

# Usability Testing in Federal Libraries: A Case Study



FLICC Libraries & Emerging Tech Working Group  
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Supreme Court of the United States  
Library



SUPREME COURT  
OF THE UNITED STATES

<http://www.supremecourt.gov/>

# the slide where I tell you about what I'm going to tell you about

- usability matters
- we did usability testing and so can you
  - challenges
  - processes (i.e. how we confronted challenges)
  - ultimate triumph



# what is this “usability” thing I keep hearing about?

- *“ease of use and learnability of a human-made object”*  
– [Wikipedia](#)
- *“if the user can’t find it, the function’s not there”*



# you're a federal library; has this ever happened to you?

- your websites live on the intranet
  - so much for [cool usability testing web apps](#)
- you have a limited budget for usability tools
  - so much for [Mora](#)
- you lack access to in-house expertise
  - so much for...hold on, it's not as hard as you think!



# Supreme Court Library: it's all about the research

- performs research for justices' chambers
- curates resources for said research
- maintains information applications...to help with research
  - among them, the Virtual Library

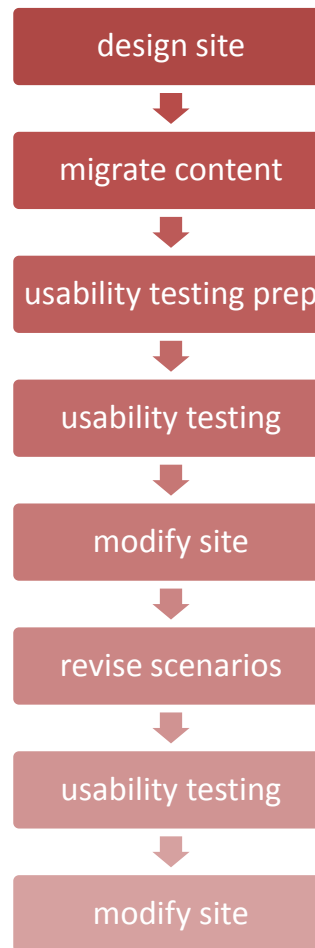


# the Virtual Library, our electronic resources access portal

- contains 1,000+ links to subscription, non-subscription, and local electronic resources
- maintained by Content Team composed of five Research and Technology librarians
- built with ASP.NET, JavaScript, Dreamweaver
- originally built in 2004, grew organically



# to redesign a Virtual Library, in convenient flowchart form



# usability testing prep, elaborated

## usability testing prep

- configure testbed
- devise a test plan
- role of observers?
- observation recording strategy?
- recruit users
- test users





# usability testbed: the free software that makes it happen

- Usability Testing Environment (UTE) v2.0
  - free to feds
  - Windows XP compatible
  - IE-based task administration
  - <http://utetool.com/>
- CamStudio v2.0
  - free/open source
  - Windows compatible
  - screen and audio recording
  - <http://camstudio.org>



# usability testing environment

- enclosed office
- PC equipped with microphone and testbed software
- one user at a time
- one hour time block
- two observers



 Aaron R. Fulkerson



# devise a test plan: what do you want to test today?

- what do you want feedback on?
  - well, what design decisions are you most ambivalent about?
  - breadth versus depth
  - you can't test everything



# where the rubber hits the road: translate test plan into scenarios

- navigational task
  - what page should user start on/end up at, and how should s/he navigate between the two?
- feedback
  - more open-ended
- codify expectations in a document that observers can quickly annotate in test session



# example scenarios

- “where would you expect to find resource X?”
- “what would you label this?”
- “is there anything that strikes you immediately?”
- “what are your impressions of the text size?”
- “where would you look for a tool that does X?”
- “is there anything you feel that is missing?”



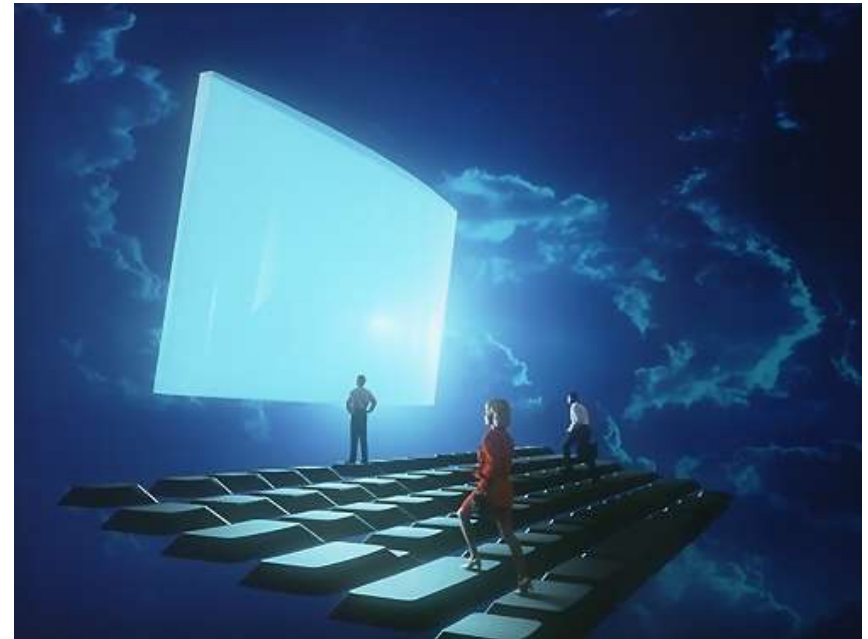
# example: single scenario from observer note-taking sheet

- *Find Justice Kennedy's testimony before Congress on the Court's Fiscal year 2008 appropriations.*
  1. top nav link: 'Links by Subject'
  2. right box: 'About the Supreme Court' / 'The Court as an Institution' > Appropriations
  3. lower right box: 'Supreme Court Appropriations Documents by Year' > drop-down for specific year > FY2008
  4. second entry: 8 March 2007 > pp. 1-35



# recruiting users

- find most passionate users
- how many is 'enough'?
- breadth versus depth
- don't let them fall off the giant, floating keyboard



[Free Stock Photos Library](#)



# administer usability test

- start UTE and CamStudio
- consent form
- instructions
- observer intervention, as needed





# observer summary spreadsheet template

Name	Navigation Path	Scenario Responses	User Suggestions	Observer Comments
User #1				
User #2				
User #3				
User #4				

- **Scenario Response** – noteworthy comments
- **Navigation Path** – (if applicable) what path did the user take?
- **User Suggestions** – incidental suggestions about any aspect of the site
- **Observer Comments** – summary of all user feedback plus observer comments



# scenario 9 (of 10)

- Find Justice Kennedy’s testimony before Congress on the Court’s Fiscal Year 2008 appropriations.
- Expected path: Links by Subject > Appropriations > FY2008

Name	Navigation Path	Scenario Response	User Suggestions	Observer Comments
User #1	<ol style="list-style-type: none"><li>1. Links by Subject</li><li>2. Legislative</li><li>3. Legislative History</li></ol>	<ul style="list-style-type: none"><li>• Would probably go directly to THOMAS.</li><li>• Would use LexisNexis or Judiciary Committee website.</li><li>• Conflated “Legislative History” and “Legislative.”</li></ul>	<ul style="list-style-type: none"><li>• Use “Supreme Court Annual Budget Hearing” label rather than “Appropriations.”</li></ul>	<ul style="list-style-type: none"><li>• Even having been primed with “Appropriations,” no users thought to look for a section by that title.</li><li>• Three users went directly to Links by Subject, then had trouble from there.</li></ul>
User #2				
User #3				
User #4				



# after the users have clicked and spoken: results analysis

- enhance observer session notes by re-watching videos
- distill all notes into summary findings
- present findings to redesign team
- not all findings are actionable; users aren't always right!



# examples of feedback-informed modifications

- removed non-interactive interface elements that users thought were interactive
- removed superfluous graphics
- renamed top-level nav categories
- made text entries more concise
- added controls to change text size
- kept quick link-type shortcuts on home page
- prioritized deployment of site search



# outcomes and lessons learned

- outcomes (i.e. ultimate triumph)
  - more unique users
  - better website
  - better framework
- lessons learned
  - don't discount accessibility
  - users are unpredictable
  - librarians and users think differently
  - a little bit of usability testing goes a long way!



# usability is a journey not a destination: how could we improve?

- perform usability testing earlier
- recruit more users
- recruit more representative users
- survey users after “final” design changes
- better utilize quantitative data



the slide where I ask if you have any  
questions



# appendix: federal government usability resources

- Usability.gov, <http://www.usability.gov/>
- HowTo.gov: Usability and Design, <http://www.usa.gov/webcontent/usability/index.shtml>
- GSA Usability Resources, <http://www.gsa.gov/portal/content/105114>
- U.S. Government Web Content Managers Forum, <http://forum.webcontent.gov/>
- Section 508, <http://www.section508.gov/>

