology - Worther Publishing : Benefaux - Caldo - Experts - Investors - Home Pages - Manage Boord Sould Paul-Materia - Donain, Registration - Small Rue Creater - States Hading - Wei Hearing Access Fadered vito : Pagers, EDAn, Web-mabled Phones and Yokes (1-500-My/Tabee)

### Make Yahoo' your home page

How to Suggest a Site - Company Infe - Copyright Policy - Terms of Service - Jobs - Advertise with Us

Copyright © 2012 Yahoo! Inc. All rights reserved. Privacy Policy

Copyreight @ 2002 Yanno' Sin: All region ressored.

How to Suggest a hits - Campany Julie - Copyright Publicy - Terms of Service - Julie - Adventor with Us

### Make Taken's your house page

the proof of proof of the proof

# Available and accessible to everyone.



### Plain but predictable.

Shop Auctions - Antos - Classifieds - Sho Connert Careers - Chat - Chilos - DesCities	Iree_email@yahoo.com Search_adv rs - End a Job. Port Your Rename. R ping - Tarof Telev Fas Maga Media Chemaga Mall Medicas Magamare r My Tabert - Deplaret Fas Same - A	esearch Salaries Einance Quetes - Sena - Spota - Weather Metric - Personala - Pergis Search - Portes
	with Yahoo! Personals seeking a Woman M	In the News Camp X-Exp down more orticiam Court convicts Onagh bomber Kourt firs for basic price
FindA	Ay Matchi (g - where millions of singles meet)	TBL set to enter Toron 200     AOU's Neurope uses Microsoft     Bendlempts at Tysen-Lexis     neuro.conference
		BOTS_
Arts & Humanities	News & Media	Marketplace
Lineter, Photography Business & Economy 828, Emeric, Shopping, John	Edit Coronage, Newspapers, TV- Recreation & Sports Sports, Tourst, Autos, Outdoors-	Yahoo! Trevel - <u>Aiefart Specials</u> 5 free DVDs plus fires shipping on Sony DVD plusan Systems     New on DVD - <u>Rack Star. Kins. of</u>
Computers & Internet	Reference	the Dragon, American Pie 2 - Liquidation - Kodak Advantix
Internet, WWW, Software, Games-	Librativa, Dictionativa, Quotationa-	Zoom Camera, \$40.99 - Save 61%
Education	Regional	Broadcast Events
College and University, K-12	Countries, Regions, US States-	<ul> <li>Beitery Spears - music videos, movie preview, fan station</li> </ul>
Entertainment	Science	Inside Yahoo!
Picks, Merses, Humon, Massic-	Animala, Astronomy, Engineering-	Movies - Black Hawk Down, Snow Dogs, Lord of the Rings
Government	Social Science	<ul> <li>Tex Center - forms, tips, online</li> </ul>
Bections, Military, Law, Taxes-	Archaeology, Teonomics, Languages-	- 11 Comes - pool, literati, spades, chess, dominoes, euchre
Health	Society & Culture	- Astrology - what's your sign?
Medicine, Diseases, Drags, Etterns	People, Litymonment, Lakpion	- Make Yahoo! your home page

Local Yahoo's

COMPAG

Leven Faterers Rowspor : Denmark - Erance - Germany - Judy - Narrany - Jpain - Stenden - UK & Jedand Asin People : Asin - Asserbin & S22 - China - HX - Joshi - Japan - Korna - Singapore - Tairan Awariton : Augustina - Boud - Canada - Chinase - Menico - Spanish US - Crise : Adanta - Bouton - Chinage - Dalas TW - LA - NEC - SE Jacy - Wash, DC - merea.

### More Yahoo's

Goode (Ener Index - Education - Health - Conferen - Priz - Erai Erant - Manie - Maleniane Determinence: Herencoper - Brandmart - Games - Manie - Manie - Ende - Tachti - TX - more Preserve (Hanimg - Bill Pay - Monry Manager - Instances - Lanno - Lanno - Eners - Emandellinian - more Decal' - Anton - Carron - Chamfields - Krents - Londing - Maga - Villey Pages - Instance/Timien - more News (Tage Statistics - Basimess - Entertainment - Lattery - Spaces - Technology - Monage Boord News (Tage Statistics - Basimess - Entertainment - Lattery - Spaces - Technology - Worther Publishing : Benefaux - Caldo - Experts - Investors - Home Pages - Manage Boord Sould Paul-Materia - Donain, Registration - Small Rue Creater - States Hading - Wei Hearing Access Fadered vito : Pagers, EDAn, Web-mabled Phones and Yokes (1-500-My/Tabee)

### Make Yahoo' your home page

How to Suggest a Site - Company Infe - Copyright Policy - Terms of Service - Jobs - Advertise with Us

Copyright © 2012 Yahoo! Inc. All rights reserved. Privacy Policy

Copyreight & 2002 Yatero' Inc. All region reserved. President Product

How to Suggest a Set - Company Sells - Copyright Publicy - Lows of Service - John - Advantan with Li-

### Make Taken's your house page

the proof of proof of the proof

Highly visual and adaptive, but still dependable.



### Modest user expectations.

Eners Warren Contract Get voor over enaal address you@chim-your-name con Yakeo! Caree Shap Auctions - Amer - Chanfieds - She Connect Careers - Chat - Chan - Enclines Personal Addr Book - Berfrare - Calend	Iree email@yahoocom Beach adv rs - Find a Job. Post Your Remain. H pring 'Iren's Tales Typing Mail Comman Mail Molecular Mails Comman Mail Molecular Mails	miced search lesearch Salaries
Make a Connection	with Yahoo! Personals	In the News
♥ <sup>♥</sup> ♥ Enter City. State or 2 Find 1	seeking a Woman W 2P: V My Match its - where millions of singles meet	Comp.X-Exy down meet obtains     Court contains (Magh bonker     Kourt film for bonkingtey     TBL set is index forms 202     AOC's Networks meet Microsoft     Bonkingth Typon Lovis     ment conference
Arts & Humanities	News & Media	Boltz
Literature, Photography	Full Coverage, Newspapers, TV-	Marketplace
		<ul> <li>Yahoo! Travel - Airfare Specials</li> </ul>
Business & Economy	Recreation & Sports	<ul> <li>5 free DVDu plus five shipping on Sony DVD Dream Systems</li> </ul>
Business & Economy 828. Ensect. Shepping. 2dts-	Recreation & Sports Sports, Transf. Autors, Outdoors-	<ul> <li>5 free DVDu plus five shipping on Sony DVD Dram Systems</li> <li>New on DVD - Rock Star, Kiss.of</li> </ul>
\$28. Finance. Shepping. Jobs-	Sports, Toront Autor, Outdoors-	5 free DVDs plus free shipping on Sony DVD Dream Systems     New on DVD - Rack Star, Kass of the Dragon, American Pre 2
		<ul> <li>5 free DVDu plus five shipping on Sony DVD Dram Systems</li> <li>New on DVD - Rock Star, Kiss.of</li> </ul>
828. Enance. Shopping, John- Computers & Internet Internet, W.W., Software, Cames-	Sports, Transf. Autor. Outdoors	<ul> <li>5 free DVDs plus fires shipping on Sony, DVD Datas Systems</li> <li>New on DVD - Rack Star. Kess of the Dataset. American Det 2</li> <li>Lagaintics - Koduk Advants.</li> </ul>
B2B. Enance. Shepping. Sets- Computers & Internet Internet. WWW, Software. Cames- Education	Spots, Tansi Autos, Outleas Reference Litratis, Dictionatics, Outlations Regional	S free DVDs plus free shipping on Serve DVD Dream Systems     New on DVD - Each Star, Kinst of the Dragen, American Pre 2     Liquidation - Kodak Advants, Zoom Camera, 141:39 - Save 61% Broadcast Events     Letter: Space - mass: videos.
828. Enance. Shopping, John- Computers & Internet Internet, W.W., Software, Cames-	Sports, Transf. Autor. Outdoors	S free DVDs plan free shipping on Sony DVD VD+ Each Star, Kras of the Dragon, American Pre 2 Liquidation - Kodak Advanta Zoom Camera, 548-59 - Save 51% Broadcast Events     Binney Spears - maxic videos, micing process, functional
B2B. Enance. Shepping. Sets- Computers & Internet Internet. WWW, Software. Cames- Education	Spots, Tansi Autos, Outleas Reference Litratis, Dictionatics, Outlations Regional	S first DVDu plus first shipping on Sony, DYD Dram, Systems Verw en DVD - Eack Stan, Kins, of the Dragen, American Pre 2 Lippidation - Kodda Advanta Zoom Camera, 548,99 - Sarre 61% Broadcast Events Broadcast Events Broadcast Events Inside Yahoot
B2B. Finance. Shepping. John- Computers & Internet Internet. WWW, Software, Cames- Education College and University, K-12-	Spots, Tarst, Autos, Outleas Reference Libraries, Dictionaries, Ouetations Regional Countries, Regiona, US States	S first DVDu plus first shipping on Song DVD Dram, Systems New on DVD - Eack Star, Kins of the Dragon, American Pie 2 Legadation - Kodak Advants Zoom Commen, 54190 - Sarot 8716 Broadcast Events Interp Space - masic videos, micis proving, fan, station Inside Valvool Marcies - Back Henk Dores,
IEB. Ensance. Shepping, John- Computers & Internet Internet, WWW, Software, Camera- Education College, and University, K-12- Entertainment Poles, Marster, Humer, Massio-	Sports, Transf. Autor. Outdoors Reference Libraries, Dictionates, Oustations Regional Countries, Regions, US, States Science Animals, Automoury, Engineering	S free DVDs plan free shipping on Sony DVD Dram Systems     New on DVD - Each Star, Kras, of the Drapes, American Pre 2     Liquidation - Kodik A Advants Zoom Camera, 140.59 - Save 81%     Britage Space 81%     Britage Space 81%     Inicial process, for Advants     Soor Dogs, Lond of the Eacys
IEB. Enance. Shepping. Sets- Computers & Internet Internet. WWW, Software, Cames Education College and University, K-12 Entertainment Poles, Merces, Hames, Massic- Government	Sports, Transk Autor, Outdeers- Reference Libraries, Dictionation, Oustations- Regional Countries, Ergiona, US States- Science Animals, Automores, Engineering- Social Science	S first DVDu plus first shipping on Song, DSD Dram, Systems New on DVD - Enck Star, Kins, of the Dragon, American Pie 2 Legadation - Kodak Advantis Zoom Commen, 541-90 - Sarot 81% Broadcast Events     Interp: Spans - mass: videos. minist provint, fan station Inside Yahoool     Marcia - Back Hawk Down, Soom Dags, Lord of the Rings - Tac Center - form, tips, colless filing
B2B. Ensance. Shepping. John- Computers & Internet Internet, W.W.V. Software, Camera- Education College. and University, K. 12 Entertainment Parks, Marsen, Hamer, Massic Government Decision, Military, Law, Tanas	Sports, Transf. Autor, Outdeers Reference Libratics, Dictionation, Outrations Regional Countries, Engines, US States Science Annuals, Automony, Engineering Social Science Archaedings, Tomonics, Languages	S free DVDu plus free shipping on Sony, DVD Dram, Systems Verw en DVD - Kack Stan, Kriss of the Dragon, American Pre 2 Liquidation - Kodak Advants Zoom Camera, 148,59 - Save 81% Broadcast Events Broadcast Events Institute provinse. Inn Jakon Institute Provinse. Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Instite Institute Institute Institute Institute Institute Institute I
IEB. Ensure: Shopping, John- Computers & Internet Internet WWW, Software, Camera- Education College and University, K-12- Entertainment Parks, Merters, Hamer, Massie- Government Decision, Military, Lee, Tana- Health	Sports, Transf. Autor, Outdeers Reference Libraries, Dictionation, Oustations Regional Countries, Ergiona, US States Science Animals, Automore, Engineering Social Science Archaeology, Economics, Languages Society & Culture	S first DVDu plan first shipping on Sony, DYD Dram, Systems Verw on DYD - Eack Star, Kins, of the Dragon, American Pre. 2 Lispidatory - Koduk Advantis Zoom Camers, 14130 - Save SIVe Broadcast Events Broadcast Events Inside Yakool Marries - Black Hank Down, Snow Dags, Lond of the Eags Das Dags. Lond of the Eags Snow Dogs. Lond of the Eags Star of Samers - Start, spades, charst, domaest, suches.
B2B. Ensance. Shepping. John- Computers & Internet Internet, W.W.V. Software, Camera- Education College. and University, K. 12 Entertainment Parks, Marsen, Hamer, Massic Government Decision, Military, Law, Tanas	Sports, Transf. Autor, Outdeers Reference Libraries, Dictionation, Oustations Regional Countries, Ergiona, US States Science Animals, Automore, Engineering Social Science Archaeology, Economics, Languages Society & Culture	S free DVDu plus free shipping on Sony, DVD Dram, Systems Verw en DVD - Kack Stan, Kriss of the Dragon, American Pre 2 Liquidation - Kodak Advants Zoom Camera, 148,59 - Save 81% Broadcast Events Broadcast Events Institute provinse. Inn Jakon Institute Provinse. Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Institute Instite Institute Institute Institute Institute Institute Institute I

Local Yaboo's

Leven Faterers Rowspor : Denmark - Erance - Germany - Judy - Narrany - Jpain - Stenden - UK & Jedand Asin People : Asin - Asserbin & S22 - China - HX - Joshi - Japan - Korna - Singapore - Tairan Awariton : Augustina - Boud - Canada - Chinase - Menico - Spanish US - Crise : Adanta - Bouton - Chinage - Dalas TW - LA - NEC - SE Jacy - Wash, DC - merea.

### More Yahoo's

Goode (Ener Index - Education - Health - Conferen - Priz - Erai Erant - Manie - Maleniane Determinence: Herencoper - Brandmart - Games - Manie - Manie - Ende - Tachti - TX - more Preserve (Hanimg - Bill Pay - Monry Manager - Instances - Lanno - Lanno - Eners - Emandellinian - more Decal' - Anton - Carron - Chamfields - Krents - Londing - Maga - Villey Pages - Instance/Timien - more News (Tage Statistics - Basimess - Entertainment - Lattery - Spaces - Technology - Monage Boord News (Tage Statistics - Basimess - Entertainment - Lattery - Spaces - Technology - Worther Publishing : Benefaux - Caldo - Experts - Investors - Home Pages - Manage Boord Sould Paul-Materia - Donain, Registration - Small Rue Creater - States Hading - Wei Hearing Access Fadered vito : Pagers, EDAn, Web-mabled Phones and Yokes (1-500-My/Tabee)

### Make Yahoo' your home page

How to Suggest a Site - Company Jule - Copyright Policy - Terms of Service - Jobs - Advertise with Us

Copyright © 2012 Yahoo! Inc. All rights reserved. Privacy Policy

Copyright © 2002 Values' Inc. All sights meaning. Primacy Project

How to Suggest a New - Company July - Copyright Publicy - Down of Society - July - Advantate with Us

### Make Taken's your house page

and press of permit permit permit permit permit and permit and permit pe

## Sophisticated, broad, and non-trivial user expectations.



Intersection of design and development still vague.

Contrast Section Contrast Cont	Free email@yahou.com	Constant States
you@claim-your-name.com		find the one for you
	Search and	mced search
Yahoo! Caree	ers - Find a Job, Post Your Rename, R	esearch Salaries
Shop Auctions - Antes - Causafiels - Sho Connect Carriers - Chain - Onlin - DesCline Personal <u>Addr.Beck</u> - <u>Briefrage</u> - Calend	pping Tarral Taller, Pga Maga Media - Graninga Mail Manhara Masangar at My Yahaoi PagDireat Fon Games K	Einance Quotes - News - Sports - Weather Methic - Personals - People Search - Photo in - Mexics - Music - Radio - TV - merc.
Make a Connection	with Yahoo! Personals	In the News
Im a Man 💌	seeking a Woman M	Camp X-Ray draws more criticism     Court connects Onauth bomber
VV Enter City, State or 2	2P: 🛛 🖓 🖓 🗸	Kmart files for bankniptcy
Find	My Match	* FBI set to enter Loren 392
		<ul> <li>AOU's Netscape rises Microsoft</li> </ul>
Take a Tour of Yahoo! Persons	es - where millions of singles meet!	<ul> <li>Beauf, erapts, at Tyson-Lexis news, conference</li> </ul>
Arts & Mumanities	News & Media	BOR.
Arts & Humanities	News & Media Full Coverage Newspapers, TV	Marketplace
	News & Media Eul.Coverage.Newspapers.TV- Recreation & Sports Sports.Texes.Autor.Coddcess-	Marketplace • Yaheet Trevel - <u>Aidlan Specials</u> • 5 fire DVDs plan See shipping on Seny DVD bran Systems - New en DVD - <u>Eack Star.</u> Kins of
Literature, Declegraphy - Business & Economy	Pull Coverage, Newspapers, TV Recreation & Sports Sports, Trans. Autor. Outdoors Reference	Marketplace  • Yahoe! Travel - <u>Airlan</u> : <u>Specials</u> • 5 free DVDs plus free shipping on <u>Serry DVD</u> : Drum Systems
Literature, Dietography- Business & Economy 828, Enance, Stepping, John- Computers & Internet Internet, WWW, Software, Games-	Pull Converge, Newspapers, TV Recreation & Sports Sports, Touris, Autors, Condenss Reference Libraries, Dictionation, Occusions	Marketplace  • Yebee! Torvel - <u>Astlan Specials</u> • Stee DVDs plus five shipping on Song DVD plusa five shipping  • New on DVD - <u>Eack Star. Kinst of the Drapse. American Pie 2</u> • Liggadation - Kodik Advants.
Literature Desegraphy - Business & Economy 828 Finance Shopping Jobs - Computers & Internet	Pull Coverage, Newspapers, TV Recreation & Sports Sports, Trans. Autor. Outdoors Reference	Marketplace  • Yabee! Travel - <u>Airlan Specials</u> • Stee DVDs plus five shipping on Seep (DSD plus five shipping on Seep (DSD plus five shipping) • New on DVD - Eack Stee, Kins, of the Drapes, American Jie 2 • Lippidation - Kodda Advants, Zoom Camera, 540.90 - Bave 87%
Literature, Photography - Business & Economy B2B, Ensens, Stropping, John - Computers & Internet Internet, WWW, Software, Camer, - Education College and University, K-12 -	Edit Coverage, Newspapers, TV Recreation & Sports Sports, Trans. Autor. Outdoors Reference Literates, Decisionates, Outstates Regional	Marketplace  • 'Univer' Torvet - Addam Specials  • Sthee DVDs plus five shipping on Song-DVD Drawn, Systems  • New on DVD - Rack Star, Kins, of the Dragon, American Pr. 2  • Ligaidation - Kodak Advants, Zoon Camers, 541:99 - Save StVs  Broadcast Events  • Behney, Spear - music videos.
Literature, Photography - Business & Economy ISB Emails, Shopping Jobs - Computers & Internet Internet, WWW, Software, Camera - Education	Full Convergen Newspapers, TV Recreation & Sports Sports, Torrel Autor, Outdeers Reference Libratics, Dictionation, Outstations Regional Countries, Regiona, US States	Marketplace  • Yabee! Torvel - Astlan: Specials  • Stee DVDs plus five shipping on Serg. DVD: Draw, Systems  • New en DVD - Rack Star, Kins of the Drages, American Pr. 2  • Ligatistics - Kodak Advants, Zeem Cemens, 941:99 - Serve 57%  Broadcast Events  Broadcast Events  Inside Yabool  • Marine - Black Bank Down, Sow Dogs, Lond of the Rags
Literature. Photography Business & Economy ISB Emante. Shopping John Computers & Internet Internet. WWW. Software. Comes Education College and University. K-12 Entertainment Dots. Mexico. Human Maxie Government	Edit Coverage, Newspapers, TV Recreation & Sports Sports, Transt Autor, Outdeers Reference Literation, Decisionation, Outstations Regional Countries, English, UK States Science Animals, Automoury, Engineering Social Science	Marketplace  • 'Whee' Torvet - Action Specials  • Song DYD plus five shipping on Song DYD Drawn Systems • New en DYD - Rack Star, Kan, of the Drape, American Pr. 2  • Legadation - Koedak Advants, Zeon Consen, 518 99 - Save 57%  Briosecarrises, familiation • Incodecast Events • Bring: Spears - music videos, micio provins, familiation • Incodecast Events • Merica - Black Hawk Dreen, Snew Dogs, Lond of the Bangs • Inc. Cation - Fernet
Literature, Photography - Business & Economy RDR Finance, Shopping, John - Computers & Internet Internet, WWW, Software, Camera- Education College and University, K-12 - Entertainment Parks, Marries, Banes, Marie - Government Dectors, Military, Law, Tares -	Edi Coverage, Newspapers, TV Recreation & Sports Sports, Terris Autor, Outdeers Reference Litrates, Dictionates, Outstates Regional Countries, Ergions, US.States Science Annuals, Astronomy, Engineering Social Science Archaedings, Tomomics, Languages	Marketplace  • Yabeet Torvel - Airlan: Specials  • Stee DVDs plus five shipping on Serg. DVD plus five shipping on Serg. DVD plus five shipping on I are en DVD - Eack Star. Kinst of the Drages. American Pie 2  • Liquidation - Koddk Advants. Zoom Comens, 548:99 - Serve 5716  Broadcast Events  Broadcast Events  Incode Values  Inside Values Inside Values  Inside Values  Inside Values Inside Values Inside Values Inside Values Inside Values I
Literature. Photography Business & Economy ISB Emante. Shopping John Computers & Internet Internet. WWW. Software. Comes Education College and University. K-12 Entertainment Dots. Mexico. Human Maxie Government	Edit Coverage, Newspapers, TV Recreation & Sports Sports, Transf. Autor. Outdoors Reference Litraries, Decisionatics, Outdoors Regional Countries, Engloss, US States Science Animals, Antonomy, Engineering Social Science Archaeology, Economics, Languages Society & Culture	Marketplace  • Yaheet Torott-Aaflan: Ipecials  • Sthee DVDs plus five shipping on Scorg, DYD Drawn, Systema  • New on DVD - Rack Star, Kins, of the Dragon, American Pr. 2  • Ligaldation - Kodak Advanta, Zoon Camera, 541:99 - Save StNe Broadcast Events  Broadcast Events Broadcast Events Broadcast Events Broadcast Events Broadcast Events Broadcast Events Broadcast Events Broadcast Events Broadcast Events Broadcast Events Broadcast Events Broadcast Events Broadcast Events Broadcast Events Broadcast Events Broadcast Events Broadcast Events Broadcast

Local Yahoo's

Reverges (Denmark - Erance - Germany - Judy - Narrany - Jpanis - Structure - UK & Jerland Asian People : Asia - Asartshin & SZ - China - HX - India - Japan - Korna - Singapore - Tairan Awaritent : Augustine - Boudi - Canada - Chinase - Menice - Spanish U.S. Criter : Adapta - Bouton - Chicage - Dalan TW - LA - STE - SE Jay - Wash, DC - merea-

### More Yahoo's

Gooder (Barrinder - Education - Health - Conferen - Priz - Eral Estate - Yahenigana) Deventower: Herencoper - Erandeart - Game - Marie - Manie - Eada - Takisti - TX - more Proseer: Barling - Bit Pay - Manager - Instance - Lama - Lama - Enanth'inico - more Local - Antos - Careno - Chaosfield - Venta - Lochang - Maga - Yahen Paga - more News : Tag Steries - Barlines - Externament - Lattry - Sports - Technology - Wrather Publishing - Barling - Date - Instantion - Instan - Posta - Home Page - Manage Boodh Swal' Ranses : Domina - Registration - Small III: Coreta - Store Manage Booth Swal' Ranses : Domina - Registration - Small III: Coreta - Store Manage Booth Swal' Ranses : Domina - Registration - Small III: Coreta - Store Manage Josefia Access Fadorol via : Pagers, FDAn, With-mabled Thomes and Yoice (1-100-My-Taheo)

### Make Yahoo' your home page

How to Suggest a Site - Company Infe - Copyright Policy - Terms of Service - Jobs - Adventise with Us

Copyright © 2012 Yahoo! Inc. All rights reserved. Privacy Policy

Copyreight @ 2002 Yanno' Sin: All region ressored.

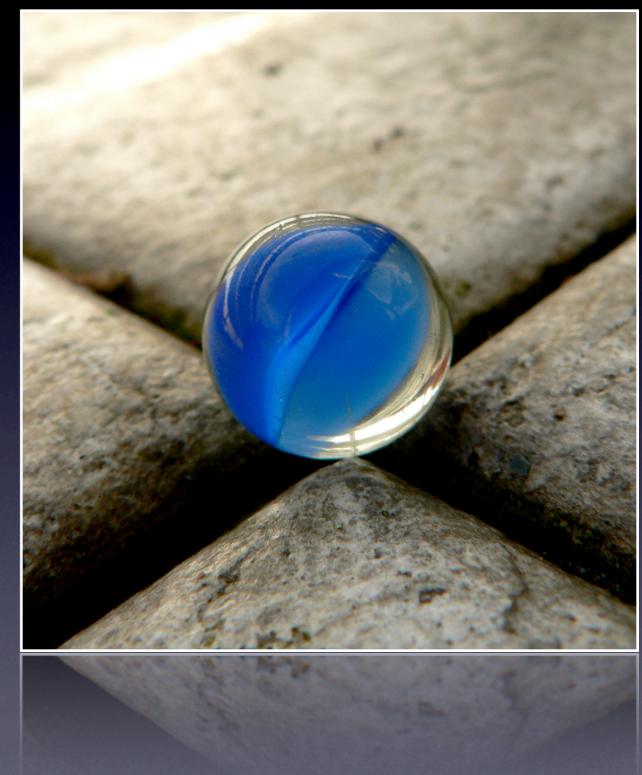
### How to Suggest a New - Company July - Copyright Publicy - Down of Society - Julys - Advantase with Us

### Make Tabau' your hour Jage

the proof of proof of the proof

### Today

Professional Frontend Engineers focused at the intersection of design and development is a best practice.



—Irene Au, SVP of UED at Yahoo!

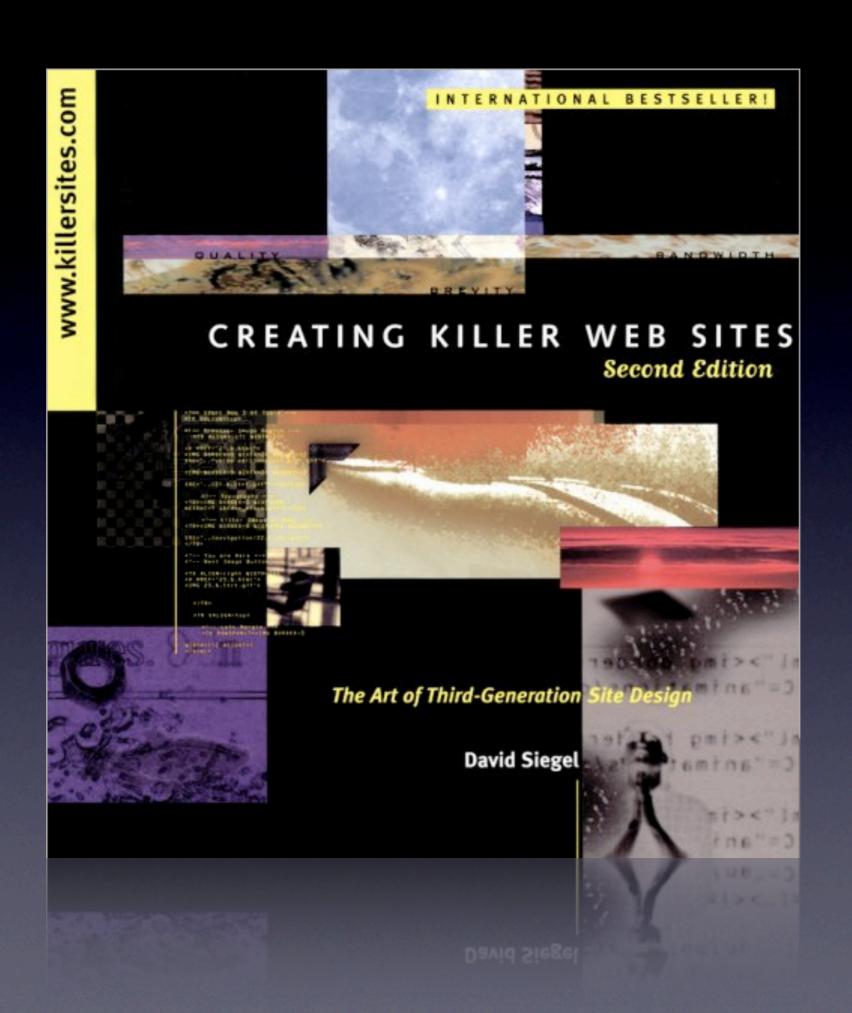
"In 2001, with developments in advanced JavaScript and DHTML, we knew the web experience would evolve beyond the static pages we were producing. We brought in web developers to help us pioneer Yahoo's offerings to include a more dynamic, interactive experience for our users."

—Irene Au, SVP of UED at Yahoo!

—Irene Au, SVP of UED at Yahoo!

"...Another motivation was to bring in a disciplined frontend programming practice to Yahoo. Before then, the presentation, behavior, and structure of our pages were not separate, which led to many challenges and inefficiencies in designing and developing our products."

—Irene Au, SVP of UED at Yahoo!



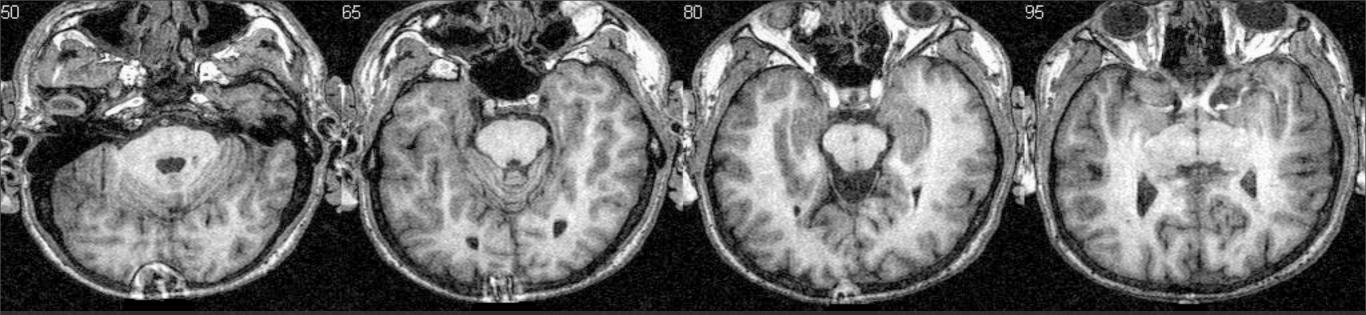


"The Framers of the Web saw browser differences as beneficial and believed that visitors should choose how their browser displays the page ... "

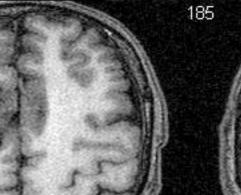


"...I wanted more control so I threw my HTML book in the trash and started from scratch."





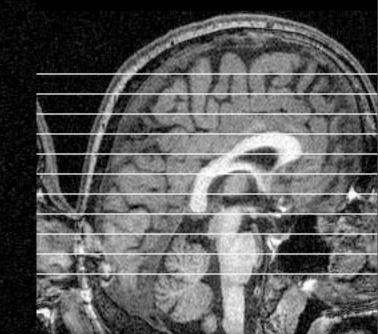
## Frontend Engineers are the Web's Radiologists



170







## Question: What is Frontend Engineering?

## Answer: We write software in JavaScript, CSS, and HTML & more...

### Answer: We tell browsers what to do.

### Answer: We're responsible for "view source"

### The Yahoo! Stack

Pages & modules 95% HTML, 5% PHP

Display logic & APIs 50% HTML, 50% PHP

Specific PHP biz logic

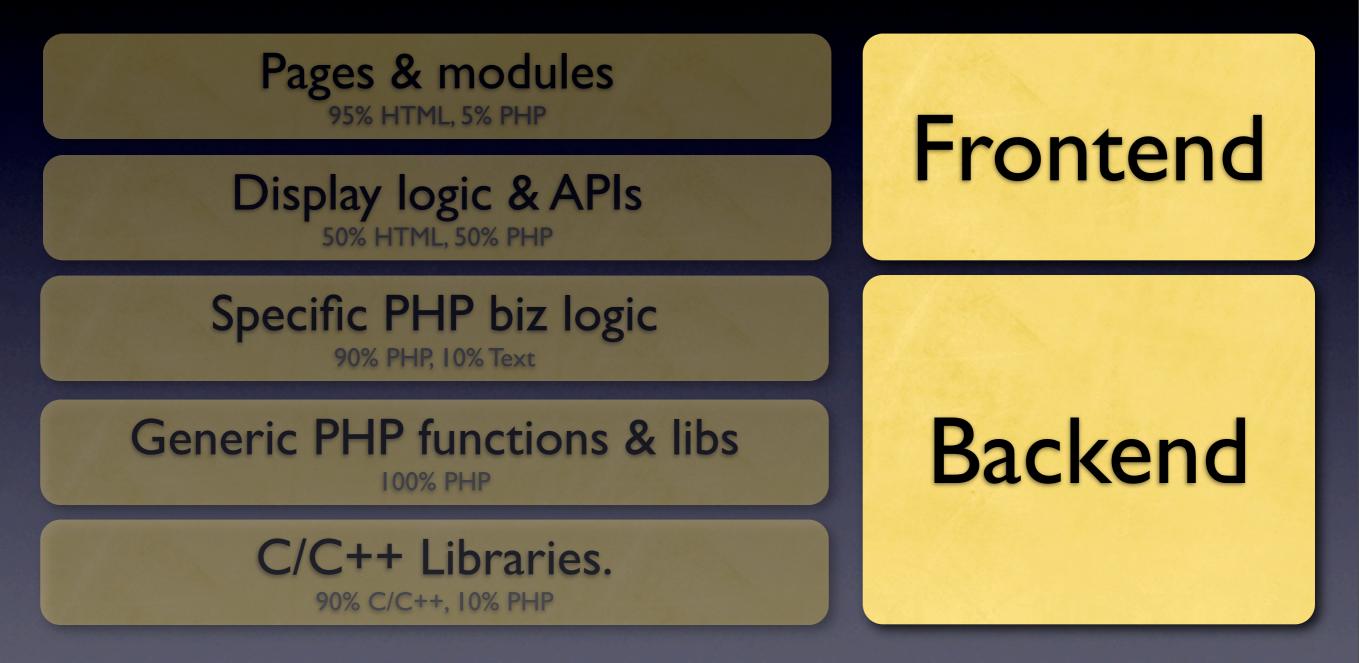
90% PHP, 10% Text

**Generic PHP functions & libs** 

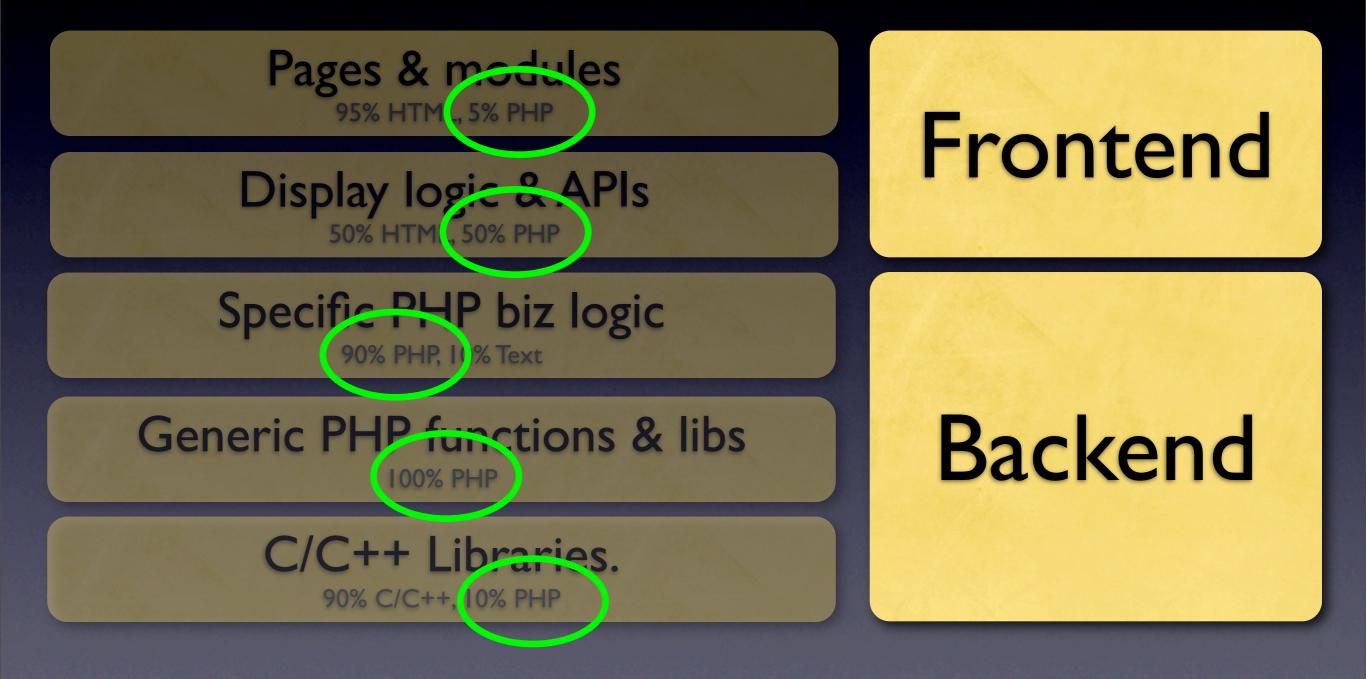
100% PHP

C/C++ Libraries. 90% C/C++, 10% PHP

### The Yahoo! Stack

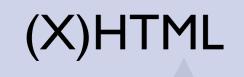


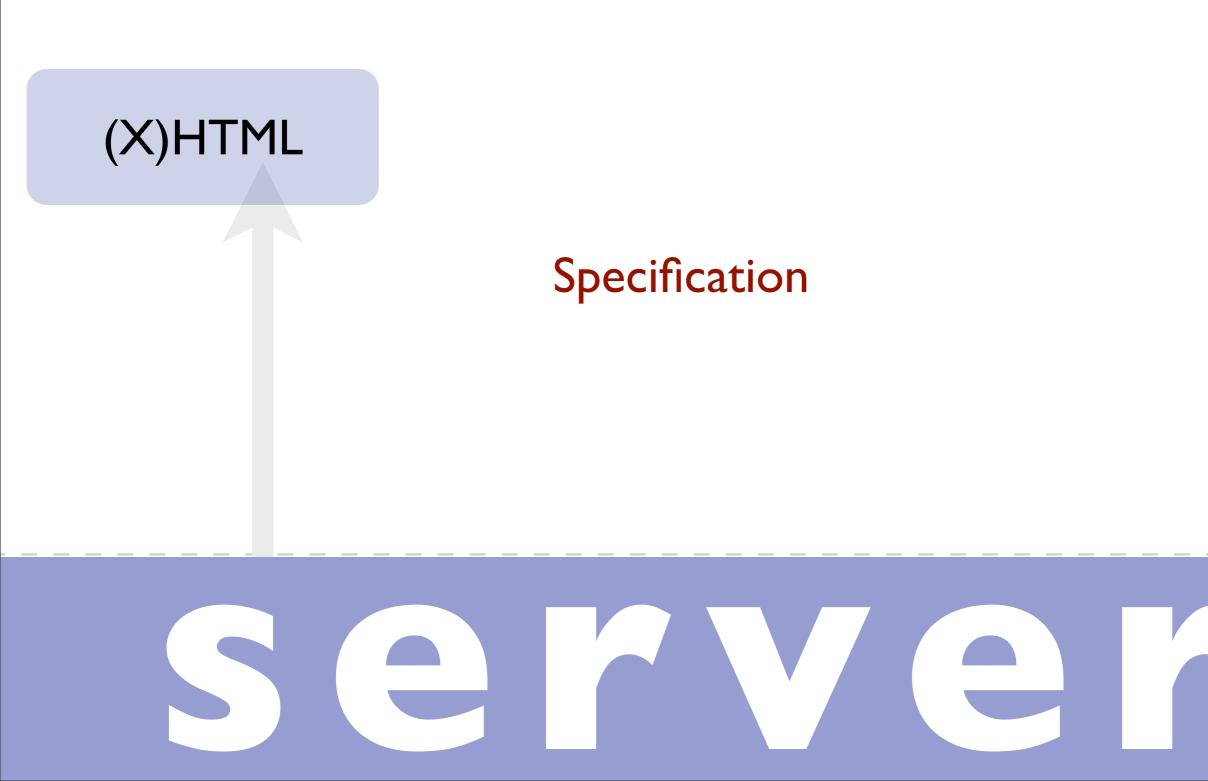
### The Yahoo! Stack



### SIMPLE?

#### no.







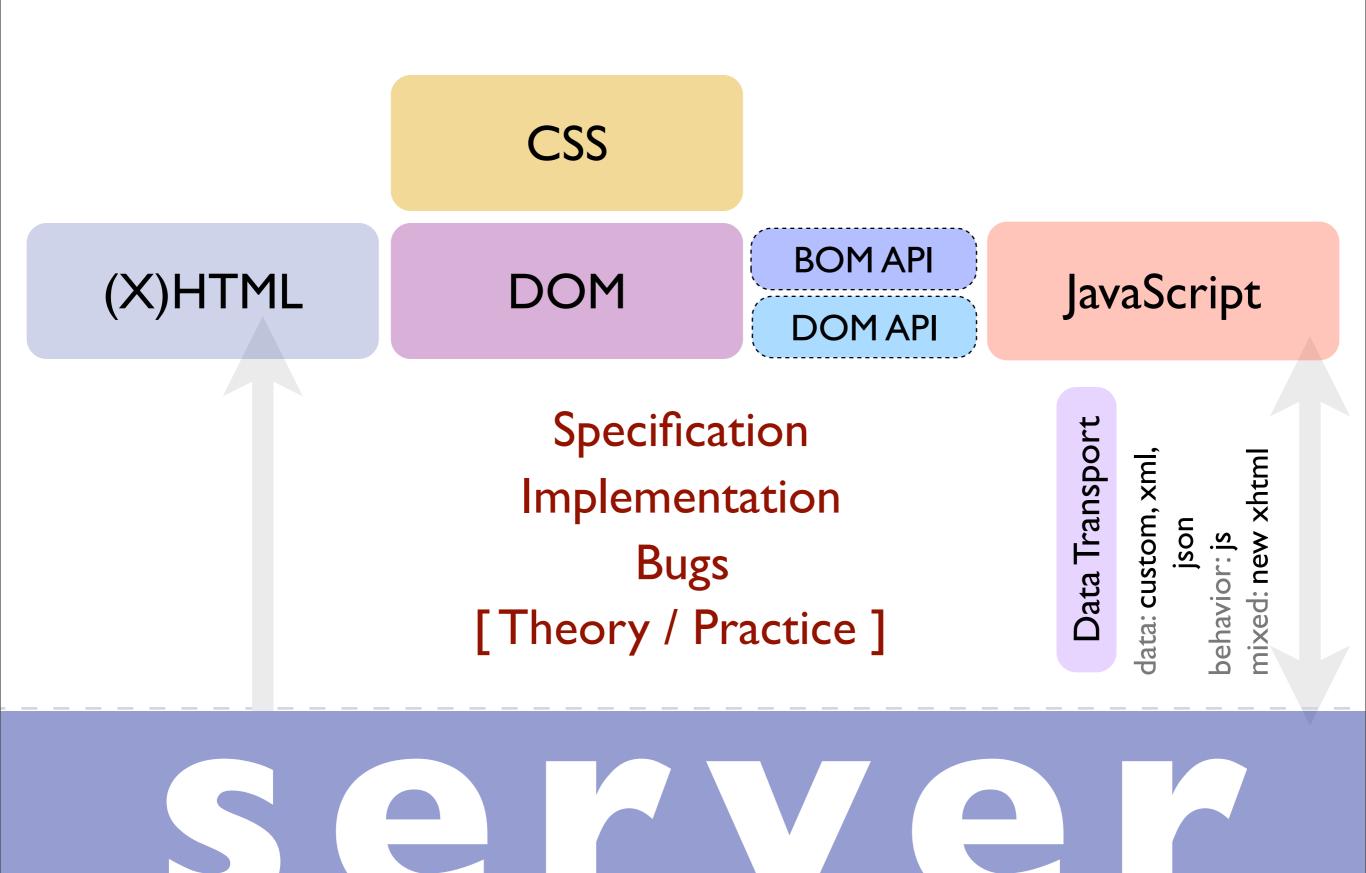
#### Specification Implementation

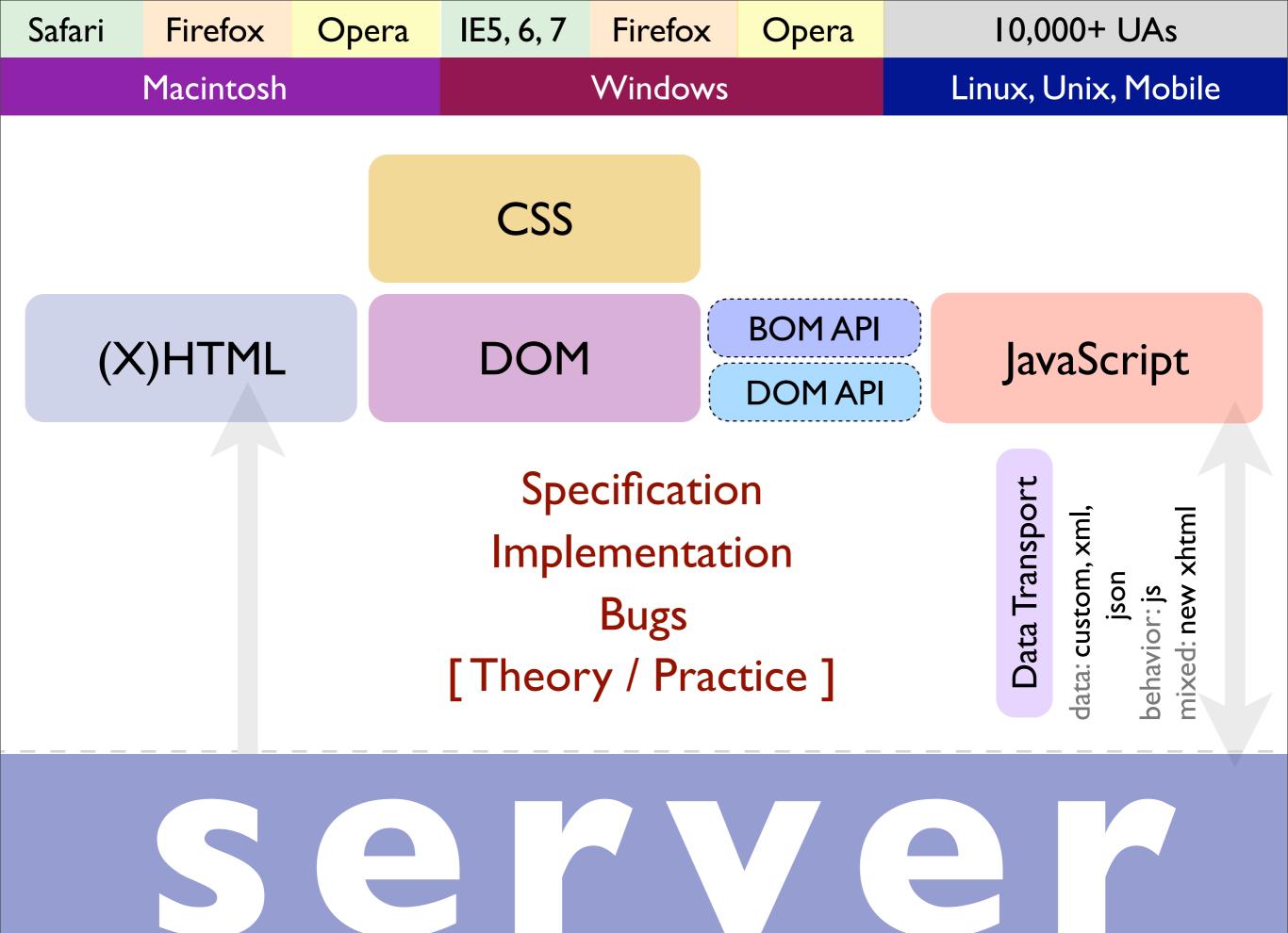


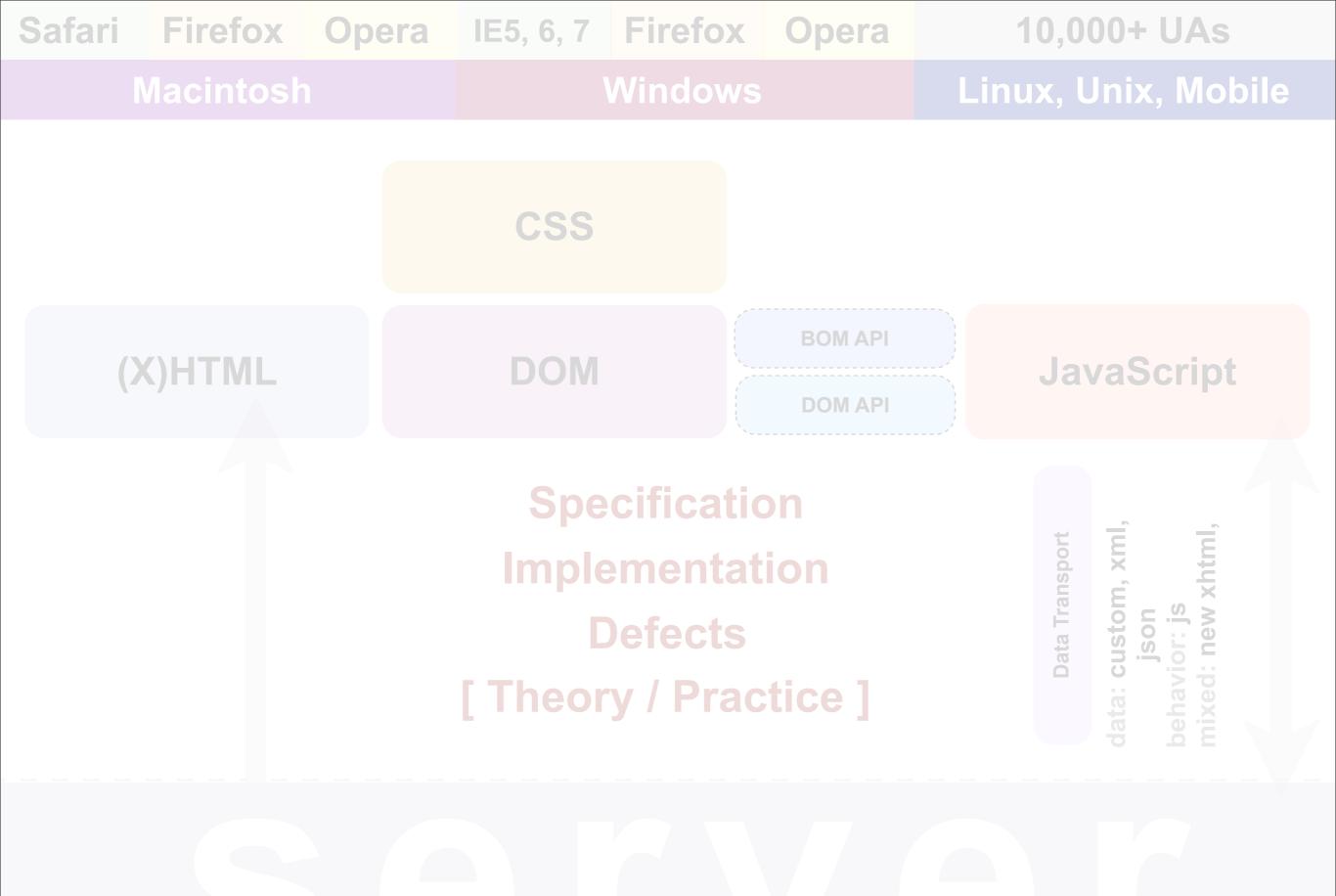
Specification Implementation Bugs

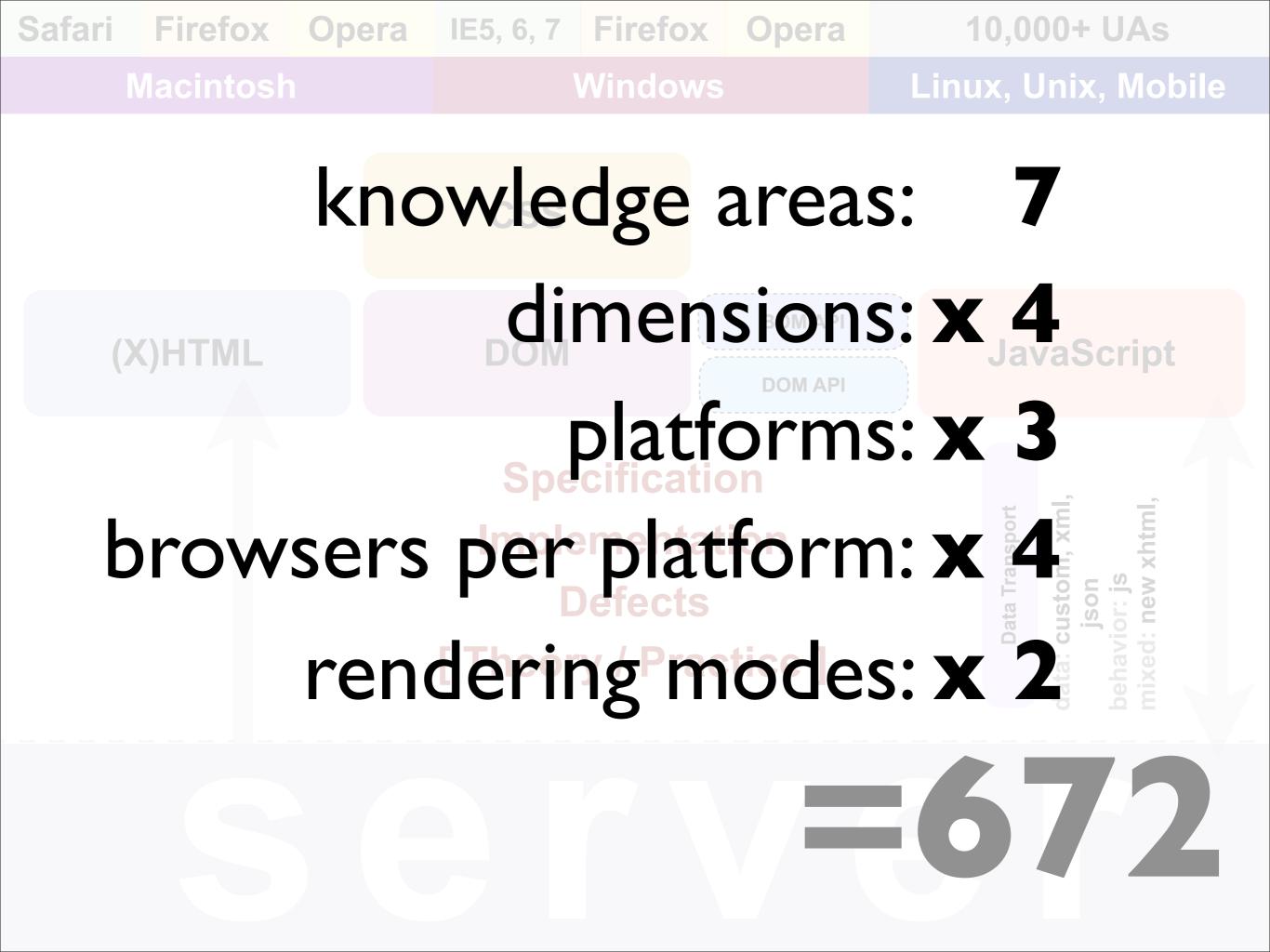


Specification Implementation Bugs [Theory / Practice ]

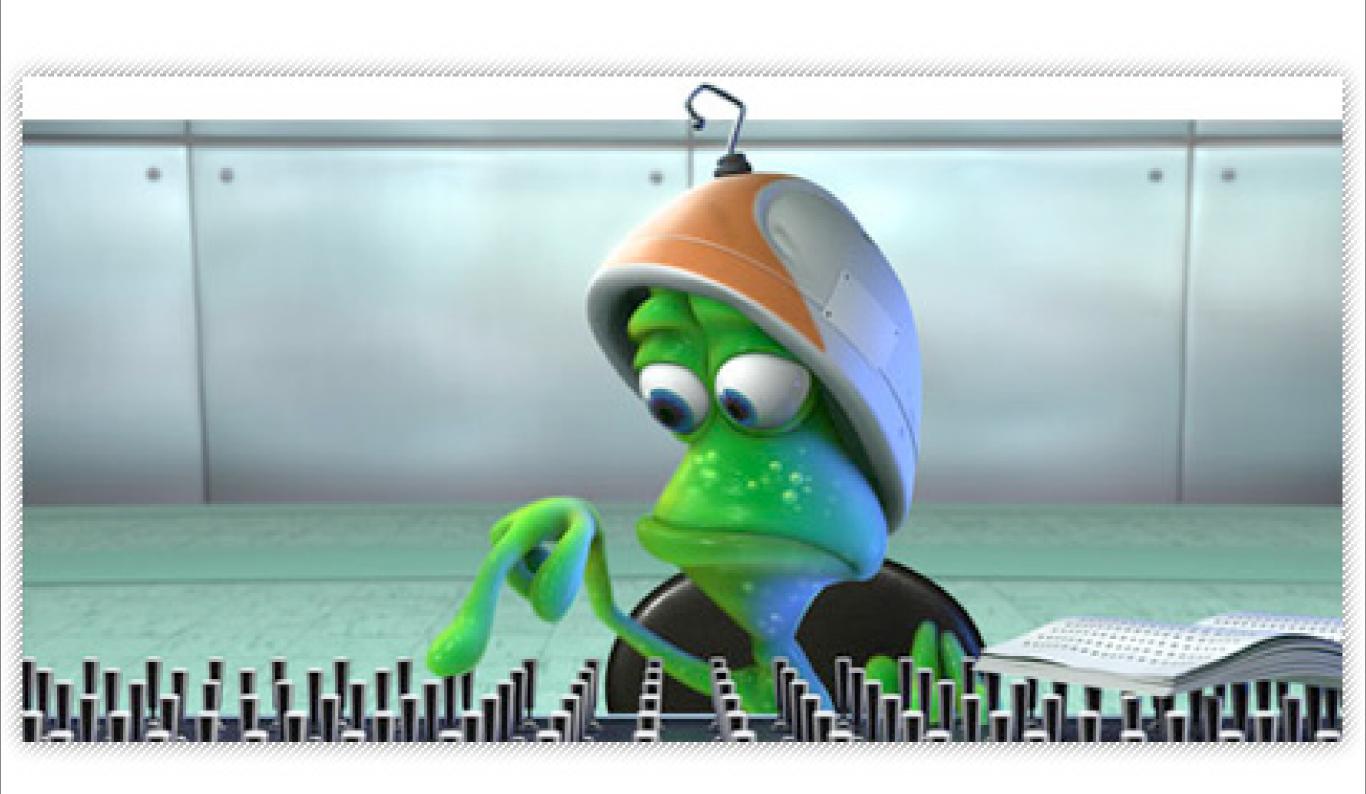








usability, internationalization, localization, visual design, accessibility, information architecture, security, build processes, performance, benchmarking, devices, portability



from *Lifted* ©2007 Pixar Animation Studios

## Different from Backend because we:

- Can't compile.
- Can't trust.
- Can't predict.
- Can't install or store.
- Can't hide anything!



#### Douglas Crockford on browsers: "The most hostile software development environment imaginable."

If your business is online... your value depends on Frontend Engineering. Elegant algorithms benefit users through interfaces built by Frontend Engineers. Every gorgeous design is brought to life by Frontend Engineers. Frontend engineers give sites strength & resilience, appearance & form, and functionality & interactivity. ...which is why professional frontend engineering is **critical** for success.

#### Historical Perspective

#### Beliefs & Principles

# Four Guiding Principles

#### I) Availability

Availability: Maximize availability, accessibility and utility of content and services for all users worldwide.



#### Openness: Share. Learn. Support. Advocate. We benefit from a healthy Internet.

#### 3) Richness

#### Richness: Provide richness, but not too much. Layer endlessly. Remember we are not average.

4) Stability

Stability: The Web is young. Invest in quality. Prepare for the future. Stability: The Web is young. Invest in quality. Prepare for the future. Start today!

#### Four Guiding Principles

- Availability
- Openness
- Richness
- Stability



# Three-Core Techniques

#### I) Progressive Enhancement

#### Flipped definition of "graceful degradation"

• Enrich content with thorough markup.

- Enrich content with thorough markup.
- Test core functionality with HTML only.

- Enrich content with thorough markup.
- Test core functionality with HTML only.
- Enhance layout with CSS.

- Enrich content with thorough markup.
- Test core functionality with HTML only.
- Enhance layout with CSS.
- Enhance behavior with JavaScript.

- Enrich content with thorough markup.
- Test core functionality with HTML only.
- Enhance layout with CSS.
- Enhance behavior with JavaScript.
- Respect end-user browser preferences.

- Enrich content with thorough markup.
- Test core functionality with HTML only.
- Enhance layout with CSS.
- Enhance behavior with JavaScript.
- Respect end-user browser preferences.
- Don't create barriers to entry.

#### 2) Unobtrusive JavaScript http://onlinetools.org/articles/unobtrusivejavascript/

• No JavaScript in HTML documents.

- No JavaScript in HTML documents.
- Don't depend on (or trust) JavaScript.

- No JavaScript in HTML documents.
- Don't depend on (or trust) JavaScript.
- Poke objects before using them.

- No JavaScript in HTML documents.
- Don't depend on (or trust) JavaScript.
- Poke objects before using them.
- Write JavaScript, not dialects.

- No JavaScript in HTML documents.
- Don't depend on (or trust) JavaScript.
- Poke objects before using them.
- Write JavaScript, not dialects.
- Mind your manners with vars & scope.

- No JavaScript in HTML documents.
- Don't depend on (or trust) JavaScript.
- Poke objects before using them.
- Write JavaScript, not dialects.
- Mind your manners with vars & scope.
- Support multiple event triggers.

#### Don't Break the Web!

href="#"
href="javascript:foo()"
onclick="foo()"

#### 3) Graded Browser Support http://developer.yahoo.com/yui/articles/gbs/

#### "Support" does not mean identical.

# "Support" is not a binary choice.

#### C-Grade

- Blacklist (of incapable browsers)
- Withhold CSS & JavaScript

#### C-Grade

- Blacklist (of incapable browsers)
- Withhold CSS & JavaScript

#### A-Grade

- Whitelist (of capable browsers tested)
- Serve CSS & JavaScript

#### C-Grade

- Blacklist (of incapable browsers)
- Withhold CSS & JavaScript

#### A-Grade

- Whitelist (of capable browsers tested)
- Serve CSS & JavaScript

#### X-Grade

- Everybody else.
- Serve CSS & JavaScript

	Win 2000	Win XP	Win Vista	Mac 10.4	Mac 10.5
Firefox 3.+	A-grade	A-grade	A-grade	A-grade	A-grade
Firefox 2.+		A-grade			A-grade
IE 7.0		A-grade	A-grade		
IE 6.0	A-grade	A-grade			
Opera 9.5 <sup>+</sup>		A-grade			A-grade
Safari 3.1 <sup>+</sup>				A-grade	A-grade

### A-Grade Support http://developer.yahoo.com/yui/articles/gbs

#### Yahool My Yahool Mail Welcome, nate.koechley [Sign Out, My Account]Search Home Help

 Web
 Images
 Video
 Audio
 Directory
 Local
 News
 Shopping
 More >>

 javascript
 Search the Web
 My Web (beta)
 My Web (beta)

#### **Search Results**

1 - 100 of about 192,000,000 for javascript - 0.22 sec. (About this page)

Also try: javascript download, free javascript, javascript tutorial More ....

Yahoo! JavaScript Directory: <u>JavaScript</u> - <u>Applets</u> - <u>Games</u> Yahoo! Shortcut - <u>About</u> My Web Results for javascript (53,199)

#### WEB RESULTS

Yahoo!'s: Seeing bad search results or ads for this query? Report them. Bucket test. NONE

- JavaScript.com Pa Resource for tutorials, scripts, and more. Category. Programming Languages > JavaScript Saved by 273 people www.javascript.com - 54k - <u>Cached</u> - <u>More from this site</u> - <u>Save</u>
   JavaScript Source, The Pa Cut and paste JavaScript library with source code.
- Category: <u>Programming Languages > JavaScript</u> Saved by 1049 people *javascript.internet.com - 60k* - Cached - More from this site - *Save*
- 3. JavaScript Wikipedia, the free encyclopedia

JavaScript is the name of Netscape Communications Corporation's implementation of ECMAScript, a scripting programming language based on the concept of prototypes. The language is best known for its use in websites, but is also used to enable ... toolbars etc are visible. Usually JavaScript is used to ensure that they ... Quick Links: <u>History</u> - <u>Usage</u> - <u>Syntax</u>

Saved by 8 people

#### Quer Lake Hutory - Usage - Syntax

The language is best known for its use in websites, but is also used to enable ... toolbars etc are vaible. Usually JavaScript is used to ensure that they .....

JavaScript - widgedia, the free encretopedia <sup>48</sup>
 JavaScript is the name of Netscape Communication's implementation of ECMAScript, a scripting programming language based on the concept of prototypes

- javascript.internet.com 60k Cached More from that site Sinv
  - aved by 1049 people

spory Programmed sugar

### C-Grade Experience

#### Yahoo! My Yahoo! Mail Welcome, nate.koechley [Sign Out, My Account] Search Home Help Web Images Video Audio Directory Local News Shopping More » TAHOO SEARCH javascript Search the Web My Web (beta) Answers My Web Search Services | Advanced Search Preferences Search Results 1 - 100 of about 192,000,000 for **javascript** - 0.04 sec. (About this page) SPONSOR RESULTS Also try: javascript download, free javascript, javascript tutorial More... JavaScript Certification Yahoo! JavaScript Directory: JavaScript - Applets - Games Find a school near you offering Yahoo! Shortcut - About JavaScript certification courses. www.computertrainingschools.com Yahoo!'s: Seeing bad search results or ads for this query? Report them. Bucket test: NONE JavaScript Editor Design HTML from XML and DBs 1. JavaScript.com 🖻 with advanced JavaScript. Try for Resource for tutorials, scripts, and more. free... Category: Pr ramming Languages > JavaScript www.altova.com Saved by 273 people www.javascript.com - 54k - Cached - More from this site - Save Java Applets - Secure Them with SSL 2. JavaScript Source, The 🖻 Gaining the trust of customers is Cut and paste JavaScript library with source code. vital to the success of online... Category: Programming Languages > JavaScript www.verisian.com Saved by 1049 people javascript.internet.com - 60k - Cached - More from this site - Save Java Script: Yahoo! Shopping 3. JavaScript - Wikipedia, the free encyclopedia 🖻 Compare prices on Java Script, read JavaScript is the name of Netscape Communications Corporation's implementation of ECMAScript, a scripting programming language reviews and more at Yahoo!... based on the concept of prototypes. The language is best known for its use in websites, but is also used to enable ... toolbars etc are shopping.yahoo.com visible. Usually JavaScript is used to ensure that they ... Quick Links: <u>History</u> - <u>Usage</u> - <u>Syntax</u> Saved by 8 people Low Prices On Java Books en.wikipedia.org/wiki/JavaScript - 51k - Cached - More from this site - Save Find low prices on today's bestselling books about Java at. 4. JavaScript Tutorial 🖻 www.allhookstores.com Free HTML XHTML CSS JavaScript DHTML XML DOM XSL XSLT RSS AJAX ASP ADO PHP SQL tutorials, references, examples for web building. ... JavaScript is used in millions of Web pages to improve the design, validate forms, detect browsers ... find complete Stylus Studio XML Tools references of all JavaScript objects and the HTML DOM objects . Free Download Saved by 102 people Edit XML, DTD, XML Schema, www.w3schools.com/js/default.asp - 23k - Cached - More from this site - Save XSL/XSLT, XQuery, XHTML, Javascript Out.. 5 JavaScript 电 www.stylusstudio.com search mozilla: JavaScript. News. JavaScript 1.5 Beta released, see the JavaScript 1.5 announcement for more information. What is search mozilia: JavaScript News. JavaScript 1.5 Beta released, see the JavaScript 1.5 announcement for more information. What is 6. JavaScript th Javascript O.t. A-Grade Experience

# C-Grade Experience

• Rating

Private

(Edit)

Tags

[2]

[3]

1. Hated it

<u>Not bad</u>
 <u>Liked it</u>
 Loved it

• Sharing Permissions

2. Didn't like it

# A-Grade Experience



#### Rating

Sharing Permissions Private ( <u>Private</u>)

Tags [?] ⇒ monkey, southeast asia ( <a href="https://www.southeast.asia">/www.southeast.asia</a>

Comments G 1 comments on this photo

#### **Photo Details**

Image size: 2592x1944 pixels
 Best print size: 8x10 Print
 Best print size: 8x10 brint
 Image size: 3285x1844 pixels

#### Photo Details

## Three Core Techniques

- Progressive
   Enhancement
- Unobtrusive JavaScript
- Graded Browser
   Support



# Making Decisions

34.19

# Making Decisions (I)

Do what is standard.
 if impossible, then:
 Do what is common.
 if impossible, then:
 Do what it takes.

# Making Decisions (2)

#### I. Do what is **simple**.

# 2. Do what is flexible & progressive.

3. Do what is **open**.

# Making Decisions (3)

- Remember you have multiples audiences to satisfy:
  - Users
  - Developers
  - Machines

### Historical Perspective

### Beliefs & Principles

Knowledge Areas & Best Practices

### 8 Areas of Focus

I. HTML
2. CSS
3. JavaScript
4. Accessibility

5. Internationalization

6. Performance

7. Infrastructure & Process

8. Tooling



### HTML

Focus: Be thorough. pros use the complete language



#### <fieldset>



### <caption>



### 

### <ins datetime="2008-05-30">

## Aim for permanence.

### (Switching costs are rising.)





Focus: Specificity pros use thoughtful selectors

### selector: declaration;

selector: declaration;

### h1: declaration;

### #mod h1: declaration;

#### div#mod h1: declaration;

#### body.cart #mod h1.class a: declaration;

### #mod ul li li: declaration;

#### Focus: Maintenance think about how sites age



# JavaScript

# JavaScript

QualitySecurity

I) Quality

# Linting

- Use programs like JSLint (jslint.org) to confirm the quality of your code.
- Adopt the idioms it promotes to improve your code quality.

# Unit Testing w/YUI Test

- Simply syntax for rapid test creation.
- Advanced failure detection ability.
- Grouping test cases into test suites.
- Can run tests for events and Ajax.
- DOM Event simulation across A-grade.

# Profiling

- Learn where to improve your code.
- Programmatically retrieve profiling information as the application is running.
- Determine unit-testing success based on profiling results.

# JavaScript Pollution

- Don't mutate JavaScript itself.
- Do protect yourself from browsers.
- Minimize touchpoints between authors and vendors so vendors can iterate faster.



# JavaScript Security

- Beware of XSS
- Never Trust Data from the Client
- Monitor AdSafe/Caja Developments



## Accessibility

#### W3C's ARIA Accessible Rich Internet Apps

Decouple Events mouse & keyboard



#### Internationalization

# Begin serving all .css and .js at UTF-8

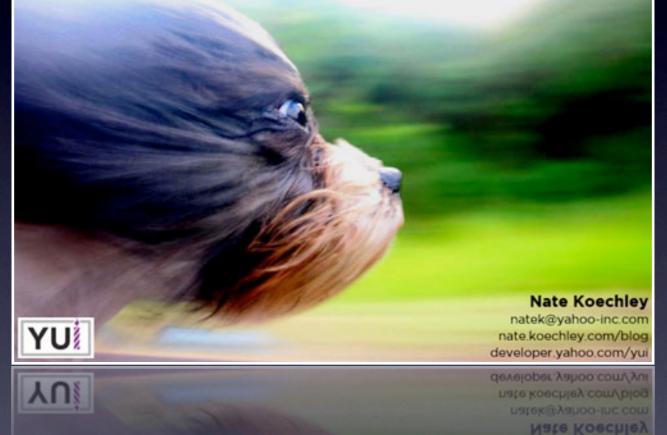
@charset "



### Performance

#### **High Performance Web Sites**

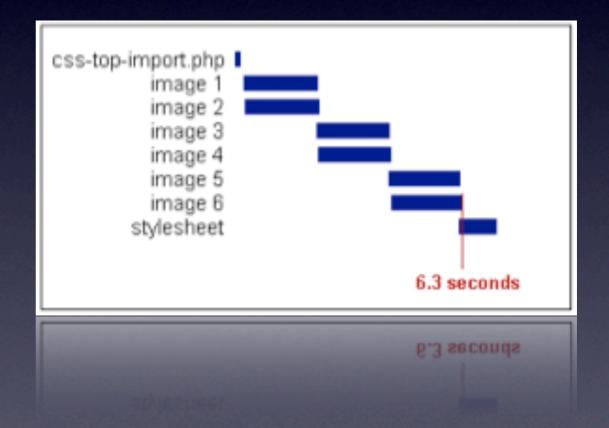
14 rules for faster pages



14 then, 8 more today.

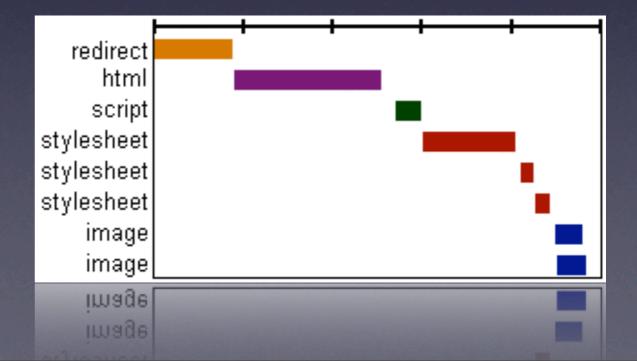
## link> not @import

 Because @import overrides the browsers' native performance sequencing.



### Avoid Redirects

- 3xx status codes mostly 301 and 302
   HTTP/1.1 301 Moved Permanently
   Location: http://yahoo.com/newuri
- Cache redirects via Expires headers
- Redirects are worst form of blocking



# Use Cookie-Free Domains For Assets.

Serving static cacheable assets from a distinct domains keeps cookies from riding along with all requests.
 yimg.com
 images-amazon.com
 fbcdn.net

#### I. Unconditional preload - always w/ onload Example: google.com's sprite

- I. Unconditional preload always w/ onload Example: google.com's sprite
- 2. Conditional preload based on user action Ex: search.yahoo.com's Search Assist

- I. Unconditional preload always w/ onload Example: google.com's sprite
- 2. Conditional preload based on user action Ex: search.yahoo.com's Search Assist
- 3. Anticipated preload give redesigns a boost

I. Horizontal alignment is usually smaller than vertical.

- Horizontal alignment is usually smaller than vertical.
- 2. Combine similar colors in a sprite to minimize color count. Only 256 colors can fit in a PNG8.

- I. Horizontal alignment is usually smaller than vertical.
- 2. Combine similar colors in a sprite to minimize color count. Only 256 colors can fit in a PNG8.
- 3. Avoid unnecessarily large gaps between parts of the sprite.

# GET for Ajax Requests

- POST is a two-step process.
- GET can send in one packet.
- Use if possible, but max payload is 2K in IE.

# Keep Focusing on Events

- I. Event Delegation to reduce total number
- 2. Don't always wait for onLoad
  - YUI Event has onAvailable, onContentReady, & onDomReady

# iPhone Tip

• iPhone will not cache assets larger than 25K

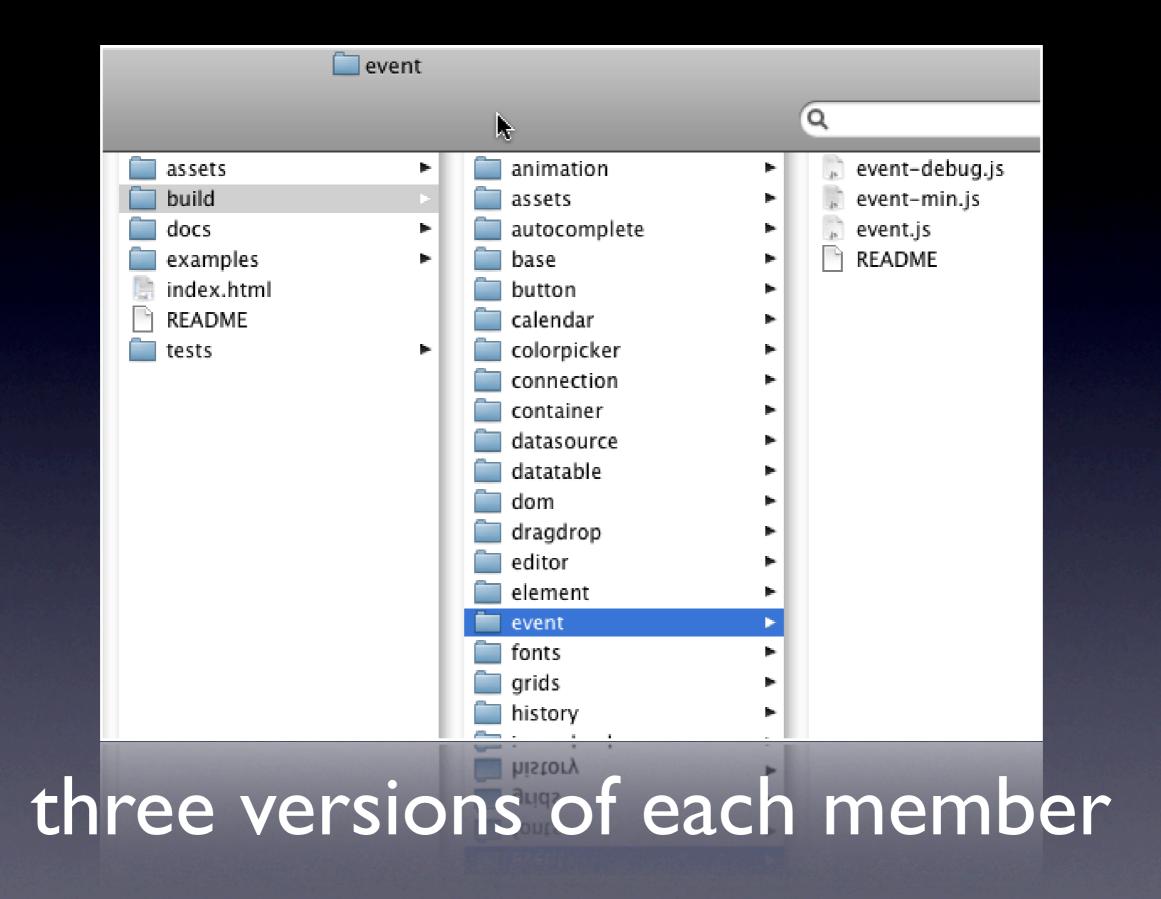
- That's 25K <u>uncompressed</u>.
- Only 19 total items in cache.
- <u>http://yuiblog.com/blog/2008/02/06/iphone-</u> <u>cacheability/</u>



# Infrastructure & Process

#### **Build Process**

#### Documentation



```
128
      /**
129
       * Subscriber listener sigature constant. The FLAT type returns two
       * parameters: the first argument passed to fire and the optional
130
       * custom object
131
132
       * @property YAHOO.util.CustomEvent.FLAT
133
       * @static
134
       * @type int
135
       */
136
      YAHOO.util.CustomEvent.FLAT = 1;
                                                     Ŧ
137
138
      YAHOO.util.CustomEvent.prototype = {
139
          /**
140
           * Subscribes the caller to this event
141
           * @method subscribe
142
143
           * @param {Function} fn The function to execute
           * @param {Object} obj An object to be passed along when the event
144
145
                                        fires
146
           * @param {boolean/Object} override If true, the obj passed in becomes
                                              the execution scope of the listener.
147
148
                                              if an object, that object becomes the
149
                                              the execution scope.
           */
150
          subscribe: function(fn, obj, override) {
151
152
             if (!fn) {
153
      throw new Error("Invalid callback for subscriber to '" + this.type + "'");
154
1EE
      throw new Error("Invalid callback for subscriber to '" + this.type + "'");
154
             if (!fn) {
```

```
IT (THIS.SIGNATURE == TAHOU.UTIL.CUSTOMEVENT.FLAT) {
    var param = null;
    if (args.length > 0) {
        param = args[0];
    }
    try {
        ret = s.fn.call(scope, param, s.obj);
    } catch(e) {
        this.lastError = e;
        YAHOO.log(this + " subscriber exception: " + e,
                  "error", "Event");
    }
} else {
   try {
        ret = s.fn.call(scope, this.type, args, s.obj);
    } catch(e) {
        this.lastError = e;
        YAHOO.log(this + " subscriber exception: " + e,
                  "error", "Event");
    }
}
if (false === ret) {
    if (!this.silent) {
        YAHOO.log("Event cancelled, subscriber " + i +
                  " of " + len, "info", "Event");
    }
```

242

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

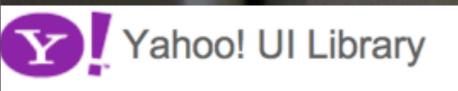
268

269

269

\*-debug.js

	<pre>'"+this.type+"'");}if(this.subscribeEvent){this.subscribeEvent.fire(B,C,A);}this.subscr</pre>			
	<pre>ibers.push(new YAH00.util.Subscriber(B,C,A));},unsubscribe:function(D,F){if(!D){return</pre>			
	<pre>this.unsubscribeAll();}var E=false;for(var B=0,A=this.subscribers.length;B<a;++b){var< pre=""></a;++b){var<></pre>			
	C=this.subscribers[B];if(C&&C.contains(D,F)){thisdelete(B);E=true;}}return			
	E;},fire:function(){var D=this.subscribers.length;if(!D&&this.silent){return true;}var			
	G=[],F=true,C,H=false;for(C=0;C <arguments.length;++c){g.push(arguments[c]);}if(!this.si< td=""></arguments.length;++c){g.push(arguments[c]);}if(!this.si<>			
	lent){}for(C=0;C <d;++c){<i>var</d;++c){<i>			
	<pre>K=this.subscribers[C];if(!K){H=true;}else{if(!this.silent){}var</pre>			
	J=K.getScope(this.scope);if(this.signature==YAHOO.util.CustomEvent.FLAT){ <i>var</i>			
	A=null;if(G.length>0){A=G[0];}try{F=K.fn.call(J,A,K.obj);}catch(E){this.lastError=E;}}e			
	<pre>lse{try{F=K.fn.call(J,this.type,G,K.obj);}catch(E){this.lastError=E;}}if(false===F){if(!</pre>			
	<pre>this.silent){}return false;}}if(H){var</pre>			
	<pre>I=[],B=this.subscribers;for(C=0,D=B.length;C<d;c=c+1){i.push(b[c]);}this.subscribers=i;< pre=""></d;c=c+1){i.push(b[c]);}this.subscribers=i;<></pre>			
	<pre>}return true;},unsubscribeAll:function(){for(var</pre>			
	<pre>B=0,A=this.subscribers.length;B<a;++b){thisdelete(a-1-b);}this.subscribers=[];return< pre=""></a;++b){thisdelete(a-1-b);}this.subscribers=[];return<></pre>			
	B;},_delete:function(A){var B=this.subscribers[A];if(B){delete B.fn;delete			
	<pre>B.obj;}this.subscribers[A]=null;},toString:function(){return"CustomEvent:</pre>			
	<pre>'"+this.type+"', scope:</pre>			
	"+this.scope;}};YAHOO.util.Subscriber= <i>function</i> (B,C,A){this.fn=B;this.obj=YAHOO.lang.isU			
	<pre>ndefined(C)?null:C;this.override=A;};YAH00.util.Subscriber.prototype.getScope=function(A</pre>			
	){if(this.override){if(this.override===true){return this.obj;}else{return			
	this.override;}}return			
	A;};YAHOO.util.Subscriber.prototype.contains= <i>function</i> (A,B){if(B){return(this.fn==A&&thi			
	<pre>s.obj==B);}else{return(this.fn==A);}};YAH00.util.Subscriber.prototype.toString=function(</pre>			
	<pre>){return"Subscriber { obj: "+this.obj+", override: "+(this.override  "no")+"</pre>			
	<pre>}";};if(!YAH00.util.Event){YAH00.util.Event=function(){var H=false;var I=[];var</pre>			
	J=[];var G=[];var E=[];var C=0;var F=[];var B=[];var A=0;var			
*	D={63232:38,63233:40,63234:37,63235:39,63276:33,63277:34,25:9};return{POLL_RETRYS:4000,			
	POLL_INTERVAL:10,EL:0,TYPE:1,FN:2,WFN:3,UNLOAD_OBJ:3,ADJ_SCOPE:4,OBJ:5,OVERRIDE:6,lastEr			
	ror:null,isSafari:YAHOO.env.ua.webkit,webkit:YAHOO.env.ua.webkit,isIE:YAHOO.env.ua.ie,_i			
	nterval:null,_dri:null,DOMReady:false,startInterval:function(){if(!thisinterval){ <i>var</i>			
•	<pre>nterval:null,_dri:null,DOMReady:false,startInterval:function(){if(!thisinterval){var</pre>			
	<pre>ror:null,isSafari:YAH00.env.ud.webkit,webkit:YAH00.env.ua.webkit,isIE:YAH00.env.ua.ie,_i</pre>			
	POLL_INTERVAL:10,EL:0,TYPE:1, 2,WHN.5,ONLDAD_OBJ:,,ADJ_SCOPE:4,OBJ:5,OVERRIDE:6,laster			
	D={63232:38,63233:40,63234:37,63 = 896 2 89 632 82,25:9};return{POLL_RETRYS:4000, POLL_INTERVAL:10,EL:0,TYPE:1 2,2,WLN.3,0NLDAD_0BJ:,,ADJ_SCOPE:4,0BJ:5,OVERRIDE:6,Laster			



#### TreeView Widget

#### 2.3.0

#### Yahoo! UI Library > treeview

Modules	Module: treeview	Show Protected	Show Private
animation	The treeview widget is a generic tree building tool.		
autocomplete			
button	Search treeview:		
calendar			
colorpicker			
connection	Start huning to find a property/method/event/config		1
container	Start typing to find a property/method/event/config		
datasource			
datatable			
dom			•
dragdrop			
editor			
element			
event			
history			
imageloader			
logger			
menu			
slider			
tabview			
treeview			
			K



## Tooling

## Need More Progress.

#### But there's been some:

- JSLint, JScript Debugger, Firebug, Debug Bar, Fiddler, Charles, HTTP Live Headers, DragonFly, Visual Studio 2008
- YUI Logger, YUI Test, and YUI Profiler

#### Historical Perspective

#### Beliefs & Principles

Knowledge Areas & Best Practices

Why It All Matters There's a lot of work to be done. We need more people doing it.

The health of the internet depends on it.

The health of our businesses and passions depends on it.

## We must stay vigilant.

#### We must defend users.

# Go forth with this in mind:

## Be Belligerent Gatekeepers of Quality

Do not accept less. Do not cut corners.

## Be Tireless Trendsetters of Quality

Be active. Find the way forward. Educate.

## Always Exhibit Stubborn Empathy for Users

We're the last line of defense!

# nate@koechley.com http://nate.koechley.com/bloq

#### natekoechley = twitter,

delicious, flickr, tripit, last.fm, linkedin, fireeagle, friendfeed, ... everywhere.

# CC Images Used

- <u>http://www.flickr.com/photos/dideo/407360526/sizes/l/</u>
- <u>http://www.flickr.com/photos/jenniferbuehrer/113554568/sizes/l/</u>
- <u>http://www.flickr.com/photos/peteashton/290691658/sizes/l/</u>
- <u>http://www.flickr.com/photos/pedjap/101230548/sizes/o/</u>
- <u>http://www.flickr.com/photos/songtuyuri/2200100451/sizes/o/</u>
- <u>http://www.flickr.com/photos/dominik99/1403329318/sizes/o/</u>
- <u>http://www.flickr.com/photos/cuellar/482993472/sizes/o/</u>