The Buzz: Supporting User Tailorability of Awareness Interfaces
James R. Eagan and John T. Stasko
GVU Center
College of Computing
Georgia Institute of Technology
Abundant Access to Info

- News headlines, overflowing email inboxes, Digg, organization charts, friends’ photo galleries, class webpages, movie listings, weblogs, ...
- Search: “You can even find * online”
<table>
<thead>
<tr>
<th>Demystifying Mail.app Plugins for Leopard</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missing Attachment Plugin Unleashed for Leopard</td>
<td>30 Nov 2007</td>
</tr>
<tr>
<td>AttachmentScannerPlugin for Mail.app in beta on Leopard</td>
<td>31 Oct 2007</td>
</tr>
<tr>
<td>Getting Buzzed: Keeping up with Information</td>
<td>25 Jun 2007</td>
</tr>
<tr>
<td>Paranoia and Proportionality</td>
<td>01 Apr 2007</td>
</tr>
</tbody>
</table>

**Demystifying Mail.app Plugins for Leopard**

In the course of writing my email un-attachment plugin for Mail.app (and subsequently updating it for Leopard), I found that Apple has a capable, but entirely undocumented, plugin API. I’m providing this update to my previous tutorial in the hopes that it may be useful to anyone else considering implementing a plugin for Apple [...]
Step 4: Yahoo Maps!

Operators
Search...
For Events...
on EVDB
on Upcoming.org
From a Web Page...
Select Links
Extract...
All Links
A Table
From Each Web Page Extract...
A Price
A Time
A Street Address
Filter by...
Price
Date
Time
Convert...
to Geocode
Display on...
Yahoo Map
Calendar
Other
Add some addresses

Workflow
1. Select Links From Page
2. Extract Address
3. Geocode
   - Get: Address: C: Street Address, City: D: City, State: E: State
   - Geocode service: Yahoo! Geocode
4. Yahoo Maps!
   - Get: Latitude: F: Latitude, Longitude: G: Longitude

Displays:
View results for this step

[Wong and Hong, CHI ’06, ’07]
Customization

- Users want personalization
- Customization is limited
- Customization is difficult
Expressiveness vs Effort

Expressiveness

Effort
Expressiveness vs Effort

- Use Default
- Select Content
- Change Properties
- Basic Customization
Expressiveness vs Effort

- Use Default
- Basic Customization
  - Select Content
  - Change Properties
- Programming
  - Visual Programming
    - Pipes
    - Marmite
  - Write Code
    - Widgets
Bicameral Approaches

- Use Default
- Select Content
- Change Properties
- Basic Customization

- Write Code
- Visual Programming
  - Pipes
  - Marmite

Expressiveness vs. Effort
Rich Customization

- Use Default
- Select Content
- Change Properties
- Basic Customization

- Programming
  - Visual Programming
    - Pipes
    - Marmite
- Write Code
  - Widgets

Effort vs. Expressiveness
Rich Customization

- Use Default
- Select Content
- Change Properties
- Define Layouts
- Configure Abstract Behaviors
- Rich Customization

- Programming
  - Visual Programming
    - Pipes
    - Marmite
- Write Code
  - Widgets
Cocoa Buzz
**Divisive Egypt reforms approved**

Controversial changes to Egypt's constitution are approved in a vote boycotted by opposition groups.

**Reach out to Israel, Arabs urged**

US Secretary of State Condoleezza Rice calls on Arab nations to reach out in peace to Israel.

**UK warns Iran over Navy captives**

Efforts to free 15 Britons will enter a new phase if diplomatic moves fail, Tony Blair warns Iran.

**Sewage flood causes Gaza deaths**

At least four people die as a sewage treatment pool collapses and floods a village in the Gaza Strip.
Wachovia Building Implosion

By Hoenikker
Wachovia Building implosion Sep. 30th 2006.

Your Photos Here!

Zach and Barry

By zpousman

By eaganj
Because of a landslide, we had to hike into town along the railroad tracks. When the train would come by, we had to find a place to duck aside to avoid getting squashed by the oncoming train.

Photos tagged 4thebuzz on flickr.com
Day in Pictures

We declare our independence

I'm thinking Chinese food. You?

Uh, Ma, I can't breathe. Ma?

Let me kiss your Nikes

www.sfgate.com/gallery/pod
FactCheck.org

"The president of Canada" and other factual bobbles.

Another Republican debate, with more false claims.

What Is a Civil Union?
Politicians often say they support civil unions but not gay marriage. We sort out the difference.

Richardson's Job Boast

Job Growth: New Mexico vs. Nearby States
Total nonfarm employment seasonally adjusted Dec 02 - July 07

<table>
<thead>
<tr>
<th>State</th>
<th>Total U.S.</th>
<th>Nevada</th>
<th>Arizona</th>
<th>Utah</th>
<th>Wyoming</th>
<th>New Mexico</th>
<th>Texas</th>
<th>Oklahoma</th>
<th>Colorado</th>
<th>California</th>
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<tr>
<td>Total U.S.</td>
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<tr>
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</table>


He claimed he had created 80,000 jobs when government figures put the total at 68,100.

Liberal Lobby Lacks Context

THE HILL

Rep. Schakowsky: Petraeus hints at decade-long Iraq presence

"Petraeus hints at decade-long Iraq presence"

Coalition distorts the words of two generals in an ad attacking Republicans.

http://www.factcheck.org/
Richard Catrambone's research interests include:

Creating examples to help learners form meaningful and generalizable solution procedures. I and the students in my lab have explored this issue in domains ranging from probability and physics to ballet. The use of task analysis techniques for identifying what a person needs to learn in order to solve problems or carry out procedures in some domain. Using information from task analyses to guide the construction of teaching and training materials including computer-based (multimedia) instructional environments. Exploring technology such as animations and embodied conversational agents (ECAs) for improving interfaces and helping people learn and carry out tasks more easily. Analogical Reasoning

Prior to joining Georgia Tech, Dr. Do was an Associate Professor at Carnegie Mellon University, where she co-directed the CoDe Lab (Computational Design Laboratory). Her research interests include Intelligent Systems and Objects, Design Computing and Cognition, Physical and Ubiquitous Computing, Intuitive Design Interfaces, Sketch Understanding, Diagram Indexing and Retrieval, Computationally Enhanced Construction Kits and Toys, Architectural Robotics, Ambient Intelligence and Smart Living Technologies.
User Interviews

- Background survey
- Identify existing practices:
  - Walk through bookmarks, browser histories
- Identify desired content, customizations:
  - Index cards: what (coarse and fine)
Iterative Prototypes

- Task decomposition
- Started with sketches and focused interviews
- Refined design with high fidelity prototypes
Richard Catrambone

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Channel Browser
Channel Metaphor

Data -> Extraction -> Transformation -> Visualization -> DB -> Presentation

- Extraction
- Transformation
- Visualization
- DB
- Presentation
Channel Metaphor

Data → Extraction → Transformation → DB → Visualization → Presentation

Harvesting
Channel Metaphor

Channel

Data → Extraction → Transformation → DB → Visualization → Presentation
Presentation Templates

Data:
- Forecast
- Radar
- Precip
- Moon

Header

Footer
Presentation Templates

Data:
- Forecast
- Radar
- Precip
- Moon
Presentation Templates

Data:
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- Radar
- Precip
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Presentation Templates

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Presentation Templates

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Presentation Templates

Data:
- Forecast
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- Precip
- Moon

![Diagram of presentation template layout](image)
Presentation Templates

Data:
- Forecast
- Radar
- Precip
- Moon
Presentation Templates

Data:
- Forecast
- Radar
- Precip
- Moon
Presentation Templates

Data:
- Forecast
- Radar
- Precip
- Moon

Diagram:
- Header (0.1, 0.1) to (0.9, 0.5)
- Top (0.9, 0.5)
- Bottom (0.9, 0.9)
- Footer (0.1, 0.5) to (0.9, 0.9)
Presentation Templates

Data:  
- Forecast  
- Radar  
- Precip  
- Moon
Channel Browser

- My Channels
  - iTunes Top Songs
  - Jason Hong's Confabulations
  - Lessig Blog
  - Lifehacker
  - Macintosh
  - MetaFilter
  - Metroblogging Atlanta
  - Michael Geist's Blog
  - Milwaukee Brewers
  - Mind Blogging
  - My Comics
  - My Inbox
  - My Webcams
  - Netflix New Releases
  - Netflix Top 100
  - New and Upcoming Movies
  - Niall Kennedy's Weblog
  - NSF News

- My Webcams
  - Display: Occasionally
  - Display Now
  - Configure...
  - Share...
  - 65 channels loaded.
The Buzz Customization Space

- Use Default
  - Use Default
- Change Properties
  - Change Properties
- Subscribe Channels
  - Subscribe Channels
- Define Layouts
  - Define Layouts
- Configure Scrapers/Harvesters
  - Configure Scrapers/Harvesters
- Rich Customization
  - Rich Customization
- Write Extraction Rules
  - Write Extraction Rules
- Write Plugin
  - Write Plugin
- Programming
  - Programming

Expressiveness vs. Effort

Holy Grail
Browsing Shared Content
Browsing Shared Content
Channel Browser
Channel Editing (WebCams)
WebCam Presentation

Configure Channel: My Webcams

Title: Web Cams
Footer: 
Display: Occasionally

Set Background... Icon...

Web Cams

Region 2 | Region 5
Any Item | Any Item

Region 6

Region 4 | Region 3
Any Item | Any Item

Preview

Cancel OK
WebCam Region Editor

Display in region: **Oregon Coast**
- Use the same window
- Draw in region

Align images: Center
Align captions: Left
Jitter placement: None

Constrain to region:
- Clip to fit
- Scale to fit
Example: BBC
Example: BBC
Example: BBC
Example: BBC
Example: BBC
Example: BBC
yay for summer!
don't say that yet...

Hotspots: Lab: PowerPoint • Lab 4 Questions • Homework 6 • Homework 6 Questions • Slides and Code • TA Corner • Comments? • Announcements • FAQ • Static Webspace

CS1315 CoWeb

This is the home of CS1315 Introduction to Media Computation. For information on what this class is about, visit the Media Computation Project CoWeb. Please read the Statement on Privacy and Statement on Acceptable Behavior.

Read Me First! What comes after CS1315?

Recent Announcements

April 8
I won't be able to hold office hours tomorrow, please email me if you have questions. Bobby Mathew

April 7
Hey everyone! I won't be able to hold my office hours tomorrow because I have to meet with a professor. Email me if you have any questions or need anything. Colleen Jordan

Hey guys! I have to cancel my office hours for today. Email me if you need anything. Toni Walden
Example: The Snake

Configure Channel: CS1315 What the Snake Says

Gather data: by crawling from web site

URL: http://coweb.cc.gatech.edu/cs1315

Depth: 1

Gather: Using a pattern matching rule...

Advanced Options

Update data:

Every 1 days at 10:00

Only when older than 12 hours
Example: The Snake
Sharing Customizations
Sharing Customizations
Sharing Customizations

The Buzz

Atlanta Thrashers

Recent Thrashers images from Yahoo! Sports. Background by liltree on Flickr.

Tags: nhl, hockey, thrashers, atlanta
Last updated: Mon Apr 23 14:05:04 2007
Pilot Deployment Study

- Six participants at Georgia Tech
- All modified channel lineup
- Five created derivative channels
- Two created new channels from scratch
Community Content

- Running in lounge
- Crawls community’s public webspace
- Special tag on Flickr
Deployment Results

- Technically savvy users seem willing and able to perform rich customization
- … and share their customizations, too!
- More evaluation needed and ongoing
Data Extraction Approaches

- Manual configuration
- Inference-based extraction [e.g. Dontcheva, UIST ’07]
- Agent-driven
- Surface Representations
Conclusions

- Rich customization important
- Wizard-like interface appears useful
- Awareness apps should support richer customization interfaces
- Fits into a larger “customization ecology”
Thank You

www.cc.gatech.edu/~eaganj
www.gvu.gatech.edu/ii/buzz