California Digital Library:

Designing for the User

Missouri Digitization Conference
March 10, 2009
Rachael Hu
California Digital Library (CDL)

- Established in 1997 by University of California’s Office of the President
- Develops tools and services for 10 UC campus libraries
- Provides access to both licensed and freely available digital content
Assessment, Design, and Web Production Services

- Provide user assessments
- Information architecture and interaction specifications
- Create and maintain web pages
CDL programs and their interfaces

- Bibliographic Services
  - (UCeLinks, Melvyl)

- Digital Preservation
  - (Web at Risk)

- Digital Special Collections
  - (Online Archive of California, Calisphere)

- eScholarship Publishing
  - (eScholarship Repository, Mark Twain Project Online)
Build it and they may not come

- No research done into users needs
- Audience not clearly defined
- No clear branding
- No usability testing
- No marketing plan
Benefits of user-centered design

- Online product that will be used
- Scopes and prioritizes features
- Help to make design decisions based on user data
Checking in with the user

- Before - discovery period
- During - iterative design
- After - evaluation and marketing
Online Archive of California (OAC)

http://www.oac.cdlib.org

- 9,000 online finding aids/collection guides
- 200,000 digital items
- Over 100 contributing institutions from across California
- Intended primary audience: researchers of all levels
Reasons for OAC redesign

- Outdated visual design (current look and feel dates back to 2002)
- Need to improve navigation and overall usability
- New technologies (for upgrade display features and also backend infrastructure and contributor tools)
- Inclusion of MARC records
- Calisphere
Over 200,000 digitized primary sources

From the UC campuses and institutions across California

Audience: Serves the general public, and is tailored to meet the needs of K-12 educators
Two audiences, two sites

Online Archive of California
- Archivists
- Historians
- Researchers

calisphere
- K-12 Teachers
- Lifelong learners
- Undergraduates
Two different goals

**OAC** is where you go for finding aids/collection guides for primary sources

**Calisphere** is where you go for digitized primary sources
Getting our sea legs

- Literature review
- Comparative analysis of display features
- Defining user groups...
  - Reference archivists
  - Expert researcher
  - Novice researcher
Comparative analysis

Northwest Digital Archive (NWDA)

Bentley, University of Michigan

Rocky Mountain Online Archive (RMOA)
Comparative analysis

Jerome Hill Papers Online

American Memory

Polar Bear Expedition Digital Collections
OAC display goals

- Historical context of collection
- Online items vs offline items
- Serve main user groups
  - Archivists
  - Researchers
Before: Pre-design assessment

- Contextual interviews and observational walkthroughs
- Points of pain
- Heavy use areas
- Entire research workflow

TIPS
- *Listen* to what users say
- *Watch* how they use the resource
- Advocate for users during development
Recruiting users

- Archival contributors

- Researchers
  - Sign-up sheets at reference desks
  - Email announcements to departmental listservs
  - Craigslist
Recruitment process

Online survey
- Scheduling
- Demographic
- Experience with archives, primary sources, and finding aids
On time deliverables

☑️ Functional personas

☐ Do’s and don’t list

☐ Requirements list with prioritization

☐ Interactive wireframes with specifications
Archivists

**Goal:** To locate relevant material that are a part of their institution's collection.

- Use library’s online catalog in conjunction with OAC for content discovery
- Use OAC for EAD processed records
- Starts with institution’s browse page
- Control+F popular location technique
- Uses collection level search box
Guide to the William R. Melton Papers

Series 3. Military Service. 1939-2004, undated. 1.70 Linear feet

Series Scope and Content Summary
This series includes, but is not limited to, newspaper clippings relating to the military service and history of the Tuskegee Airmen, photographs of the Tuskegee Airmen and Tuskegee Army Air Field nurses, lithographs of fighter planes, and awards that William R. Melton received from various entities.

[Box 1]
[Folder 5]
Stapled packet from Pete Peters to William R. Melton including "Black Redtail Angels' gather with Eagles" by Pete Peters from the Las Vegas Sun (3 photocopies) . 1996

[Box 1]
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Newspaper clipping titled "Tuskegee Airmens Confab Attracted Top Black Military Brass" from the St. Louis Sentinel . 1982

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Newspaper clipping titled "Black pilots broke segregation barrier" from the Star News . 1983

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Newspaper clipping titled "Black Pilots Shatter Myths" from the Sacramento Union . 1974

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[Folder 5]
Newspaper clippings titled "Tuskegee Alumni Honors Jenkins" and "Airmen Honor Doolittle" from the Los Angeles Sentinel . 1983
Researchers

Advanced

Goal: To locate relevant material both physical and digital objects.

- Understands primary source collection arrangements
- Will interact with reference archivist and visit institution
- Uses OAC search
- Search terms in context and search hits very important
- Needs institution’s contact information
Inventory of the California Horse Racing Board Records

View options:
Standard
Finding aid

Search within this document:

[Search]

Contents:
Descriptive Summary [4 hits]
Administrative Information [2 hits]
Agency History [10 hits]
Scope and Content [4 hits]
Related Materials at the California State Archives [8 hits]

Arrangement

Indexing Terms [4 hits]
Series Descriptions [5 hits]
Satellite Facilities Minutes, 1965-1970
Correspondence, 1968-1988
Publicity Files, 1968-1996
Investigation Files, 1968-1996 [2 hits]
Minutes, 1965-1995 [8 hits]
Transcripts, 1968-1995 [4 hits]
Meeting Files, 1960-1994
Advisory Committee Files, 1962-1994
Reports, 1970-1994 [1 hit]

Want to learn more?
Do you have a question about this collection?
Would you like to view the original items in this collection?
Are you seeking permission to publish or reproduce items in this collection?

More information on this collection:
Contact the contributing institution: California State Archives

To learn more about these issues, please see the OAC Frequently Asked Questions.
Researchers

Novice

Goal: To locate relevant content or digital material.

- Use library’s online catalog or Google for general topic searching
- Unfamiliar with primary source collections or finding aids
- Enters OAC mid-stream at the collection level
- Hard for them to understand online vs offline
- Needs general overview of collection
On time deliverables

- Functional personas
- **Do’s and don’t list**
- **Requirements list with prioritization**

- Interactive wireframes with specifications
Do’s and Don’ts ➔ Requirements

- Print entire collection guide
- Wanted to search digital objects within a collection
- Wanted yellow search term highlighting
- Lost their place in long scrolling lists
- How do I get the item?
On time deliverables

- Functional personas
- Do’s and don’t list
- Requirements list with prioritization
- **Interactive wireframes with specifications**
During: Iterative design

- Participatory design
- Clickable wireframes for quick reaction testing
- Quick development prototypes with real data
Major additions to new OAC

- Browse by institution page with prominent contact information
- Incorporation of dynamic maps
- Auto complete search on browse collections pages
- Inclusion of MARC records within search and browse displays
- Collection level page with prominent and stationary collection information
Bancroft Library, UC Berkeley

Collections with online items: 58
Physical collections: 250

Find a collection at this institution

Hit escape key to turn off autocomplete feature.

Online items available
Show collection descriptions

1906 San Francisco Earthquake and Fire Digital Collection (8920 digital objects (approximately 14,000 images and 7,000 pages of text))
1916 Preparedness Day Parade Bombing, 1916-1933 - Photographs (32 digital objects)
1934 International Longshoremen's Association and General Strike (247 digital objects)
Choose a city:  Select one  Go  
Choose a campus:  Select one  Go

Zoom in to view an institution's location. Click on an icon to see more information about the institution.

Contributing Institutions:
- Albany Library
- Anaheim Public Library
- Arcadia Public Library
- Archives and Special Collections
- Department, California State University
- Dominguez Hills
- Art Center College of Design Archives
- Arts Library Special Collections, UC Los Angeles
- Bancroft Library, UC Berkeley
- Berkeley Art Museum/Pacific Film Archive
- UC Berkeley
- Berkeley Public Library
- Biomedical Library (Louise M. Darling Biomedical Library), UC Los Angeles
- California Historical Society
- California Institute of Technology
- California Institute of the Arts Library
- California Museum of Photography, UC Riverside
- California Polytechnic State University
- California Social Welfare Archives
- University of Southern California
- California State Archives
- California State Library
- California State Parks
- California State Railroad Museum Library
- California State University Archives
- California State University, Dominguez Hills

Collection Number: 233
Riverside Library, Special Collections Department
Riverside, CA 92517-5900

Series 3 Military Service, 1939-2004, undated 1.70 Linear feet

Series Scope and Content Summary

This series includes, but is not limited to, newspaper clippings relating to the military service and history of the Tuskegee Airmen, photographs of the Tuskegee Airmen and Tuskegee Army Air Field nurses, lithographs of fighter planes, and awards that William R. Melton received from various entities.

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[Box 1] [Folder 6] Booklet titled "Tuskegee Airmen, The First Top Gun: The Last Hurrah" 2004

[Box 1] [Folder 7] Artwork brochure for the "Tuskegee Airmen 332nd Fighter Group" (3 copies) undated

[Box 1] [Folder 8] "Tony Brown’s Journal", January/March (2 copies) 1983

Collection Contents:
- Overview
- Administrative information

Collection Contents:
- African American History
- Aviation History
- Military Service
- Personal History
- Tuskegee Airmen, Inc.
Evaluation: test, test, test

- Paper prototyping
- Detailed task based usability testing
- Extended testing period with working group and contributors
- ADA compliance testing
Usability testing

- Beta release to archival contributors
  - Feedback on labeling
  - Data display
  - Functional testing

- First round testing with advanced researchers (August, 2008)

- Second round testing with researchers (April, 2009)
Evidence is key!

- Task-based testing
- Audio clips
- Camtasia clips
- Video clips
- Review with stakeholders and development team
Things discovered during iterative design

- Archivists need:
  - Sort MARC from EAD

- Visual emphasis:
  - Labeling and search term highlighting

- Online vs offline:
  - Increase clarity in labels
After the release party…

- Surveys
- Usage logs
- Workshops with archivists
OAC User Timeline

✔ **Before** (4 mos)
  - Research, plan, define scope

✔ **During** (12 mos and ongoing)
  - Iterative design, visual design, and program functionality
  - Usability testing and contributor feedback

☐ **After** (still to come)
  - surveys, workshops, ADA compliance testing
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Final checklist

- Thank you!

- Email: rachael.hu@ucop.edu

- Questions?