

Web Design Patterns

Pressman, Chapter 12 (parts)
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Web Design Patterns

- how to create **navigation bars** for finding relevant content...
- how to create a **shopping cart** that supports check out...
- how to make **e-commerce** sites where people return & buy...
- etc.

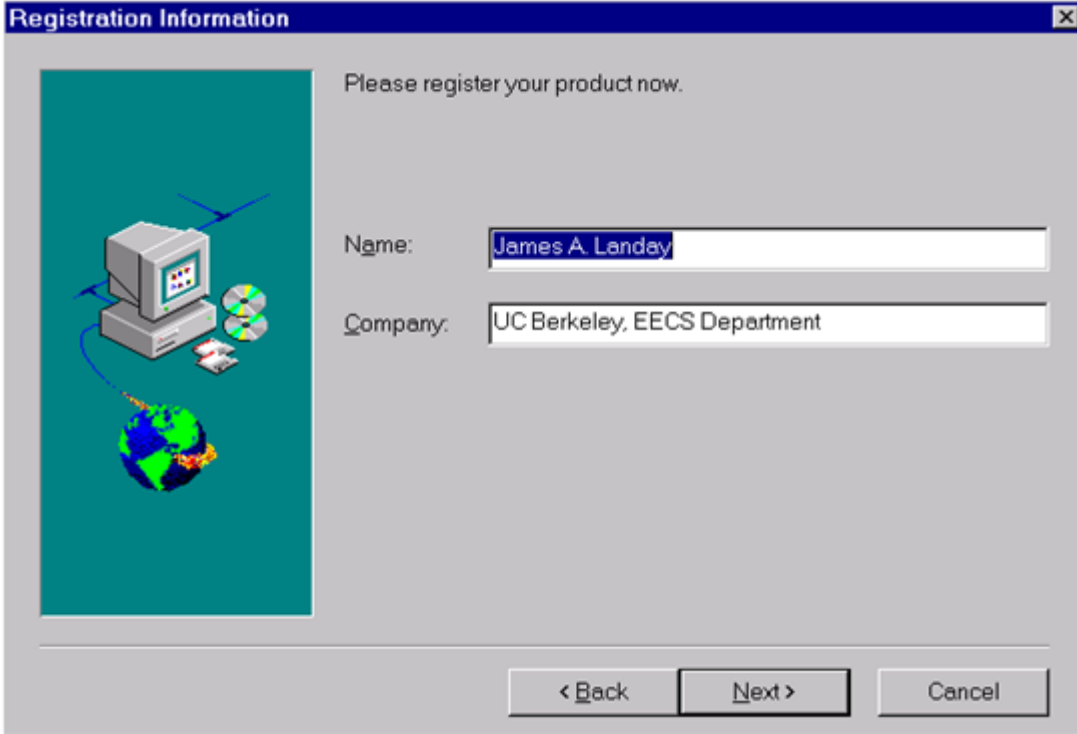
Web Design Patterns

- | | | | |
|---|------------------------|---|-----------------------|
|  A | Site genres |  G | Advanced ecommerce |
|  B | Navigational framework |  H | Completing tasks |
|  C | Home page |  I | Page layouts |
|  D | Content management |  J | Search |
|  E | Trust and credibility |  K | Page-level navigation |
|  F | Basic ecommerce |  L | Speed |

[van Duyne et al.]

Process Funnel (H1)

- Problem: help people complete highly specific stepwise tasks
- Desktop Solution:



Registration Information

Please register your product now.

Name:

Company:

< Back Next > Cancel

Process Funnel (H1): Web Solution



The screenshot shows a web browser window with a navigation bar at the top containing links: Back, Forward, Reload, Home, Search, Guide, Print, Security, and Stop. Below this is a shopping cart section with a stack of books icon, and links for Shopping Bag, Checkout, My Account, and Help. A yellow banner below the shopping cart contains the text: Welcome | Beauty | Jewelry | Toiletries | Accessories | Gifts.

The main content area features a large teal rectangle on the left containing an illustration of a computer monitor, a CD-ROM, and a globe with a blue arrow pointing from the globe to the monitor. To the right of this illustration, the text "Please register your product now." is displayed. Below this text are two input fields: "Name:" followed by a text box, and "Company:" followed by a text box.

At the bottom of the page, there is a banner for "FAST ACTION" with a logo on the left and the text "QUAKE II" on the right. Below the banner are three buttons: "Back", "Next", and "Cancel".

Process Funnel (H1): Problems

- How much longer?
- Why ads & nav bars?
- extra help?



The screenshot shows a web browser window with a navigation bar at the top containing links: Back, Forward, Reload, Home, Search, Guide, Print, Security, and Stop. Below the navigation bar is a shopping cart section with links: Shopping Bag, Checkout, My Account, and Help. A yellow banner below the shopping cart contains the text: Welcome | Beauty | Jewelry | Toiletries | Accessories | Gifts. The main content area features a large graphic on the left showing a computer monitor, a CD, and a globe with a blue arrow pointing from the globe to the monitor. To the right of the graphic, the text reads: Please register your product now. Below this text are two input fields: Name: [] and Company: []. At the bottom of the form is a banner for 'FAST ACTION' with a logo on the left and the text 'FAST ACTION' in large, bold, purple letters. To the right of 'FAST ACTION' is a logo for 'QUAKE II' with a stylized 'Q' and the text 'QUAKE II'. Below the banner are three buttons: Back, Next, and Cancel.

Process Funnel (H1)

- Problem: How much longer?
- Solution: Progress bars



Process Funnel (H1)

- Problem: Why ads & nav bars?
- Solution: Remove them, present minimal interface
- New problem: What site?
- Solution: Keep logo, layout, colors

Process Funnel (H1)

- Problem
 - What if users need extra help?
- Solution
 - Use pop-up windows because we want to keep people in the funnel



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Memory ?

128MB 133MHz SDRAM

Hard Drive ?

40GB⁵ Ultra ATA-100 Hard Drive (7200 RPM)

Great Add-Ons For This System

Price

Check any item(s) you wish to add to this system, then click Customize It.



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• With on-site service, you don't have to leave your home or ship your computer to us should you have a problem.

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Epson Stylus Color 880 InkJet Printer
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933Mhz

\$1,199

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E-Value Code
61771-4100p01

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Intel® Pentium® III processor at 933MHz

Memory



128MB 133MHz SDRAM

Hard Drive



40GB⁵ Ultra ATA-100 Hard Drive (7200 RPM)

Epson 640U Scanner

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Click on a term.

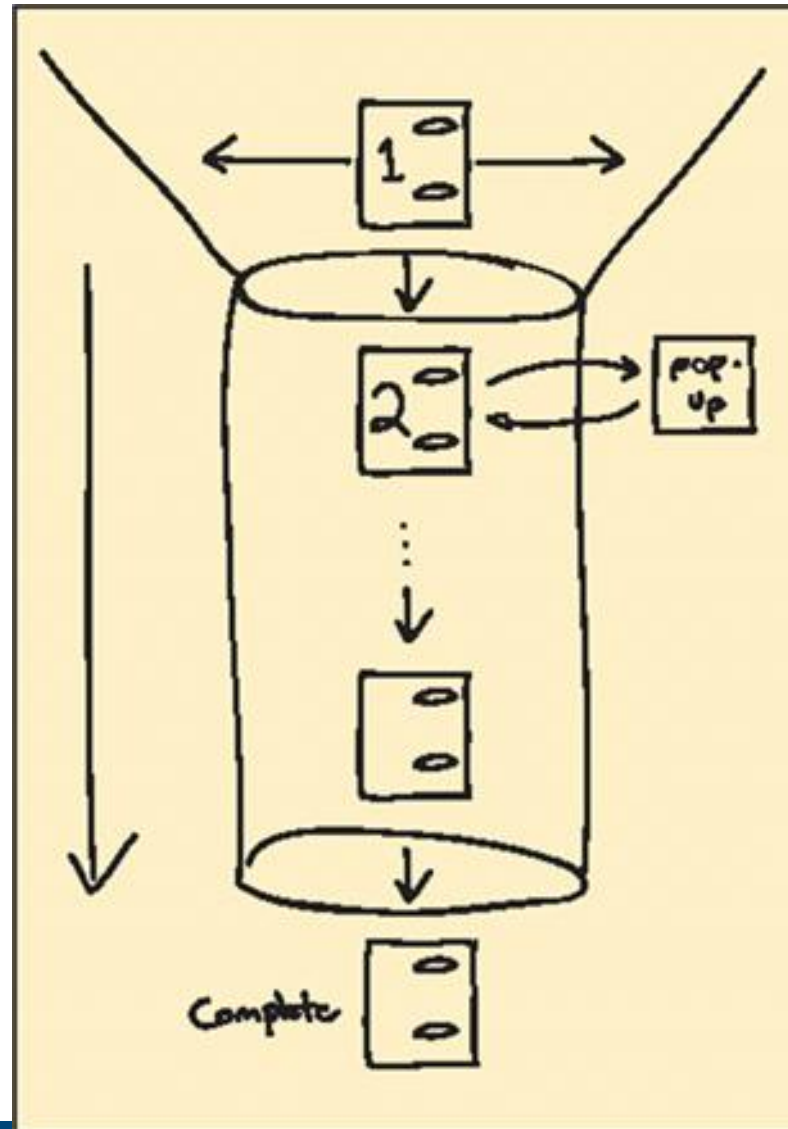
Keyboard Type	Dell™ QuietKey	Microsoft® Internet Keyboard, Dell Edition	Dell™ Enhanced QuietKey	Dell™ Enhanced Performance
 ZOOM! For a closer look.				
Benefits	<ul style="list-style-type: none"> Quiet key response Soft "rubberdome" touch 	<ul style="list-style-type: none"> 10 Hot Keys for easy access to your internet and e-mail E-mail Hotkey 	<ul style="list-style-type: none"> 3 programmable keys Soft "rubberdome" 	<ul style="list-style-type: none"> 7 programmable keys Built-in 2 port USB HUB

speeds.

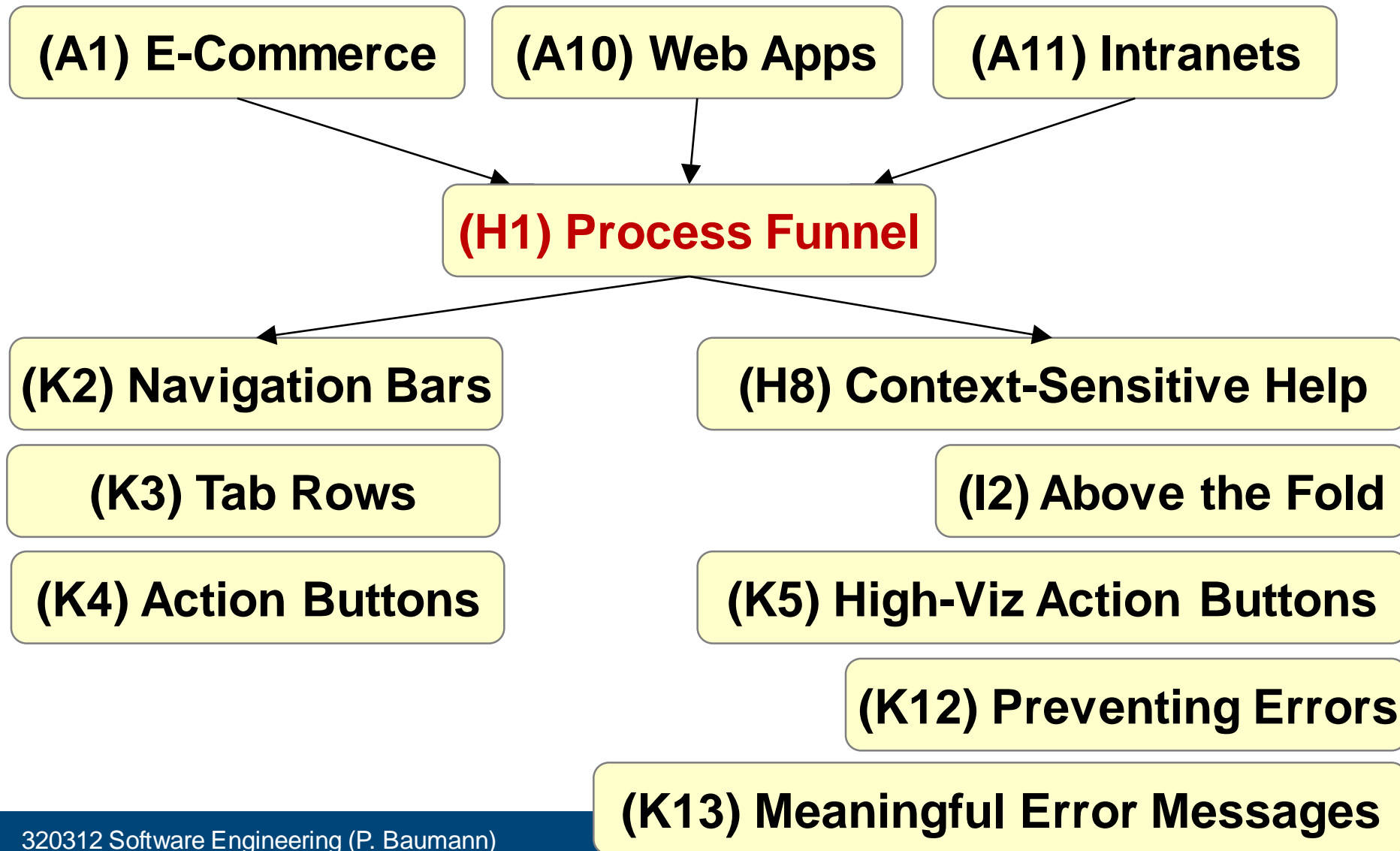
[More Details](#)



Solution Diagram: *Process Funnel* (H1)




Related Patterns: *Process Funnel* (H1)



Meaningful Error Messages (K13)

- Problem
 - When customers make mistakes, they need to be informed of the problem and how to recover
- Solution
 - Clear statement of problem
 - Explain how to recover
 - Position near the problem

Good? Bad?



Shopping Bag Checkout My Account Help

Welcome | Beauty | Jewelry | Toiletries | Accessories | Gifts

We found an error while verifying your shipping address. We've marked the problem in red for you.

Update Address Book of:

Required information is marked in GREEN CAPS.

NICKNAME:
Please assign a "nickname" for the person you're shipping to.
You may change or delete this information.

FIRST NAME: **MIDDLE INITIAL:**

LAST NAME:

ADDRESS:

CITY:

STATE:

ZIP CODE:

COUNTRY:

SHIPPING METHOD:

Please select a shipping option.
Note: all USA orders are shipped UPS. If you prefer next day service or U.S. Post, please

☒ **Standard UPS**
(2 business days plus processing time)

☐ **Upgrade to UPS Next Business Day**
(1 business day plus processing time, additional charge)

☐ **U.S. Postal Service**
(Same price as Standard UPS delivery. Use for addresses not served by UPS or if you prefer U.S. Post. 5-7 days plus



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1-800-761-3355

Purchase Assistance

- ▶ Security & Privacy
- ▶ Limited Warranty

WELCOME TO CHECKOUT



Secure
shopping
guarantee

* - Indicates Required Fields



Please address the 2 item(s) indicated on this page.

To continue with checkout, please sign in or create an account. Your account will enable you to retrieve your order status online and benefit from pre-filled forms on your next purchase.

Sign In

Already have an account? Sign in here.

* Email Address

johndoe@johndoe.com

* Password

[Forgot Password?](#)

Sign In

OR

Create An Account

Complete these fields to create a new account.

* First Name

John

* Last Name

Doe

* Email Address

johndoe@johndoe.com

* Confirm Email Address

johndoe@johndoe.com

☒ Yes, send me exclusive Dell offers and specials by email. (You can unsubscribe at any time)

No Password. Please enter your password.
Password Confirmation is missing or unrecognizable.

* Create Password

Password must be at least four characters in length.

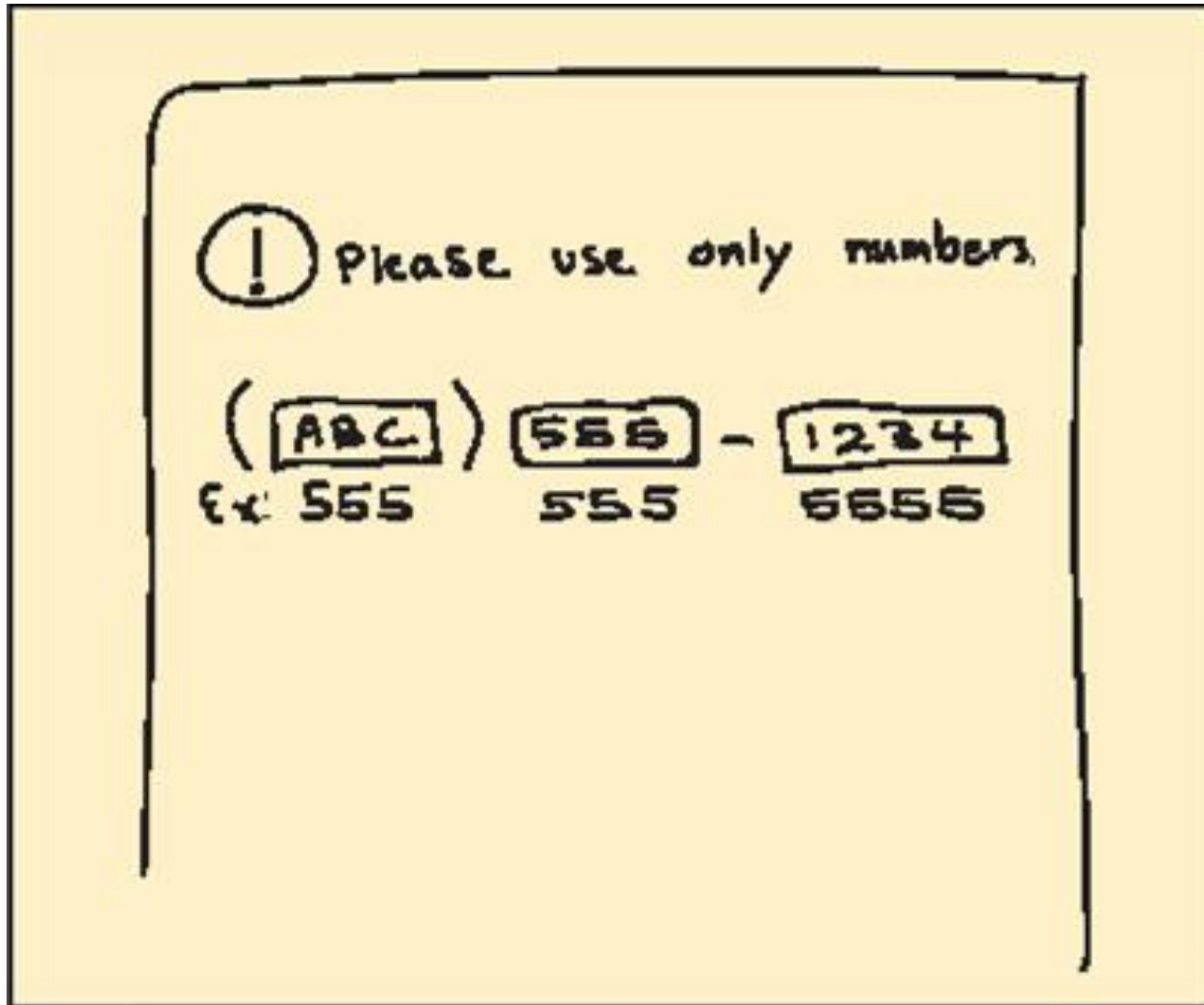
Password Confirmation is missing or unrecognizable.

* Confirm Password

Sign In

Solution Diagram:

Meaningful Error Messages (K13)



Related Patterns: *Error Msgs (K13)*

(H1) Process Funnel

(H2) Sign-in / New Account

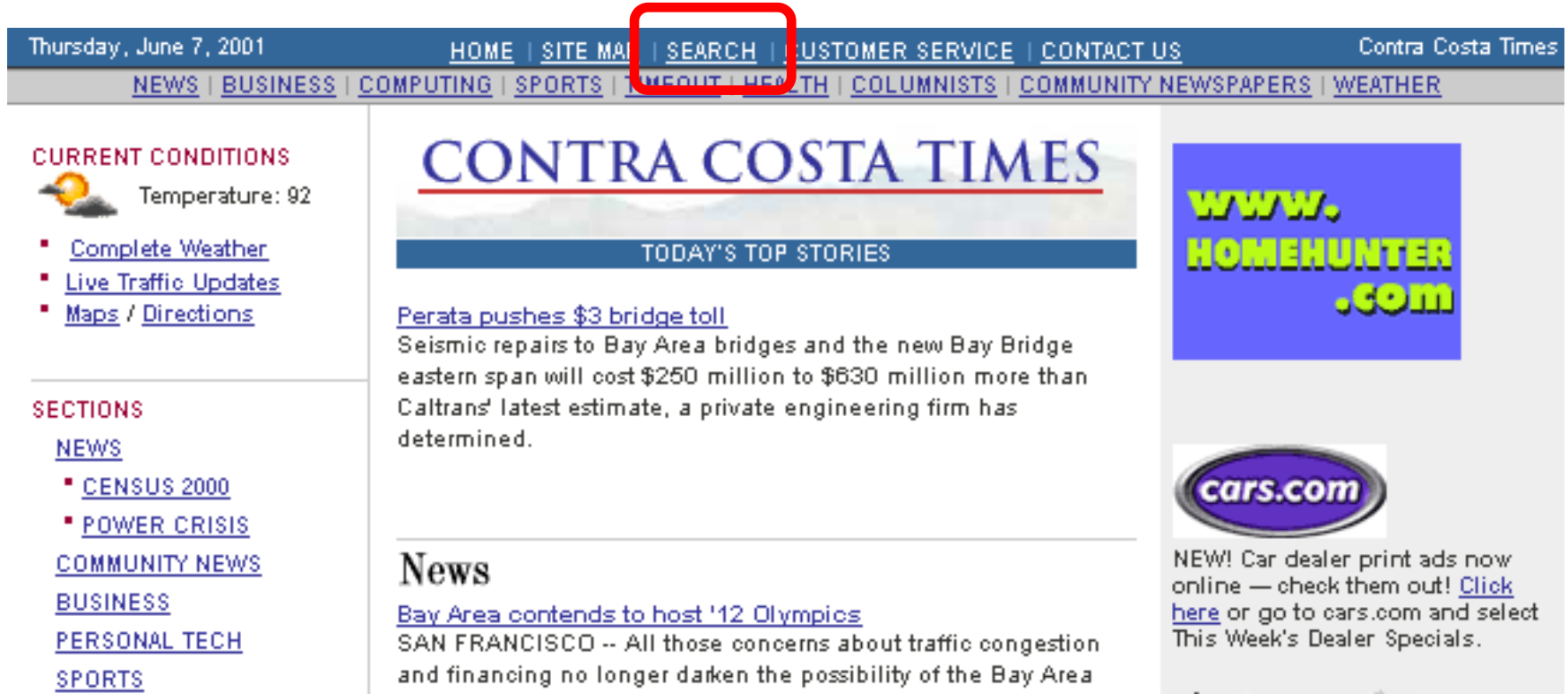
(F1) Quick-Flow Checkout

(K12) Preventing Errors

(K11) Familiar Language

(K13) Meaningful Error Messages

“What am I Searching For?”




Thursday, June 7, 2001

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CONTRA COSTA TIMES


TODAY'S TOP STORIES

[Perata pushes \\$3 bridge toll](#)
Seismic repairs to Bay Area bridges and the new Bay Bridge eastern span will cost \$250 million to \$630 million more than Caltrans' latest estimate, a private engineering firm has determined.

News

[Bay Area contends to host '12 Olympics](#)
SAN FRANCISCO -- All those concerns about traffic congestion and financing no longer darken the possibility of the Bay Area

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BREAKING NEWS Appeals court denies McVeigh request to delay execution. Details soon.

June 7, 2001 -- Updated 06:03 p.m. EDT, 2203 GMT



Bush tax cut becomes law

President Bush today signed into law the first major piece of legislation of his presidency, a \$1.35 trillion tax cut over

EXPERTS AGREE:
Take it!

DEVELOPING STORY: MCVEIGH APPEAL

 Attorneys for Oklahoma City bomber Timothy McVeigh await an appeals court ruling on a stay of his Monday execution.
[Full Story](#) | [In-Depth](#)

[Wolf Blitzer: Latest on McVeigh execution, 8 p.m. EDT](#)

TOP STORIES

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Search



BY POPULAR VOTE
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SAN FRANCISCO
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Results

You searched for a restaurant that has a Food Rating of 20, has a Decor Rating of 20, is in peninsula or san jose, has a(n) romantic spots scene. We found 5 unique restaurants based on your search criteria. [Refine Your Search](#)
 CLICK ON ANY COLUMN HEADING TO SORT BY THAT CATEGORY.

	sort by NAME	sort by CUISINE	sort by AREA	F	D	S	C	VOTE
1. 231 ELLSWORTH 231 S. Ellsworth Ave. (bet. 2nd & 3rd Aves.) San Mateo (650) 347-7231 High-end French "gem" in San Mateo with "elegant, refined food" that's "never a . . . full review "	French	French (New)	Peninsula	25	22	24	\$47	VOTE
2. Bella Vista 13451 Skyline Blvd. (5 mi. south of I-92) Woodside (650) 851-1229 A sky-high, "mountain-retreat" location and matching prices characterize this . . . full review	Continental		Peninsula	22	23	23	\$47	VOTE
3. EMILE'S 545 S. Second St. (bet. Reed & William Sts.) San Jose (408) 289-1960 "High-powered brokers and celebrities" dine at this pricey San Jose pioneer . . . full review	French		San Jose	26	21	23	\$51	VOTE
4. LE MOUTON NOIR 14560 Big Basin Way (bet. 4th & 5th Sts.) Saratoga (408) 867-7017 Saratoga stalwart with "excellent" French food, "great service", "outstanding . . . full review "	French		San Jose	25	23	24	\$49	VOTE

The search results here can be sorted in many ways, including food, cuisine, and area.

The search results also provide good information, including the restaurant's address, the phone number, and part of the review

Search

Only the most relevant search results are shown.

Also, the search results are divided up into different logical categories, making it easier to find what you are looking for.

Top Search Results from Amazon.com for maria callas



Classical Music: [See all 151 results in Classical Music...](#)

- [Callas - La Divina](#) -- Giacomo Puccini(Composer), et al; Audio CD
- [Callas - La Divina - Complete](#) -- Giacomo Puccini(Composer), et al; Audio CD
- [Verdi: Aida /De Fabritiis, Callas, Del Monaco, Taddei, et al](#) -- Giuseppe Verdi(Composer), et al; Audio CD



Books: [See all 58 results in Books...](#)

- [Maria: Callas Remembered](#) -- Nadia Stancioff; Paperback
- [The Autobiography of Maria Callas: A Novel](#) -- Alma Halbert Bond, Frank Ecknair (Illustrator); Paperback
- [Maria Callas : Sacred Monster](#) -- Stelios Galatopoulos; Hardcover



Video: [See all 9 results in Video...](#)

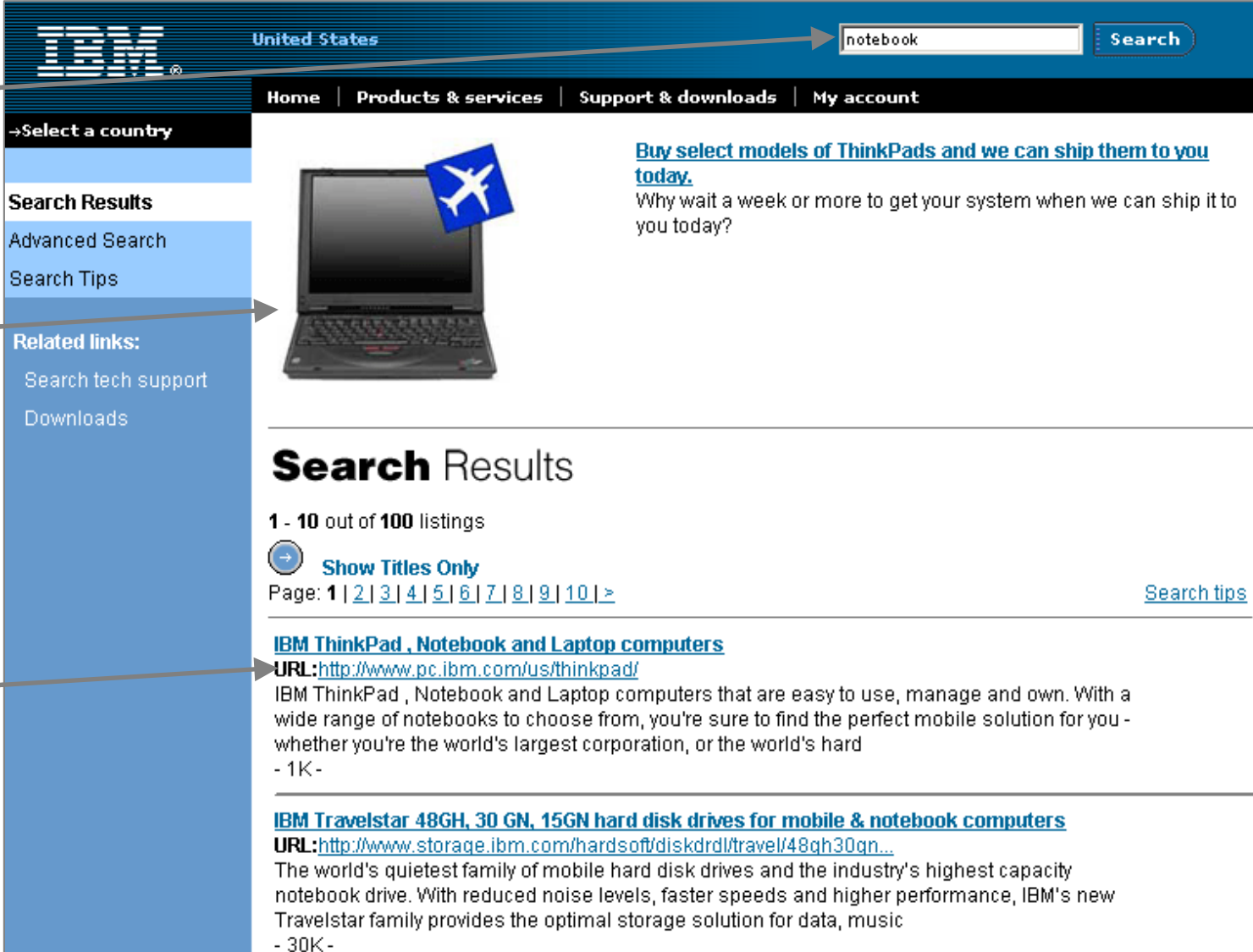
- [Medea](#) -- Pier Paolo Pasolini(Director), et al; VHS Tape
- [Maria Callas - The Paris Debut](#) -- Maria Callas(Primary Contributor); VHS Tape
- [Wise Cracks](#) -- Gail Singer(Director), et al; VHS Tape

Search

Is it a "notebook," a "laptop," or a "ThinkPad" computer? On IBM's website, it doesn't matter, they all work correctly!

Also, a special search result appears that lets people get to the right page quicker.

These are the standard search results.



The screenshot shows the IBM United States website. At the top, there is a search bar with the text "notebook" and a "Search" button. Below the search bar, there is a navigation menu with links: Home, Products & services, Support & downloads, and My account. On the left side, there is a sidebar with a "Select a country" dropdown, a "Search Results" section with links to "Advanced Search" and "Search Tips", and a "Related links" section with links to "Search tech support" and "Downloads". The main content area features a large image of an IBM ThinkPad laptop with a blue airplane icon above it, and a text box that says "Buy select models of ThinkPads and we can ship them to you today. Why wait a week or more to get your system when we can ship it to you today?". Below this, the "Search Results" section shows "1 - 10 out of 100 listings" and a "Show Titles Only" button. The results list includes a link to "IBM ThinkPad, Notebook and Laptop computers" with a URL and a description, and another link to "IBM Travelstar 48GH, 30 GN, 15GN hard disk drives for mobile & notebook computers" with a URL and a description.

IBM United States

Search notebook Search

Home | Products & services | Support & downloads | My account

→Select a country

Search Results

Advanced Search

Search Tips

Related links:

Search tech support

Downloads

Buy select models of ThinkPads and we can ship them to you today.

Why wait a week or more to get your system when we can ship it to you today?

Search Results

1 - 10 out of 100 listings

Show Titles Only

Page: 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | >

[Search tips](#)

IBM ThinkPad, Notebook and Laptop computers

URL: <http://www.pc.ibm.com/us/thinkpad/>

IBM ThinkPad, Notebook and Laptop computers that are easy to use, manage and own. With a wide range of notebooks to choose from, you're sure to find the perfect mobile solution for you - whether you're the world's largest corporation, or the world's hard

- 1K -

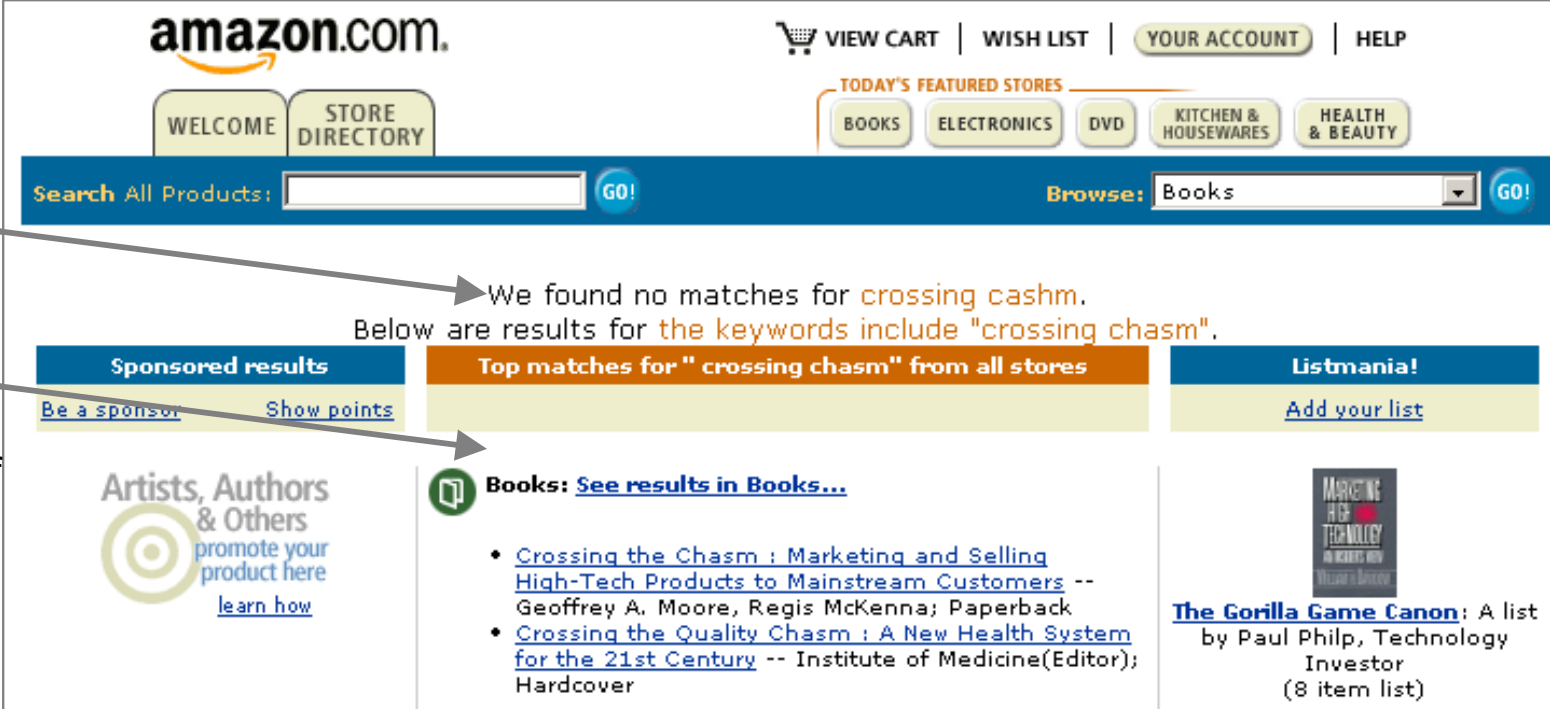
IBM Travelstar 48GH, 30 GN, 15GN hard disk drives for mobile & notebook computers

URL: <http://www.storage.ibm.com/hardsoft/diskdrdl/travel/48gh30gn...>

The world's quietest family of mobile hard disk drives and the industry's highest capacity notebook drive. With reduced noise levels, faster speeds and higher performance, IBM's new Travelstar family provides the optimal storage solution for data, music

- 30K -

Search



The screenshot shows the Amazon.com homepage with a search bar containing the text "crossing cashm". The search results page displays a message: "We found no matches for crossing cashm. Below are results for the keywords include 'crossing chasm'." The results are organized into three columns: "Sponsored results", "Top matches for 'crossing chasm' from all stores", and "Listmania!". The "Sponsored results" column features a target icon and the text "Artists, Authors & Others promote your product here learn how". The "Top matches" column lists two books: "Crossing the Chasm : Marketing and Selling High-Tech Products to Mainstream Customers" by Geoffrey A. Moore and Regis McKenna, and "Crossing the Quality Chasm : A New Health System for the 21st Century" edited by the Institute of Medicine. The "Listmania!" column features a book cover for "Marketing High Technology" and a list titled "The Gorilla Game Canon" by Paul Philp.

amazon.com. [VIEW CART](#) | [WISH LIST](#) | [YOUR ACCOUNT](#) | [HELP](#)

[WELCOME](#) [STORE DIRECTORY](#)



Search All Products: [GO!](#) **Browse:** [Books](#) [GO!](#)

TODAY'S FEATURED STORES

[BOOKS](#) [ELECTRONICS](#) [DVD](#) [KITCHEN & HOUSEWARES](#) [HEALTH & BEAUTY](#)

Search results for "crossing cashm"

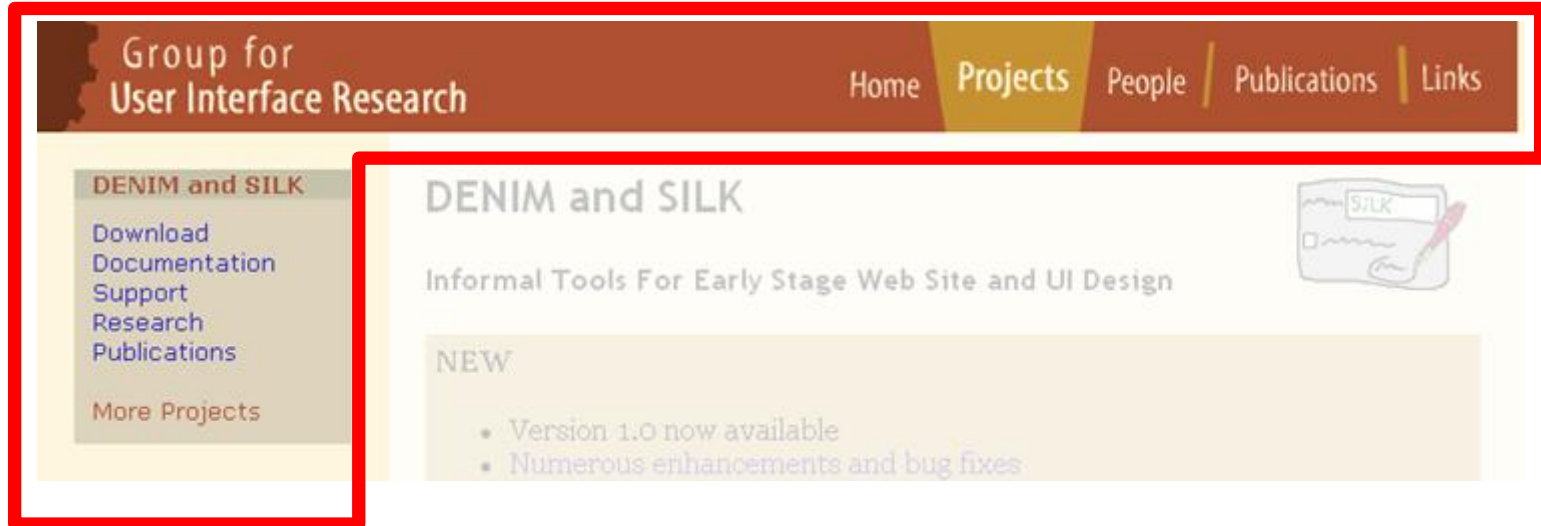
We found no matches for crossing cashm.
Below are results for the keywords include "crossing chasm".

Sponsored results	Top matches for "crossing chasm" from all stores	Listmania!
Be a sponsor Show points	Books: See results in Books...	Add your list
 Artists, Authors & Others promote your product here learn how	<ul style="list-style-type: none"> Crossing the Chasm : Marketing and Selling High-Tech Products to Mainstream Customers -- Geoffrey A. Moore, Regis McKenna; Paperback Crossing the Quality Chasm : A New Health System for the 21st Century -- Institute of Medicine(Editor); Hardcover 	 The Gorilla Game Canon: A list by Paul Philp, Technology Investor (8 item list)

States that it couldn't find any results.

Does the next search, what a person would do anyway, instead of presenting "No results."

Pattern Examples: Navigation Bar



Group for User Interface Research

Home | **Projects** | People | Publications | Links

DENIM and SILK

- Download
- Documentation
- Support
- Research
- Publications
- More Projects

DENIM and SILK

Informal Tools For Early Stage Web Site and UI Design

NEW

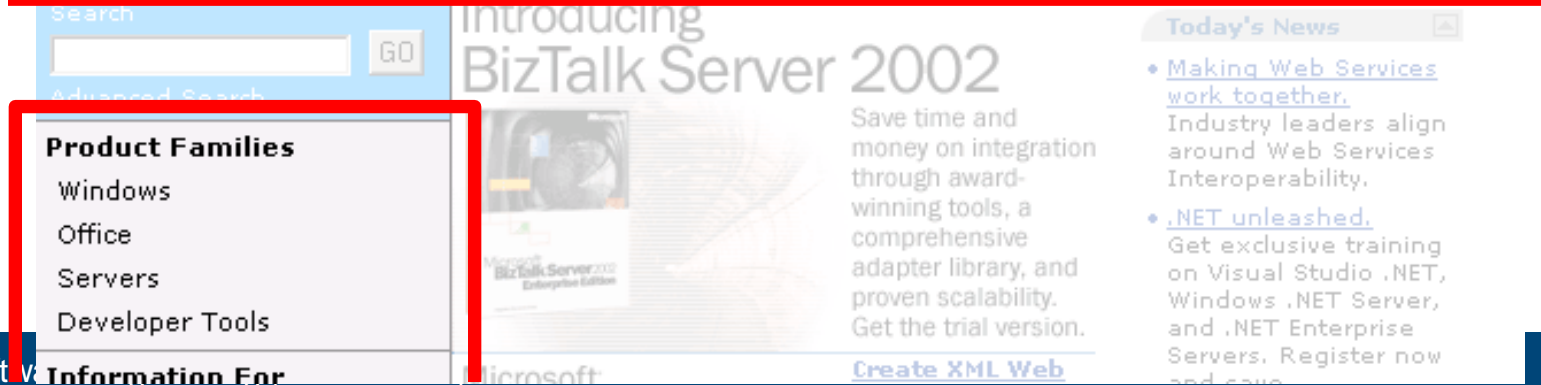
- Version 1.0 now available
- Numerous enhancements and bug fixes



Microsoft®

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Search

GO

Advanced Search

Product Families

- Windows
- Office
- Servers
- Developer Tools

Introducing BizTalk Server 2002

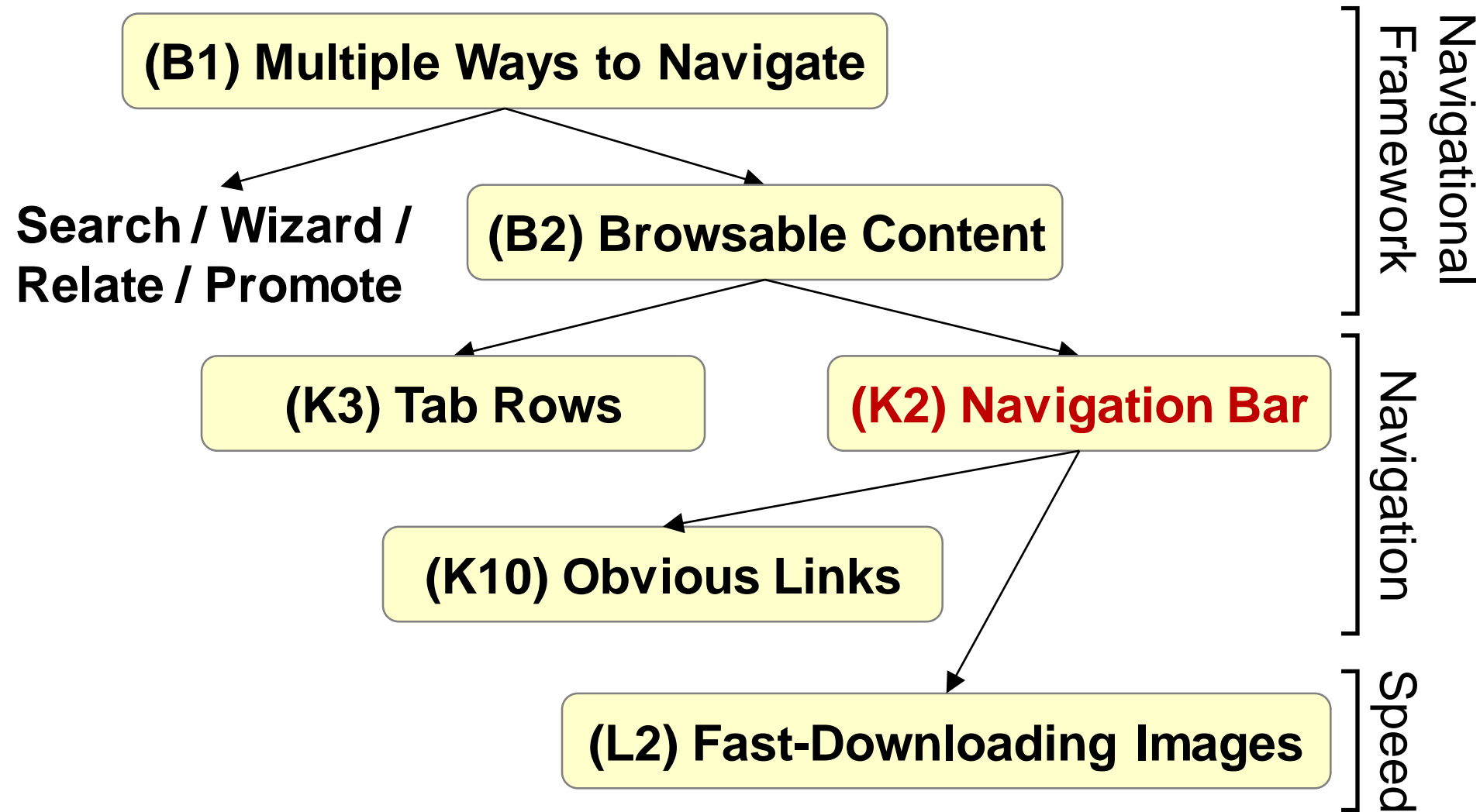
Save time and money on integration through award-winning tools, a comprehensive adapter library, and proven scalability. Get the trial version.

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Today's News

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Industry leaders align around Web Services Interoperability.
- [.NET unleashed.](#)
Get exclusive training on Visual Studio .NET, Windows .NET Server, and .NET Enterprise Servers. Register now and save.

Web Design Patterns



Web Design Patterns

(A1) Personal E-Commerce

(H1) Process Funnel

(F1) Quick-Flow Checkout

(F3) Shopping Cart

(I1) Grid Layout

(I2) Above the Fold

(K4) Action Buttons

(L2) Fast-Downloading Images

Summary

- Lots of issues involved in designing web sites
- Design patterns one way of capturing good design knowledge