The design of visual information

Anthony Hornof

October, 2003

February, 2011

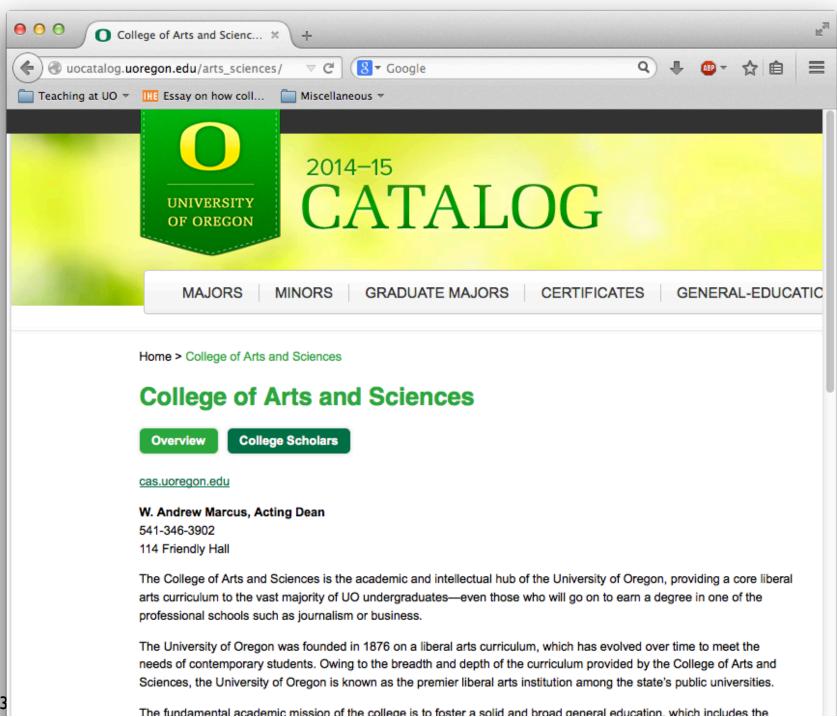
October, 2014

Three main points on the design of visual information

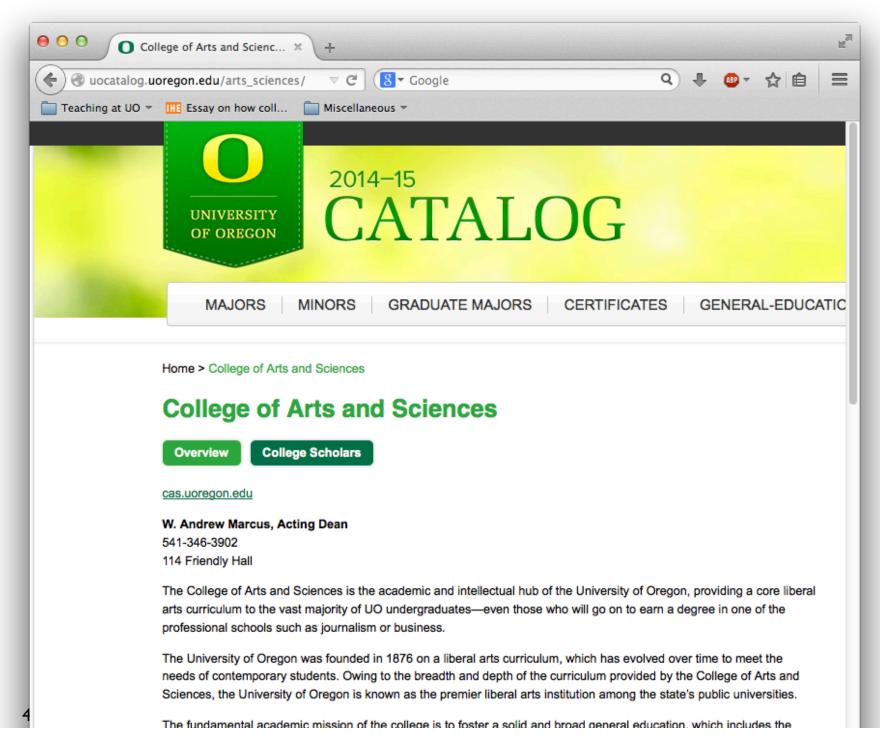


- Make sure the information that the user will need is readily available.
- Organize the information so that it is presented in a manner that is easy for the user to access (given fundamental perceptual-cognitive-motor abilities).
- Always keep in mind what is the user's task, and how it will unfold over time.

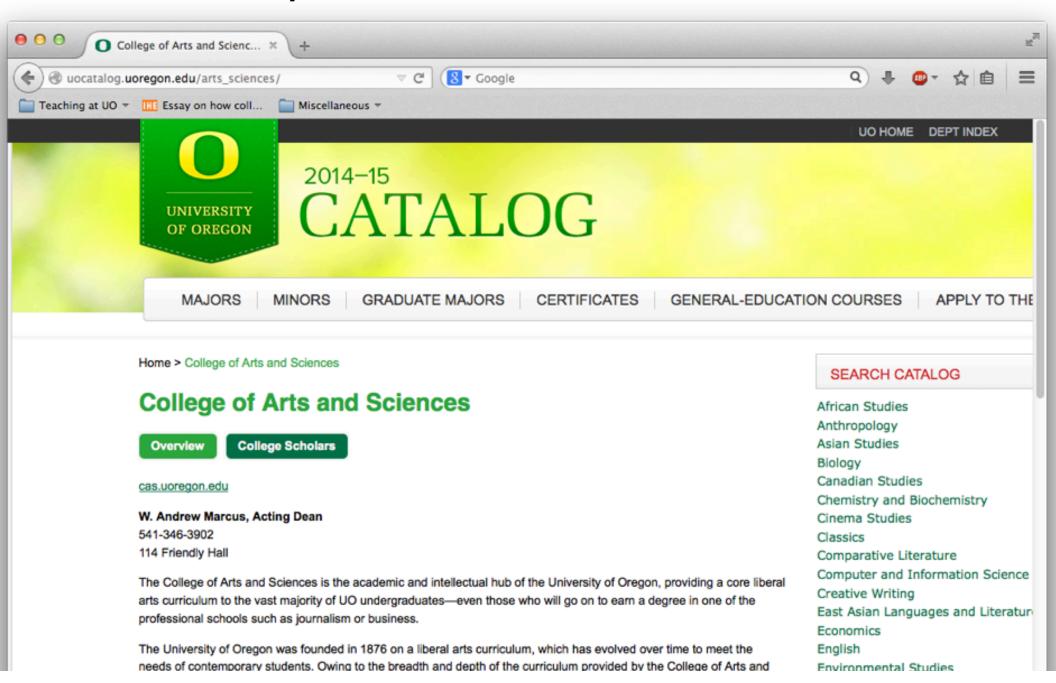
Is this a good interface?



The task is to click on the CIS link or search the catalog.

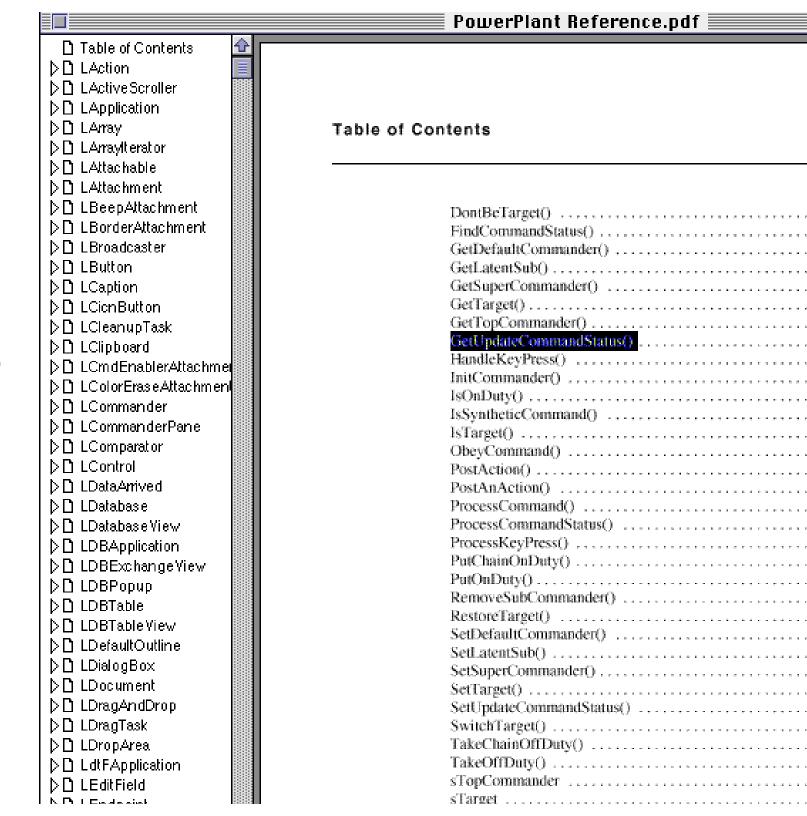


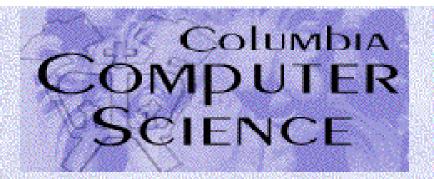
Support the user's task at the perceptual level. Make necessary visual information visible.



Make necessary information visible.

Make taskrelevant text readable.





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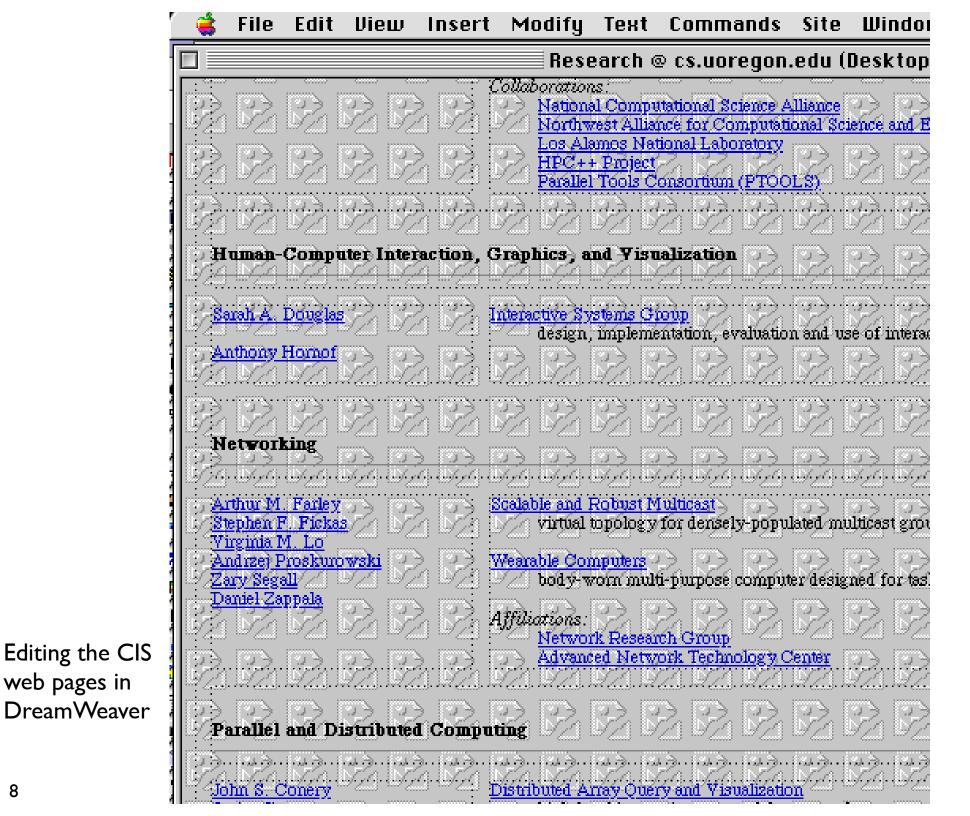
Research Groups, Technical Report Archive, Faculty Research Guide, Research Interests, Related Departments and Research Centers



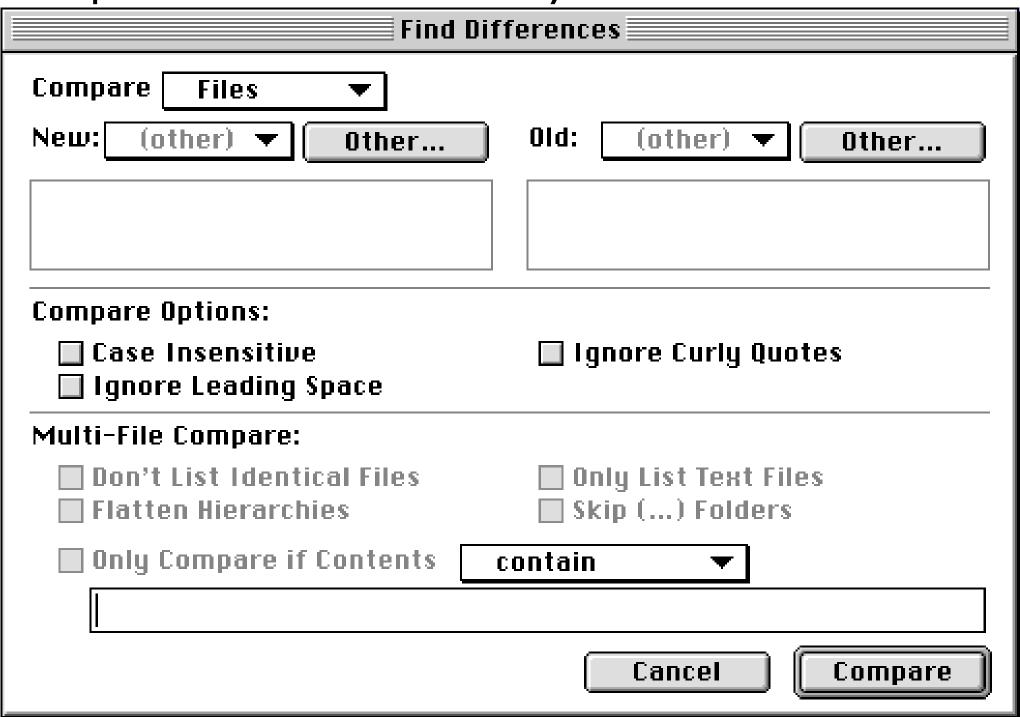
Faculty, Staff, Ph.D. Students, M.S. Students, Undergraduates, Affiliates, Ph.D. Alumni, Graduating Ph.D. Students, Alumni, Search, List by User ID

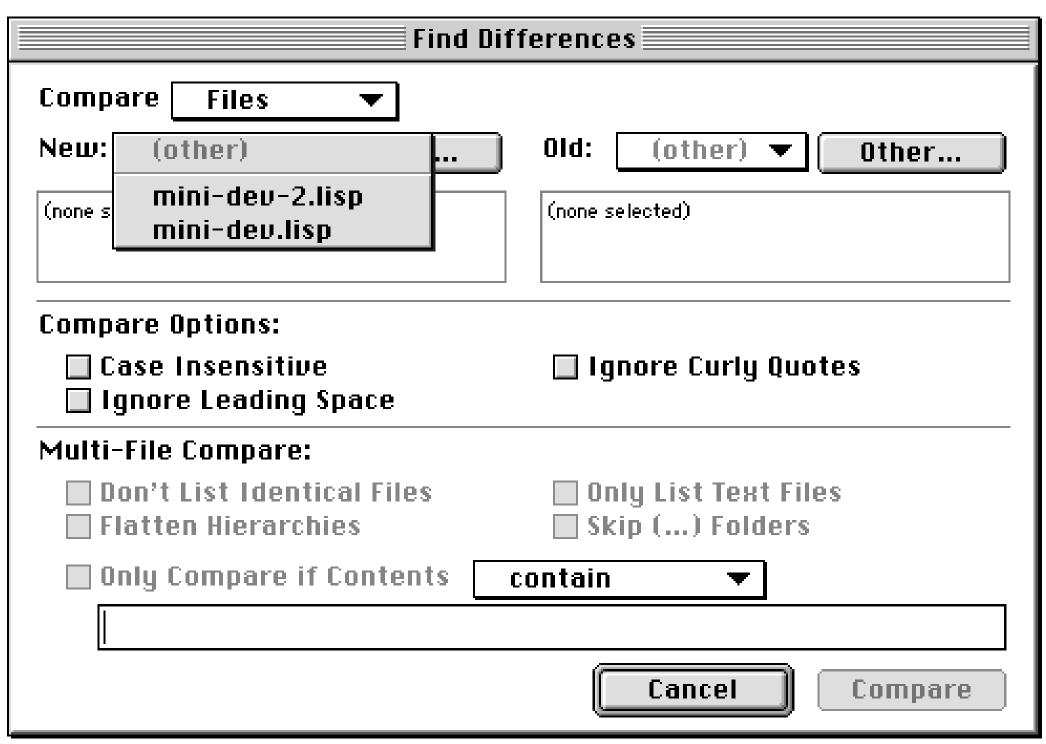


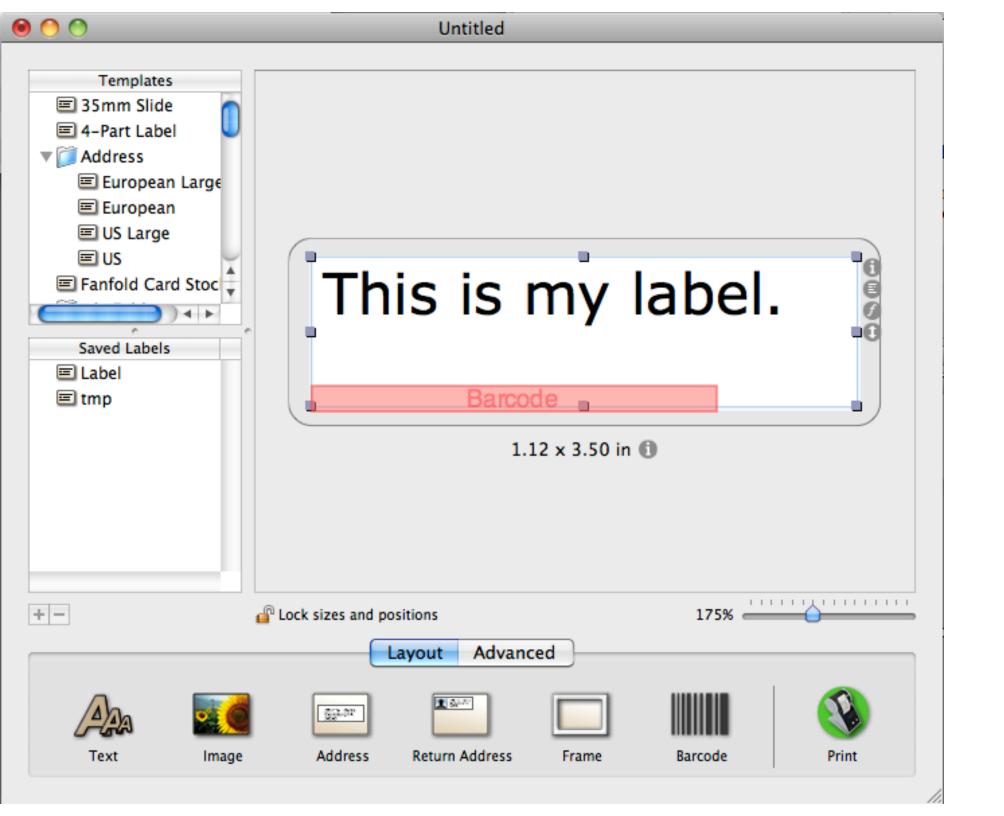
Undergraduate, M.S., Professional, Ph.D.



Compare the two files currently loaded in the editor.







Three main points on the design of visual information



- Make sure the information that the user will need is readily available.
- Organize the information so that it is presented in a manner that is easy for the user to access (given fundamental perceptual-cognitive-motor abilities).
- Always keep in mind what is the user's task, and how it will unfold over time.

Proximity Alignment Repetition Contrast

Group related items and give them headings.





Visor Prism amazing colo

free shipping + free digital came

Reviewing the Reviewers

Home Search About ConsumerSearch FAQ's Jobs

Finding the best reviews

Analyzing their picks Identifying the best products Choose a category to start

Electronics

- DVD Players
- Handheld Computers PDA
- CD Writers
- VCRs
- TV-VCR Combos
- Television Sets
- More...

Computers

- · Home Design Software
- Desktops, Budget
- Desktops, High-End
- <u>Laptops</u>, Budget
- Laptops, High-End
- Color Inkjet Printers
- More...

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- Digital Cameras
- Digital Camporders
- 35mm Cameras
- SLR Cameras
- APS Cameras
- Camcorders
- More...

Office

- Portable PC Projectors
- Fax Machines
- Job Sites
- Desktop Copiers
- Desktop Publishing Software
- Office Chairs
- More...

House & Home

- Yacuums, Upright
- Washing Machines
- Long Distance Phone Service
- Cordless Drills
- Air Conditioners
- Air Purifiers
- More...

Kitchen

- Breadmakers
- Dishwashers
- Espresso Machines
- Cookware
- Coffee Makers
- Juicers
- More...

Family

- Car Seats, Infant
- Baby Monitors
- Men's Electric Shavers
- Car Seats, Convertible
- Cat Food
- Double Strollers
- More...

Personal Finance

- Tax Preparation Software
- Online Brokers
- Small-Cap Mutual Funds
- Bond Mutual Funds
- Online Bill Paying
- Large-Cap Mutual Funds
- More...

Automotive

- TiresSUVs
- Minivans
- Pickup Trucks
- Radar Detectors
- Family Sedans
- More...

Health & Fitness

- Treadmills
- Home Gyms
- Elliptical Trainers
- Exercise Bikes
- Weight Loss Programs
- Stair Steppers
- More...

Sports & Leisure

- Gas BBQ Grills
- Handheld GPS
- Binoculars
- Backpacking Stoves
- Hiking Boots
- Kids Bikes
- More...

Lawn & Garden

- Snow Blowers
- Leaf Blower-Vacs
- Lawn Mowers
- Hedge Trimmers
- String Trimmers
- More...

Use perceptual groupings.

Location: http://www.cs.columbia.edu/home/textonly/

The frames and image version is here

Columbia University Department of Computer Science

450 Computer Science Building Fu Foundation School of Engineering & Science

Telephone (212) 939-7000, Fax (212) 666-0140

Mailing Address: 1214 Amsterdam Avenue, Mailcode: 0401 New York, NY 10027-7003

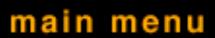
The Hunes day hinge version is <u>note</u> .
General Info - [Mission] [News] [Directions] [Contacts] [Links] [Events] [CRF] [FTP]
Academics - Course Information [(new) Fall '98] [Spring '99] [General Academics] [Ph.D. Registration]
Research - [Groups] [Tech Reports] [Guide] [Interests] [Links]
People - [Search] [Faculty][Staff] [Ph.D.][Masters][Undergraduate][Affiliates][Alumni]
Admissions - [Undergraduates] [Masters] [Professional] [Doctorate]
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CUCS Februster c vebruster@es.columbia.edu >

Created on: Sun Nov 8 19:14:46 1998 | Version: 1.0 | Last modified: Wed Dec 2 15:13:36 1998

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Use a grid.				
16				

Use a grid.

The New Hork Times

Technology

Twesday, May 15, 2001 12:51 AM (10-Minute Updates)

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Circuits on THURSDAYS

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7 DAY INDEX

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Sony and AOL Join Forces on the Video Game Front

By JOHN MARKOFF

Sony Computer Entertainment and America Online, seeking a strategic alliance against Microsoft, plan to announce a new relationship intended to blend the video-game and online Internet experience.

Review of Revised Internet Names Contract

By SUSAN STELLIN

VeriSign and the Internet Corporation for Assigned Names and Numbers will review an agreement that would change the contract that governs VeriSign's control over the Internet address system.

Loss of Internet Provider Has Businesses Searching for a Link

By JAYSON BLAIR

Hundreds of New York small business owners still struggle to replace the DSL service they lost when Internet service provider NorthPoint Communications declared bankruptcy last month and shut down its network.

Advanced Micro Unveils New Chip

By CHRIS GAITHER

Advanced Micro Devices introduced a new line of mobile microprocessors in an effort to re-establish a presence in laptop computers.

The Green Revolution Yields to the Bottom Line

By ANDREW POLLACK

Agricultural research -- once the realm of public institutions like land-grant colleges -- is increasingly being controlled by private companies.



High Bail Is Ordered in Trade-Secret Case

By THE NEW YORK TIMES

A federal magistrate ordered that bail be set at \$900,000 each for the three men accused of conspiring to steal trade secrets from Lucent Technologies.

An Audio Spotlight Creates a Personal Wall of Sound

By JENNIFER 8, LEE

A 28-year-old graduate student has invented a device that projects a discrete beam of sound in much the same way a spotlight projects a beam of light.

CINET NEWS FROM

CalPERS spreads wealth around 6:20 p.m. ET

<u>Label releases</u> <u>copy-protected CD</u> <u>with Pride</u> 4:55 p.m.

Microsoft and XP give USB 2.0 a break 4:40 p.m. ET

Clarent lays off 10 percent 3:10 p.m. ET

VC watch: This week's funding wins 2:40 p.m. ET

Publishing start-up captures Adobe veteran 1:50 p.m. ET

"Spyware" piggybacks on Napster rivals 12:45 p.m. ET

Telecom scavengers bulk up with bargains 12:45 p.m. ET

Agere's ax falls 12:25 p.m. ET

New KML e-business standard introduced 12:15 p.m. ET

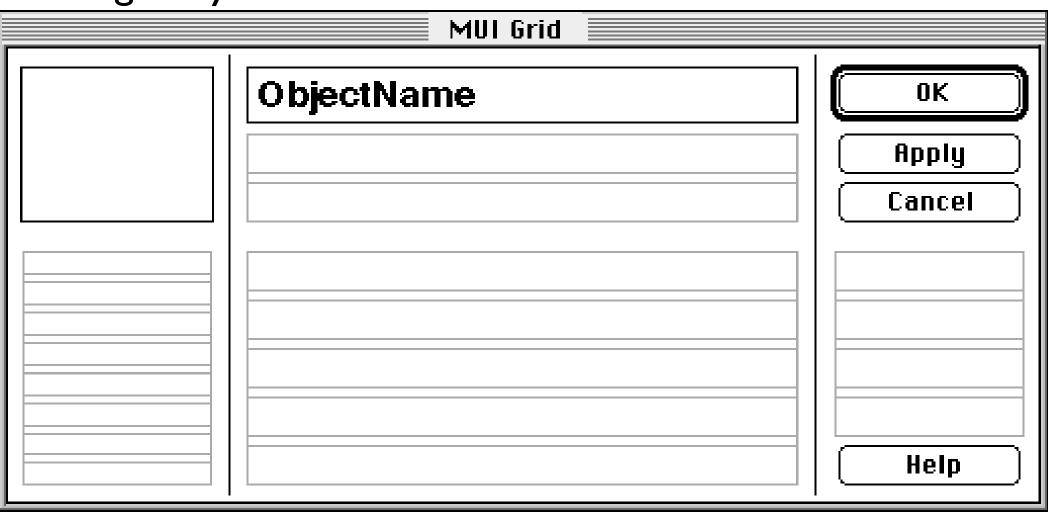
Web popularity swells overseas 12:10 p.m. ET

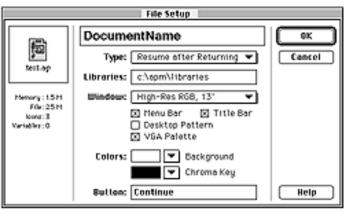
HP fights counterfeiting in Asia 11:15 a.m. ET

BREAKING TECHNOLOGY NEWS

AP | REUTERS

Use a grid system.







Response Options				
	Respons	seName		0K
Text	Type:	Text	Ŧ	Cancel
	Match:	Words [Incremental	
Display	Erase:	After Next Entry	▼	
L : 100	Response:	NotJudged	~	
T: 200 V: 220	Branch:	Try Again	~	
H : 24	"	☑ Capitalization ☐ Punctuation ☐ Extra Words	Spaces Order	Help

Proximity Alignment Repetition Contrast



Advanced Search Preferences Search Tips

human-computer interaction Google Search

[I'm Feeling Lucky]

Category: Computers > Human-Computer Interaction

University of Maryland, Human-Computer Interaction Lab

... The **Human-Computer Interaction** Lab (HCIL) at the University of Maryland has a mission to design, implement, and evaluate new interface technologies that are ...

Description: Development of user interfaces and research. Projects include information visualization, digital...

Category: Computers > Human-Computer Interaction www.cs.umd.edu/hcil/ - 23k - Cached - Similar pages

Human-Computer Interaction Resources on the Net

Human-Computer Interaction Resources on the Net.

By Mikael Ericsson. This is a collection ...

Description: a collection of information related to **Human-Computer Interaction** (HCI) by Mikael Ericsson

Category: Computers > Human-Computer Interaction

www.ida.liu.se/labs/aslab/groups/um/hci/ - 7k - Cached - Similar pages

HCl Bibliography: Human-Computer Interaction Publications and ...

HCI Bibliography: Human-Computer Interaction Resources Last Modified:

2001-04-02 Accesses since 1998-04-10: 234307 ...

Description: The HCI Bibliography (HCIBIB) is a list of publications and resources on

human-computer interaction

Category: Computers > Human-Computer Interaction www.hcibib.org/ - 11k - Cached - Similar pages

Human-Computer Interaction Institute

Category: Computers > Human-Computer Interaction > Departments
www.cs.cmu.edu/afs/cs.cmu.edu/user/hcii/www/hcii-home.html - 3k - Cached - Similar pages

A Brief History of **Human Computer Interaction** Technology

A Brief History of Human Computer Interaction Technology. ... Keywords:

Human Computer

Interaction, History, User Interfaces, Interaction Techniques. ...

www.cs.cmu.edu/~amulet/papers/ujhistory.tr.html - 34k - <u>Cached</u> - <u>Similar pages</u>

[More results from www.cs.cmu.edu]

University of Maryland, Human-Computer Interaction Lab

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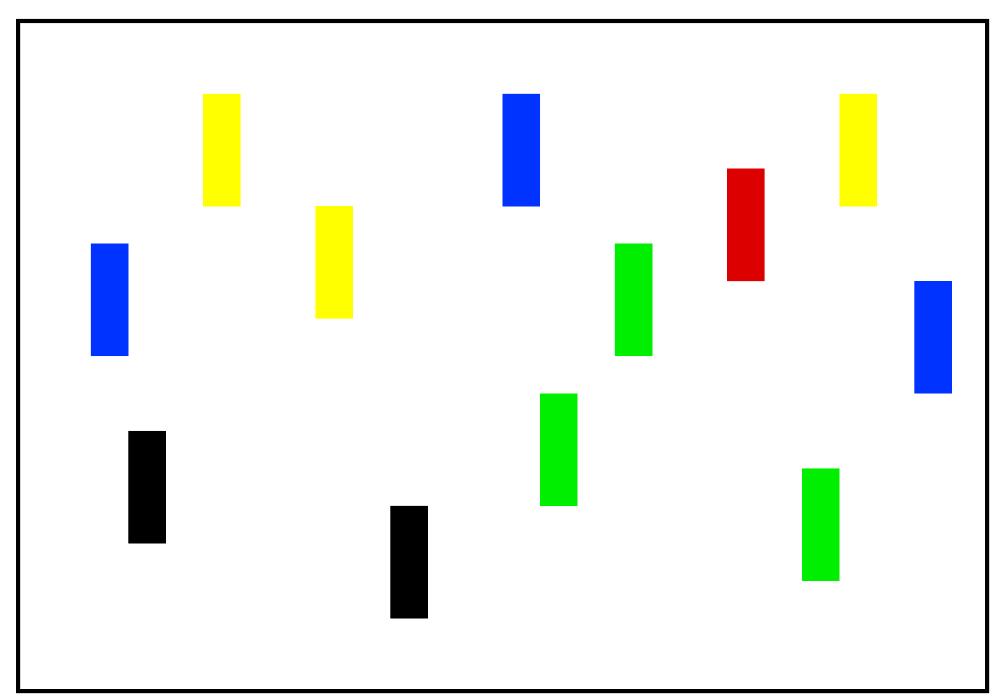
human-computer interaction

Category: Computers > Human-Computer Interaction

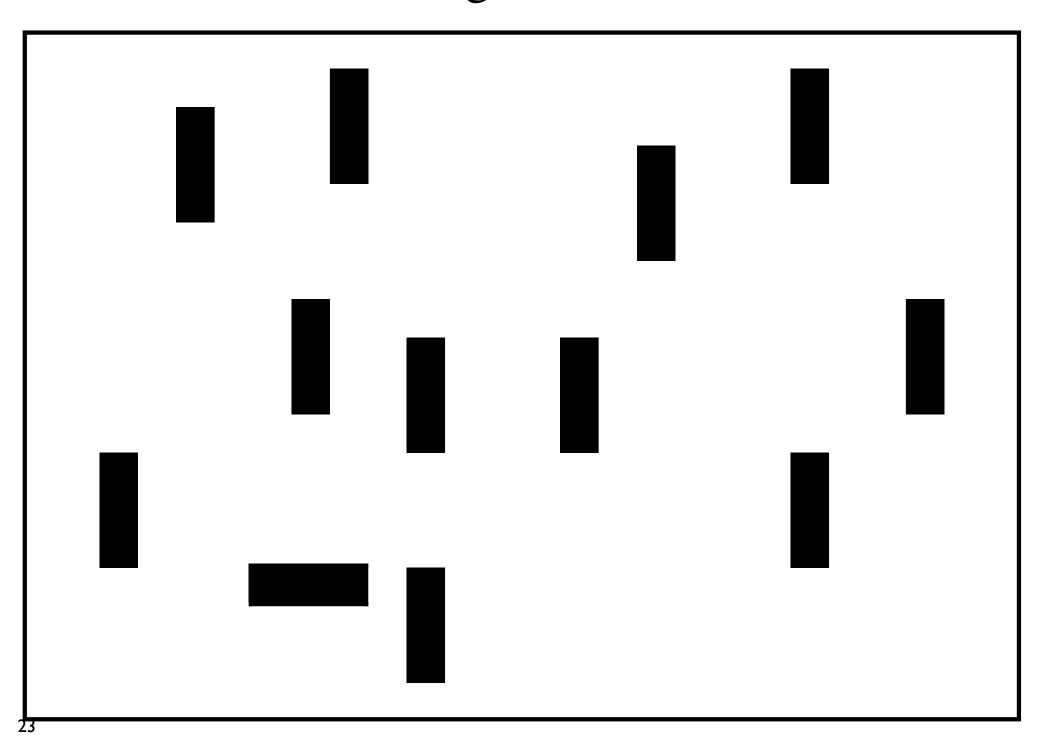
www.hcibib.org/ - 11k - <u>Cached</u> - <u>Similar pages</u>

Peripherally-salient primary visual features such as color, size, and orientation appear to "pop-out." Use these features to distinguish the target item.

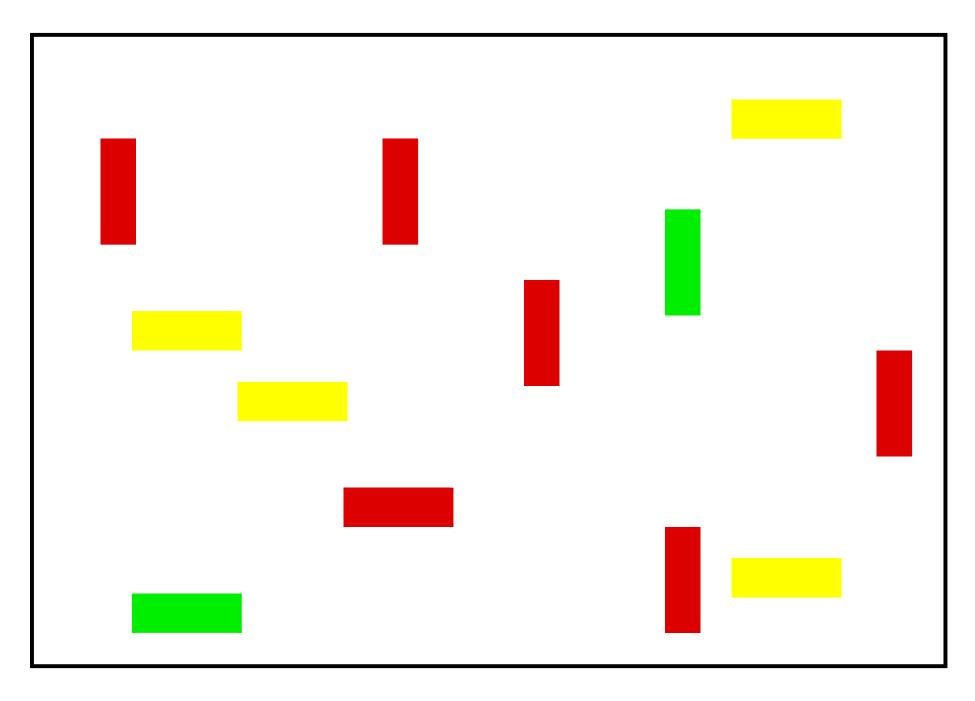
Find the red target.



Find the horizontal target.

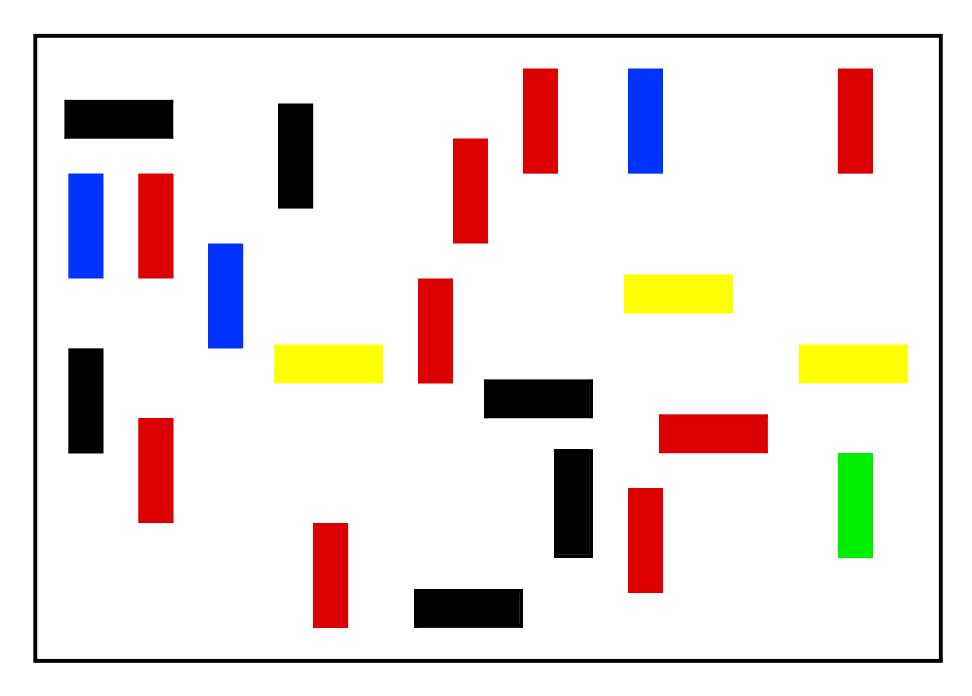


Find the horizontal red.



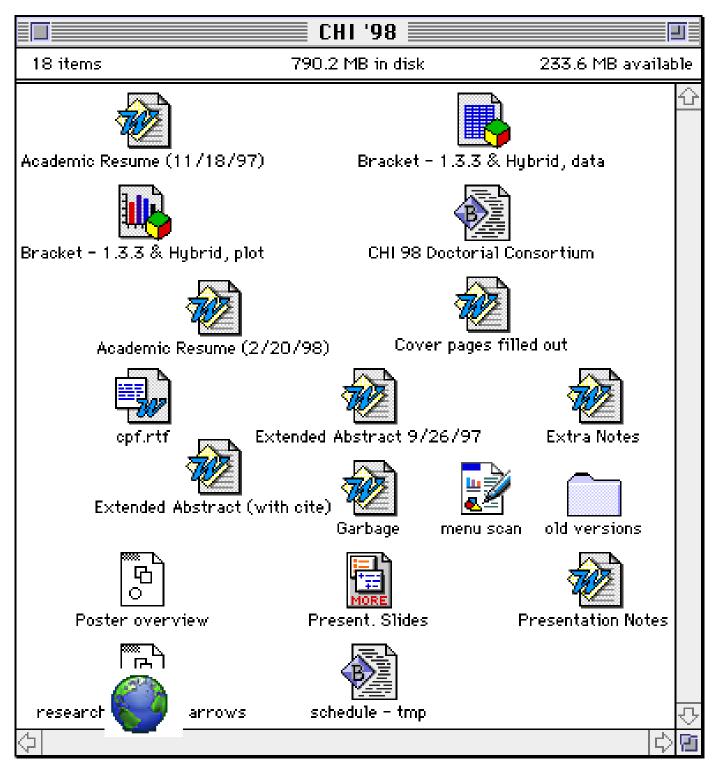
11 distractors

With more distractors.



21 distractors

Task: find the file entitled "Present. Slides".



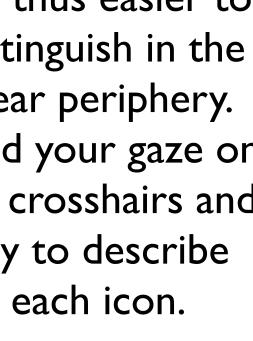
iOS 6 vs iOS 7 icons

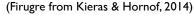
http://applenapps.com/ feature/ios-7-vs-ios-6comparing-the-homescreen-stock-app-icons





iOS 6 vs iOS 7. The new icons better emphasize the primary visual features of color, shape, and size, and are thus easier to distinguish in the near periphery. Hold your gaze on the crosshairs and try to describe











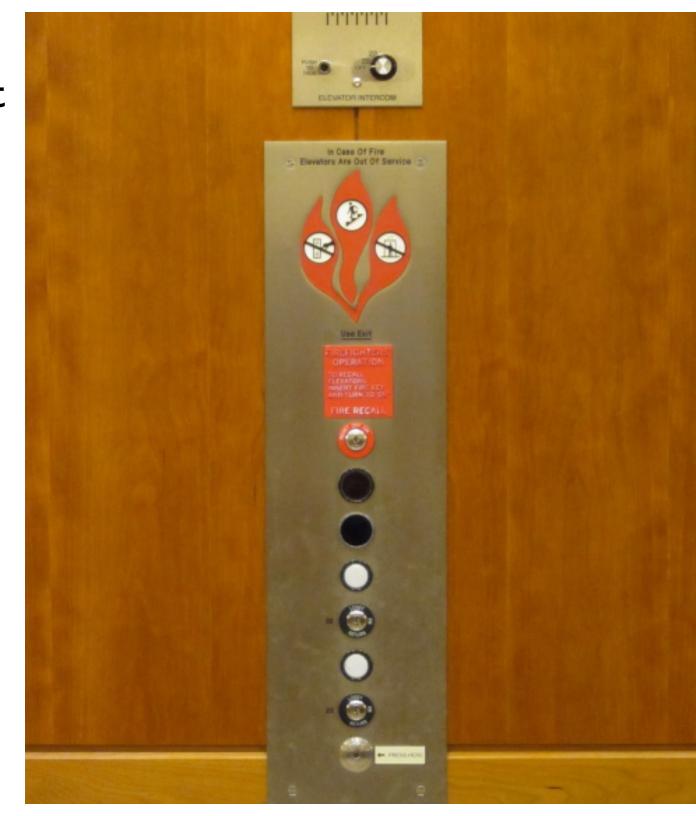








Task: Get to the basement parking at the Riverbend Hospital.



Task: Get to the basement parking at the Riverbend Hospital.



Task: Get to the basement parking a the Riverbend Hospital.

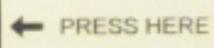
The lesson learned here is to remove "distractors".





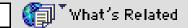












University of Oregon's DuckWeb Information System



DuckWeb is an interactive web application that provides easy access to information. Be prepared to supply your nine-digit User Id and your Personal Access Code(PAC). If you are a student, this is the same PAC you use to access DuckCall.

For security reasons, DuckWeb requires that your browser be configured to accept cookies. For best performance, it is recommended that you use the 4.x versions (or later) of Netscape or Internet Explorer.

DuckWeb is generally available 24 hours a day. There may be occasional breaks in service when the system is down for routine maintenance, especially most Sunday evenings from 6pm to midnight.



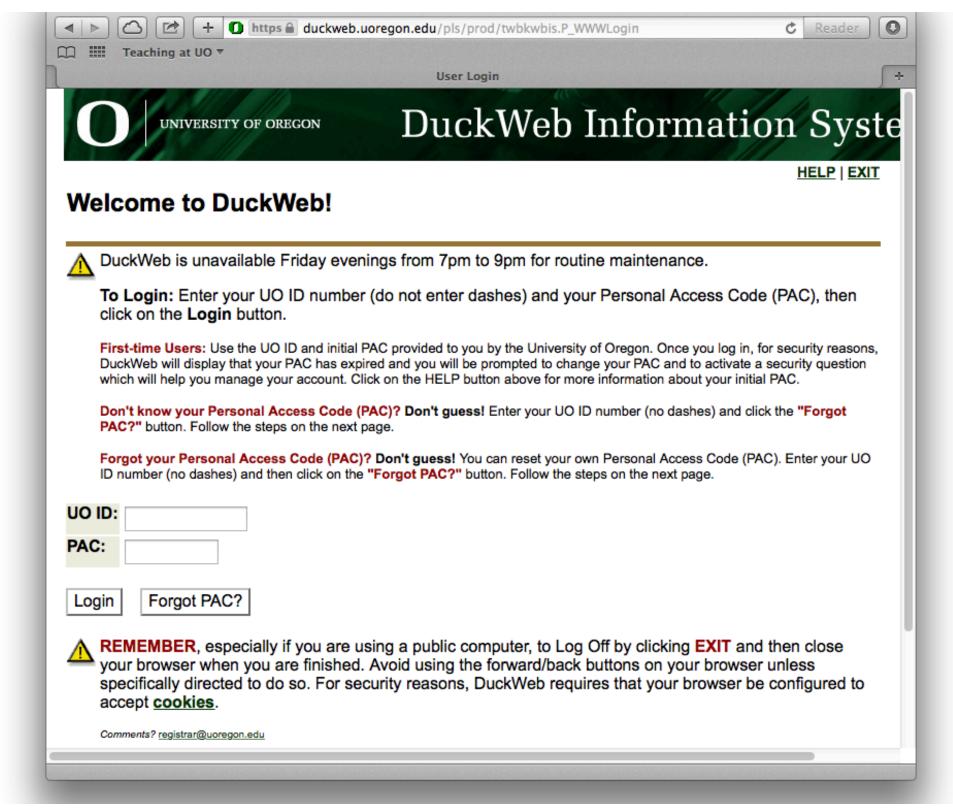


REMEMBER, especially if you are using a public terminal, to press the **LOG OFF** button when you are finished. Avoid using the forward/back buttons on your browser unless specifically directed to.

Student Related Links

[UO Home Page] [DuckHunt] [Registrar] [Financial Aid] [Admissions] [Career Center]

Questions or comments about DuckWeb can be directed to: gfreeman@oregon.uoregon.edu.



HELP | EXIT

User Login

Info: Please enter your UO Id number and your personal access code (PAC) for access to University Of Oregon's DuckWeb Information System. When finished press the **Login** button

The first time you login, you will be asked to activate a security question which will help you manage your DuckWeb account. Login now, then follow the three easy steps on the next page.

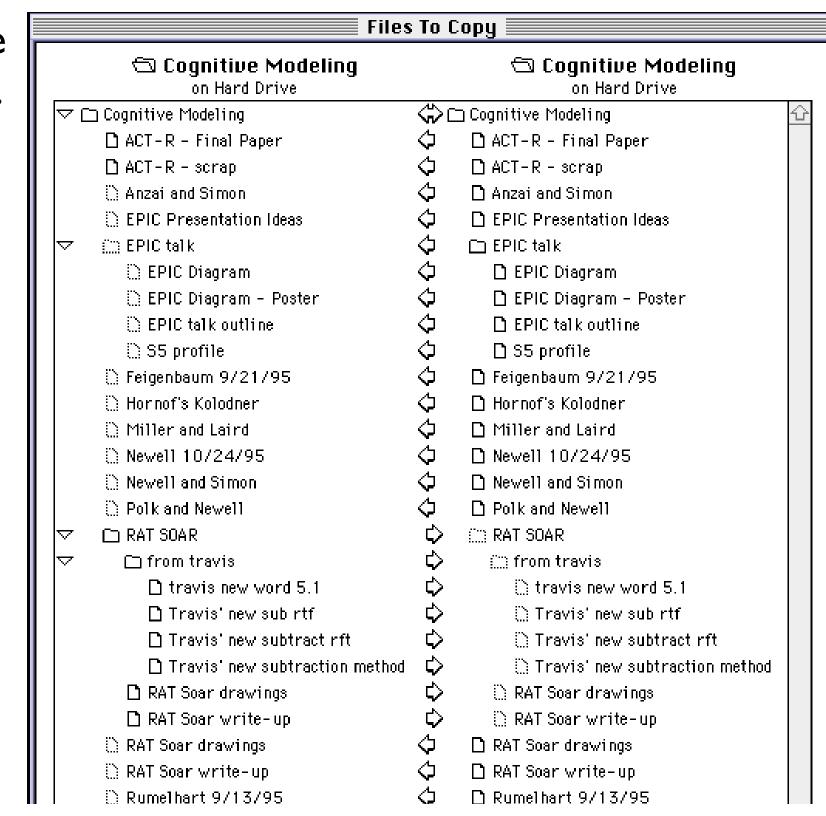
UO Id:	
PAC:	

Forgot PAC?

RELEASE: 5.3

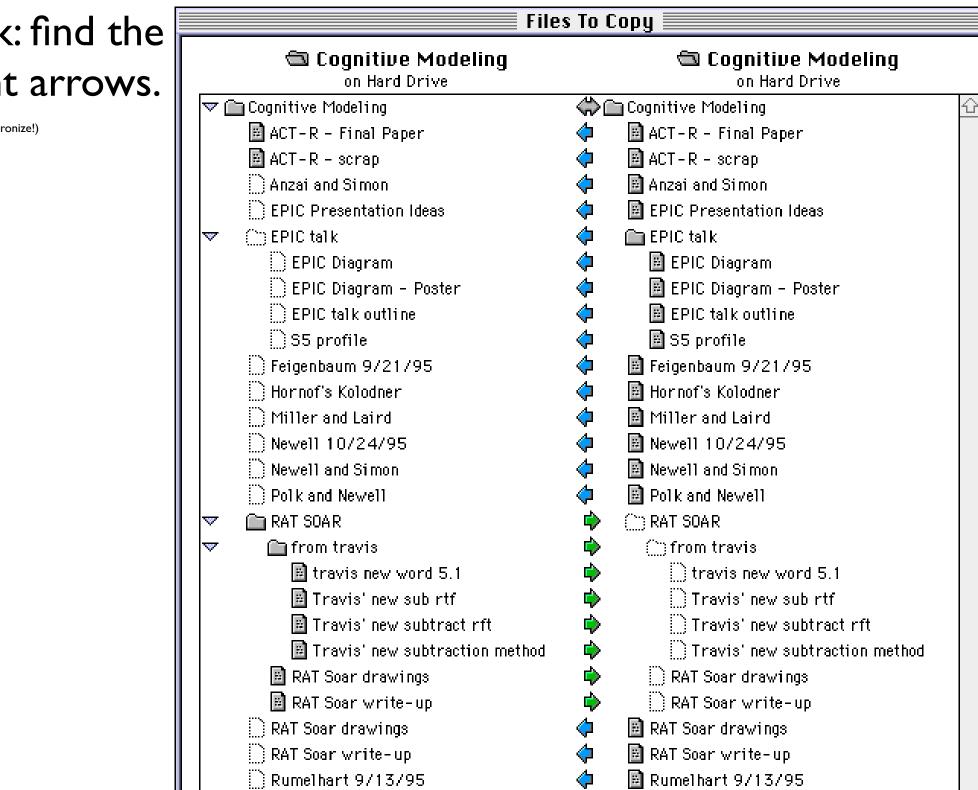
Task: find the right arrows.

(Qdea Synchronize!)



Task: find the right arrows.

(Qdea Synchronize!)



Task: Find the travel forms.



Business Affairs



Mission

Text Only

Director's Notes *** CLOSING OF THE BOOKS ***

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Calendar



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FAOS



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Travel Policy Team



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Insurance Coverage



<u>FIS</u>



Forms



HRIS



BAO Accolades



Parents/Students Survival Guide



Quality Assurance



Student Information



Banner Guide



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Contracting



Property Control

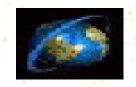


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Classes

Labs



Resume Book



TRACY





News

Mai

Industrial Engineering Department A. Common Errors

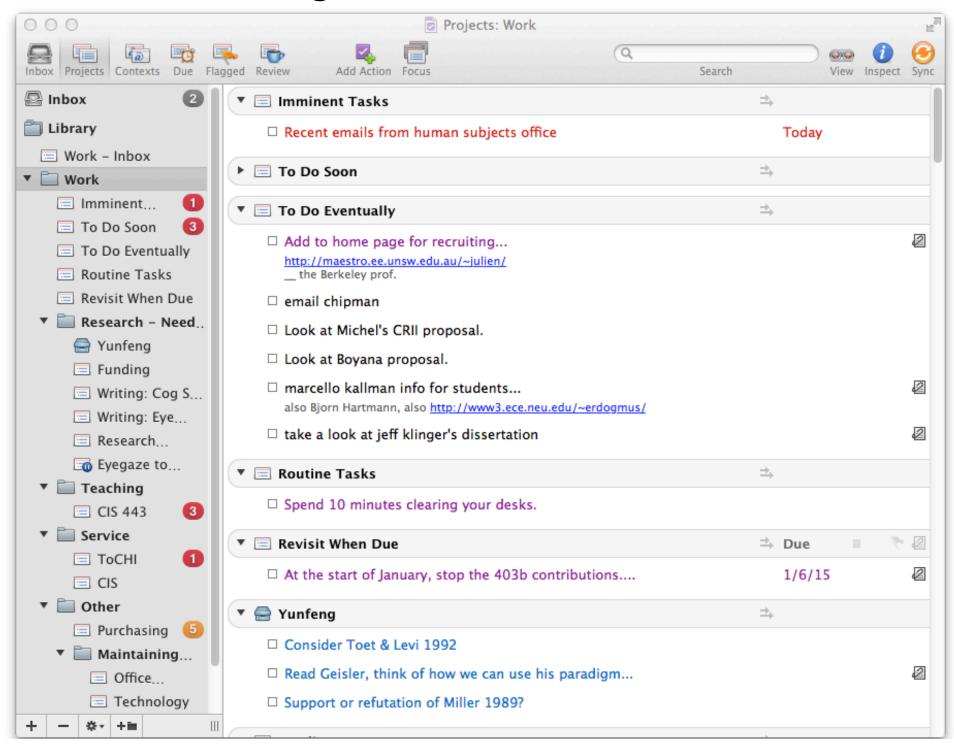
Clutter and visual noise, as opposed to reducing a design to its essence. Sity of Minnesota Duluth

Using explicit structure as a crutch

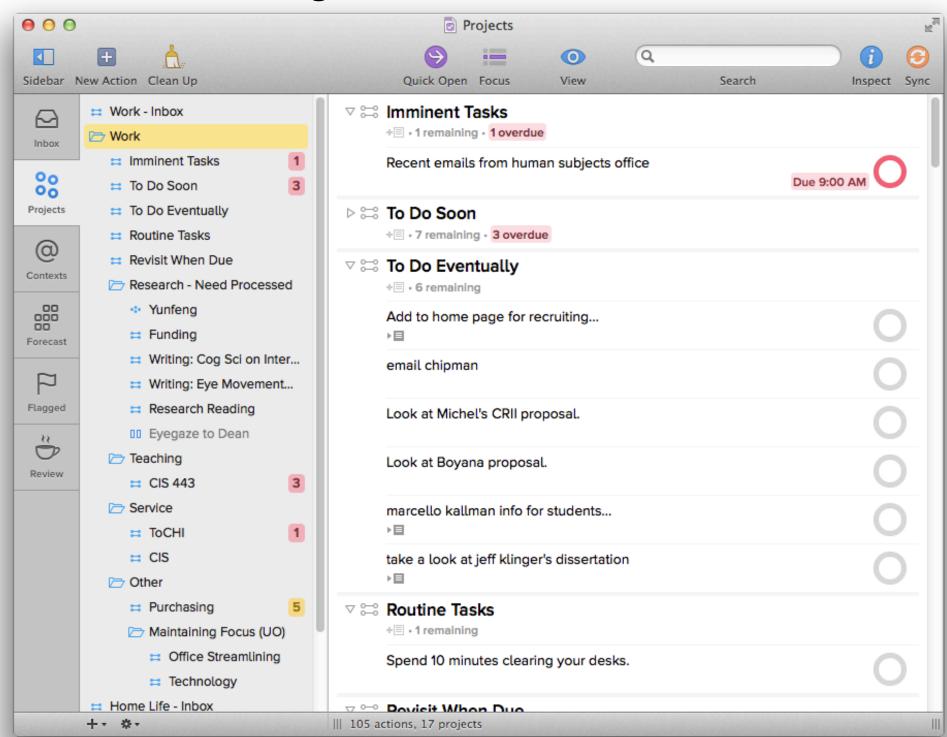
Excessive detail and embellishment

Arbitrary component positions and dimensions Inconsistent visual language

Information Design Problems Persist - OmniFocus vI

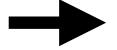


Information Design Problems Persist - OmniFocus v2



Three main points on the design of visual information

 Make sure the information that the user will need is readily available.



- Organize the information so that it is presented in a manner that is easy for the user to access (given fundamental perceptual-cognitive-motor abilities).
- Always keep in mind what is the user's task, and how it will unfold over time.

Task: Put a textbook on reserve. Fill out all the red blanks.



University of Oregon Library System

Reserve Orders

UO Faculty and GTFs: If the library does not own an item you need for your course reserves one will be ordered for you from the information using the following form. Books will be rush-ordered, but please plan on 60-90 days for delivery.

The Library does not add course textbooks to the Library Collection. If you'd like to place a copy of your course textbook on reserve you may personal copy.

Notes:

- If you are requesting a videocassette or film, please use the <u>Acquisition Request Form for Videos or Films</u>.
- Please contact <u>Leslie Bennett</u>, (lbennett@oregon.uoregon.edu, (541)346-1930) for requests to purchase music or materials for the Do Room, and <u>Christine Sundt</u>, (csundt@oregon.uoregon.edu, (541)346-2209) to obtain slides for use in the image reserve at the Visual Collection.

Order one item per form. Items shown below in red font are required. Items listed in black font will help us process your order more quickly.

Instructor:	Anthony Hornof	Office phone:	346-1372
Email address:			
Dept/Course:	CIS 443/543 User Interfaces	Term/Year:	Fall 2001
Course title:		# students:	30
Location for this reserve			(411
material:	Science Library	Loan Period:	4 How
Title: A Guid	le to usability: human factors in computing		
Author/Editor: Jenny	Preece		
Publisher: (& date &location):			

If you are ordering from a catalog, please provide the name and date of the catalog. Please include the catalog item number.

Catalog: Item #:

To send your request click the "submit" button below. To make another request after submitting the first, return to this page, click the "clear for use this form to provide information for the next order request.

Submit Clear Form

Page last udnated on July 6, 2001, his

Thank you

Your email address or comments appear to be blank, and thus were not sent to knives@oregon.uoregon.edu . Please re-enter your comments, You can return to the form using your browser's BACK command or button (or return to http://libweb.uoregon.edu/acs_svc/reserveorders.html if you want.).



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Instruct	tor:	Office phone:
Email addre	33:	
Dept/Com	se:	Term/Year:
Course ti	tle:	# students:
Location for this rese mater		Loan Period: 2 Hour
moer	Sold trong and in the control and the control	
Title:		
Author/Editor:		
Publisher: (& date &location):		
Series:		
ISBNJISSNJMusic#:		

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