

HUMAN-CENTERED  
DESIGN

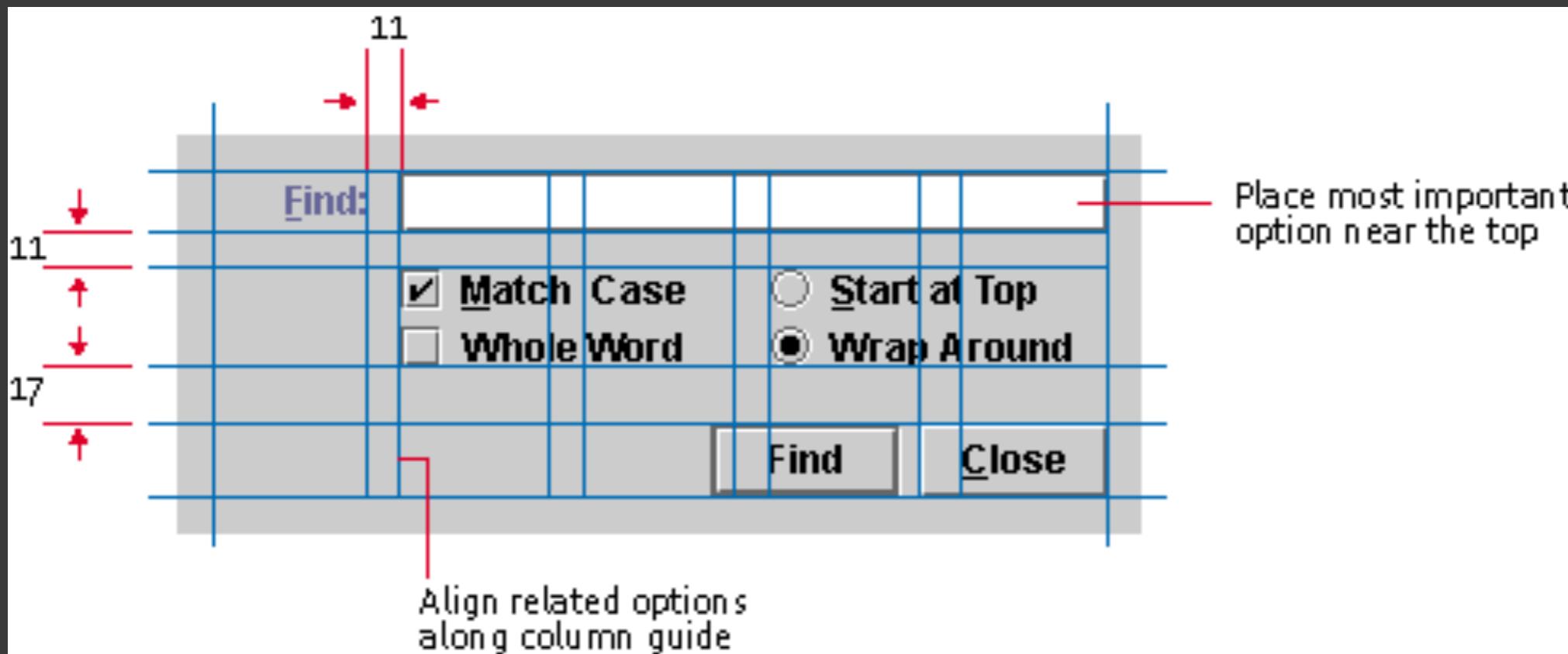
# Grids & Grouping, and Alignment

Scott Klemmer

UC San Diego  
The Design Lab



# Grid Systems (Java L&F, 2001)



# Jan Tschichold's Bauhaus Revolution



At the Bauhaus in Berlin, 2009

# Grids comprise...

Lorem ipsum dolor sit amet,  
consectetur adipisicing elit, sed do  
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# **Lorem Ipsum!**

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Sit Amet  
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## ****Lorem ipsum dolor sit amet****

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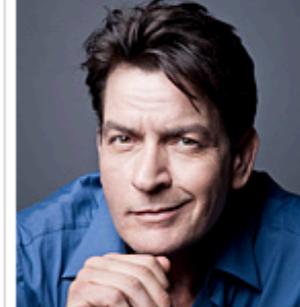






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Sports  
moments ago

## Woods Plays First Round With Precision

By BILL PENNINGTON



Harry How/Getty Images

Tiger Woods, playing with Phil Mickelson and Bubba Watson, showed who was in charge with a one-under par 69 in the featured pairing of the first round of the 112th United States Open.

U.S.

moments ago

## Senate Panel Blocks Rules on Seasonal Jobs

By THE ASSOCIATED PRESS

The vote would delay rules designed to make it more difficult for businesses like seafood processors to exploit foreign workers and to get more Americans into seasonal jobs.

N.Y. / Region  
moments ago

## Parlors Face Age-Limit Bill Over Tanning by Teenagers

By ERIC P. NEWCOMER

Teenagers under 17 would be able to get suntans only the old-fashioned way under a bill working its way through the New York State Legislature.

Opinion  
moments ago

## Ground Zero Cancers

Adding 50 cancers to the list of illnesses covered by a health fund was the right thing to do because we have an obligation to help those harmed by exposure at ground zero.

Business Day  
moments ago

## Smithfield Foods' Profit Drops on Lower Margins for Pork

By THE ASSOCIATED PRESS

The pork producer's net income fell to 49 cents a share from 59 cents a share last year.

Business Day  
moments ago

## Anything-but-Ordinary Mom Pitches for Chobani Yogurt

By STUART ELLIOTT

Chobani, the market leader in Greek yogurt in the United States, is advertising its new children's product with a campaign that features the former Olympian Jennie Finch.



Sports  
moments ago

## Armstrong Seemingly Readies for Battle

By JULIET MACUR







LOREM



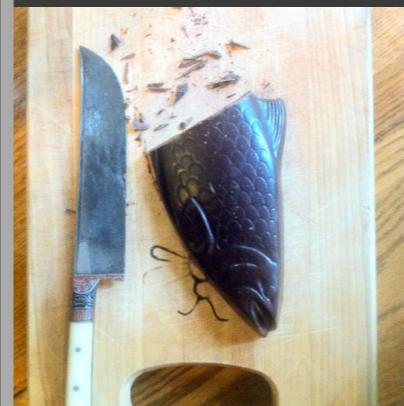
IPSUM



DOLOR



SIT



AMET



CONSECTETUR

Web Applications.....	cs142
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Research Topics in Human-Computer Interaction...cs376	
d.compress - Designing Calm.....	cs377d
Designing Liberation Technology.....	cs379l
Beyond Bits & Atoms: Designing Technological Tools.....	cs402
Envisioning the Future of Learning.....	educ333B
Press Play: Interactive Device Design.....	ee47

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- cs377d d.compress - Designing Calm
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- educ333B Envisioning the Future of Learning
- ee47 Press Play: Interactive Device Design

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- cs294s Paradigm Shifts in Mobile & Social Computing Systems *Lam*
- cs376 Research Topics in Human-Computer Interaction *Klemmer*
- cs377d d.compress - Designing Calm *Moraveji, Pea*
- cs379l Designing Liberation Technology *Cohen, Winograd*
- cs402 Beyond Bits & Atoms: Designing Technological Tools *Blikstein*
- educ333B Envisioning the Future of Learning *Gilbert, Mehta*
- ee47 Press Play: Interactive Device Design *Ju*

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*Mackay*

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*Lam*

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When creating templates,  
design for the longest text block

In general, left-aligned  
text is faster to skim  
(in places that read left-to-right)

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cs402 Beyond Bits & Atoms: Designing  
Technological Tools  
*Blikstein*

# STANFORD UNIVERSITY AUTONOMOUS HELICOPTER

## Overview

The goal of this project is to push the state-of-the-art in autonomous helicopter flight: extreme aerobatics under computer control.

## Featured Videos

<p>Stanford Autonomous Helicopter - Airshow # <span style="float: right;">More info</span></p>  <p><b>Hurricane</b></p> <p>0:00 / 1:39</p>	<p>Stanford Autonomous Helicopter - Chaos <span style="float: right;">More info</span></p>  <p><b>Chaos</b></p> <p>0:00 / 0:23</p>
---	--

**Autonomous airshow**

**Autonomous Chaos**

More videos (including autorotation) [below](#) or on our [YouTube Channel](#).

## Publications

**Autonomous Helicopter Aerobatics through Apprenticeship Learning**, Pieter Abbeel, Adam Coates, and Andrew Y. Ng. *IJRR*, 2010. [[IJRR](#)] [Dataset](#)

**Learning for Control from Multiple Demonstrations**, Adam Coates, Pieter Abbeel, and Andrew Y. Ng. *ICML*, 2008. [[ps](#), [pdf](#)] [Talk PPT slides](#), [Supplementary Material \(Videos\)](#)  
[Best Application Paper Award](#)

**Autonomous Autorotation of an RC Helicopter**, Pieter Abbeel, Adam Coates, Timothy Hunter, and Andrew Y. Ng. In *International Symposium on Robotics*, 2008. [[pdf](#)] [Supplementary Material \(Videos\)](#)  
[Ben Wegbreit IFRR Student Fellowship Award](#)

**An Application of Reinforcement Learning to Aerobic Helicopter Flight**, Pieter Abbeel, Adam Coates, Morgan Quigley, and Andrew Y. Ng. In *NIPS 19*, 2007. [[ps](#), [pdf](#)]

**Learning vehicular dynamics, with application to modeling helicopters**, Pieter Abbeel, Varun Ganapathi, and Andrew Y. Ng. In *NIPS 18*, 2006. [[ps](#), [pdf](#)]

# Alignment guides the eye, reducing clutter

- **Avoid slight misalignments**  
they undermine your ability to beacon organization.
- We ‘automatically’ notice patterns and deviations
- So when you deviate from a pattern do so strategically
- And use **visual proximity** and **scale** to convey semantic information

When to use top, left,  
and right alignment

# Add an address: right aligned labels

**Add an address**

**Full Name:**

**Address Line1:**   
Street address, P.O. box, company name, c/o

**Address Line2:**   
Apartment, suite, unit, building, floor, etc.

**City:**

**State/Province/Region:**

**ZIP:**

**Country:**  United States

**Phone Number:**

**Optional Delivery Preferences** ([What's this?](#))

**Address Type:**

**Security Access Code:**   
For buildings or gated communities

# Account: Left-aligned labels

Amazon.com | Today's Deals | Gift Cards | Help

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Hello, Scott Your Account ▾ Cart ▾ Wish List ▾

**Amazon Gift Cards for Dad** E-mail or print now

**Your Account**

**Orders**  
See & Modify Recent Orders



**View, Modify, Track or Cancel an Order**

**Your Orders** ▶

**Order History**

[View Open Orders](#)  
[View Your Digital Orders](#)  
[Download Order Reports](#)  
[View Your Kindle Orders](#)

**Search Orders**

Title, Department, Recipient... ▶

**More Order Actions**

[Return Items or Gifts](#)  
[Manage Subscribe & Save Items](#)  
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**E-mail Address**  
  
**Password**  
  
**Sign In**

**Your Other Accounts**

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**Sell Your Stuff**

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Password, Prime & E-mail

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**Kindle Help**

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# Sign-in: top-aligned labels

Amazon.com | Today's Deals | Gift Cards | Help

Amazon Gift Cards for Dad  
E-mail or print now

Hello, Scott  
Your Account

Cart Wish List

## Your Account

**Orders**  
See & Modify Recent Orders



**View, Modify, Track or Cancel an Order**

[Your Orders](#)

**Order History**

[View Open Orders](#)  
[View Your Digital Orders](#)  
[Download Order Reports](#)  
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**Search Orders**

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**More Order Actions**

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[Manage Subscribe & Save Items](#)  
[Manage Magazine Subscriptions](#)  
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[Leave Packaging Feedback](#)  
[Manage Prime Membership](#)  
[View Your E-mails with Sellers](#)

**E-mail Address**  
  
**Password**  
  
[Sign In](#)

**Your Other Accounts**

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[Your Trade-In Account](#)  
[Corporate Customers](#)  
[Web Services Account](#)  
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[Sell Your Stuff](#)

**Kindle Support**



**Kindle Help**

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[Get to know your Kindle](#)

# A brief word on color

- Pay attention to it
- Design in grayscale first
- Keep luminance values from grayscale when moving to color

# Amazon in Grayscale

The screenshot shows the Amazon.com homepage with a search bar containing 'Web Form Design'. Below the search bar, there are filters for 'Format' (Paperback, Hardcover, Kindle Edition, HTML, PDF) and 'Sort by' (Relevance). The main content area displays two book results:

**1. Web Form Design: Filling in the Blanks** by Luke Wroblewski (May 2, 2008)

**2. Forms that Work: Designing Web Forms for Usability (Interactive Technologies)** by Caroline Jarrett, Gerry Gaffney and Steve Krug (Nov 26, 2008)

Each book listing includes a 'LOOK INSIDE!' thumbnail, customer reviews, and purchase options for Paperback, Kindle Edition, and Other Formats.

**Left sidebar (Shop by Department):**

- New Releases
  - Last 30 days (1)
  - Last 90 days (4)
  - Coming Soon (1)
- Department
  - Any Department
  - Books**
    - Computers & Technology (362)
    - Education & Reference (268)
    - Arts & Photography (53)
    - Professional & Technical (106)
    - Business & Investing (71)
    - Law (5)
    - Science & Math (28)
    - Politics & Social Sciences (30)
    - Teens (1)
    - Crafts, Hobbies & Home (6)
    - Literature & Fiction (6)
    - Humor & Entertainment (5)
    - Comics & Graphic Novels (1)
    - Children's Books (2)
    - Health, Fitness & Dieting (1)
    - Medical Books (7)
    - History (5)
    - Cookbooks, Food & Wine (1)
    - Christian Books & Bibles (1)
    - Religion & Spirituality (1)
    - Calendars (1)
  - Format
    - Paperback (385)
    - Hardcover (43)
    - Kindle Edition (9)
    - HTML (3)
    - PDF (2)

# Amazon in Color

**amazon Prime**

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Shop by Department ▾ Search Books ▾ **Web Form Design** Go

Hello, Scott Your Account ▾ Cart ▾ Wish List ▾

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Department  
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Computers & Technology (362)  
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Business & Investing (71)  
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Teens (1)  
Crafts, Hobbies & Home (6)  
Literature & Fiction (6)  
Humor & Entertainment (5)  
Comics & Graphic Novels (1)  
Children's Books (2)  
Health, Fitness & Dieting (1)  
Medical Books (7)  
History (5)  
Cookbooks, Food & Wine (1)  
Christian Books & Bibles (1)  
Religion & Spirituality (1)  
Calendars (1)

Format  
Paperback (385) Hardcover (43) Kindle Edition (9) HTML (3) PDF (2)

**Books > "Web Form Design"**

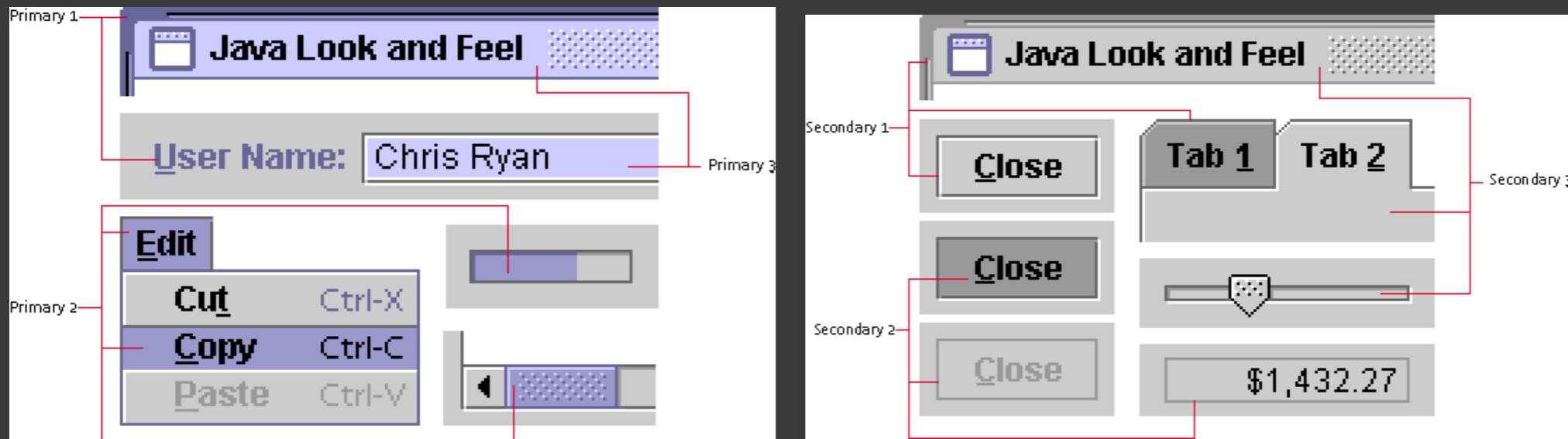
Showing 1 - 12 of 452 Results Sort by Relevance

**Format**

1. **Web Form Design: Filling in the Blanks** by Luke Wroblewski (May 2, 2008)  
★★★★★ (33 customer reviews)  
Formats Price New Used  
**Paperback** \$39.00 \$38.98 \$31.91  
Order in the next 13 hours to get it by Monday, Jun 18.  
**Kindle Edition** \$12.10  
Auto-delivered wirelessly  
**Excerpt - Front Cover:** "... WEB FORM DESIGN Filling in the Blanks by LUKE WROBLEWSKI foreword by..." See a random page in this book.  
Sell this back for an Amazon.com Gift Card

2. **Forms that Work: Designing Web Forms for Usability** by Caroline Jarrett, Gerry Gaffney and Steve Krug (Nov 26, 2008)  
★★★★★ (27 customer reviews)  
Formats Price New Used  
**Paperback** \$51.95 \$43.24 \$29.41 \$25.29  
Order in the next 18 hours to get it by Monday, Jun 18.  
Only 7 left in stock - order soon.  
Get \$2 in MP3s. See Details  
**Kindle Edition** \$41.04 (or rent from \$19.07)  
Auto-delivered wirelessly  
**Other Formats:** Unknown Binding  
**Excerpt - Front Cover:** "... Forms that Work Designing Web Forms for Usability -r (:C ..." See a random page in this book.  
Sell this back for an Amazon.com Gift Card

# Color (Java L&F)



- Six colors in two groups
- Clean, consistent look
- Easy on eyes (mostly gray)

# Make space, guide the eye

*I take pride withal in my humiliation, and as I am to this privilege condemned, almost I find joy in an abhorrent salvation; I am, I believe, alone of all our race, the only man in human memory to have been shipwrecked and cast up upon a deserted ship.*

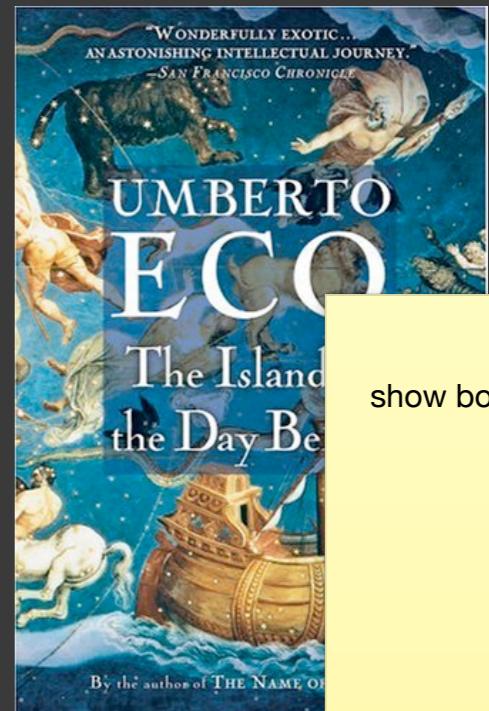
THUS, WITH UNABASHED conceits, wrote Roberto della Griva presumably in July or August of 1643.

How many days had he been tossed by the waves, feverish surely, bound to a plank, prone during the hours of light to avoid the blinding sun, his neck stiff, strained unnaturally so as not to imbibe the water, his lips burnt by the brine? His letters offer no answer to this question: though they suggest an eternity, the time cannot have been more than two days, for otherwise he would never have survived the lash of Phoebus (of which he so poetically complains), he, a sickly youth, as he describes himself, a creature condemned by a natural defect to live only at night.

He was unable to keep track of time, but I believe the sea grew calm immediately after the tempest swept him from the deck of the *Amaryllis*, on that makeshift raft a sailor had

I

Umberto Eco, *The Island of the Day Before*



show book cover in person,

# Grids: To learn more...

- Kevin Mullet and Darrell Sano,  
*Designing Visual Interfaces*
- Luke Wroblewski, *Web Form Design*
- Jan Tschichold, *The New Typography*