Truman’s Responsive Design Catalog

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Plan

- Responsive design: what is it & why?
- Responsive design in webcat context
- Our project timeline
- Tour of the responsive catalog
- Specific problems we faced

Please interrupt!
Responsive Design

“Rather than tailoring disconnected designs to each of an ever-increasing number of web devices, we can treat them as facets of the same experience. We can design for an optimal viewing experience, but embed standards-based technologies into our designs to make them not only more flexible, but more adaptive to the media that renders them. In short, we need to practice responsive web design.” – Ethan Marcotte, “Responsive Web Design” (2010)
Problem: Displaying Content on Different Devices

Solution 1: Create different web pages for different devices (MobileCat)

Solution 2: Create a single web page that responds to different constraints of different devices (Responsive Design)
Why We Didn’t Like MobileCat

- Requires separate maintenance
- Full catalog inaccessible: offers a link to the full catalog, but the option is not “sticky”
- Patrons cannot renew items, but never see a verification that their items have been renewed
- Truman would like to brand our own scoped instance of the catalog
- Truman website underwent responsive redesign in 2014
Why Is Responsive Design Hard?

- Webpac Pro offers much flexibility for customization, BUT
- Key components of the catalog are inserted into pages through “Tokens”
- In production, the system replaces the tokens with system-generated code, which is not necessarily responsive.
So How do We Make It Responsive?

- CSS can style elements to make them more responsive. CSS3 allows very fine controls for selecting and styling elements.
- JavaScript can rewrite elements to correct nonresponsive features.
- Potential problem: users must access the page with devices and browsers that are capable of reading and executing CSS3 or JavaScript.
Time Line

- April 2015: Conversations at IUG 15 with III developers & with Justin
- April/May 2015: We reassigned a student worker (Jessica) from materials processing to library software assistant.
- Summer 2015:
  - Conversations with MCO about plans for fall.
  - Convened a “wepac design” committee to review options
  - Megan Durham appointed as MCO contact.
- September: Jessica returns from vacation and we start!
  - Meet with campus ITS to discuss local practices for responsive design
  - Meet weekly with wepac design committee
Why You Get Me ...

... Because Europe.
Existing Models for Responsive Redesign

- Wellcome Library
  http://catalogue.wellcomelibrary.org/search/

- University of Dayton
  http://flyers.udayton.edu/
Thoughts on Existing Designs

- Want streamlined views of search boxes and controls.
- Don’t crowd out search functionality with links & menus.
- Borders separating various bits (tabs, results) need to be very distinct.
Tools

- Git/Github: repository software (for sharing documents with MCO)
- Microsoft SharePoint: for experimenting with mockups
- Browser developer tools
- WebCat documentation
- Bootstrap (JavaScript library)
Bootstrap

- Library of JavaScript functions and scripts that can be used to easily implement responsive features
- Divides a webpage into a “grid” of 12 columns and arbitrarily many rows.
- A developer partitions the web content into groups (typically with `<div>` tags), organizes the groups into rows, and assigns each `<div>` a certain number of columns based on the size of the screen.
- A developer can also hide or display elements based on the size of the screen, which facilitates turning tabs or links into menus (like “hamburger menus”)
- Images can be made scalable for different screens.
University of Dayton Files, Greenstone Interlude

- Megan was able to acquire University of Dayton’s files, and began work on the consortium template.
- Megan requested that we wait while she adapted the UD files for a consortium template
- Jessica spent this time getting up to speed on Github and Webpac files
- Meanwhile, we applied Responsive Design to our Greenstone-based digital library. This turned out to be valuable practice.
Tour of the **Responsive Catalog**: Search Screen

- We have a single search screen for all indexes. Selecting a tab displays search boxes for some indexes, and hides for others. The page for the keyword search screen was copied to all other indexes, save one.
- Notice that selecting different tabs does not change the URL, unless you click on “Advanced Search.” This was necessary because there were features of the advanced search page that were only available through that page.
- Some index tabs have multiple search boxes.
- On smaller screens, the navigation bar converts to a hamburger menu; the tabs to a drop-down menu.
Tour of the **Responsive Catalog**: Search Screen
Tour of the Responsive Catalog

- Results screen: Note that we have the location table appearing in the results. Tables aren’t ideal, but we’ve wrapped this in a row class, and specified a width of 12 columns for all screen sizes. Seems to work okay.
- Record screen: Note the navigation buttons on the left. Dayton originally had these relocating to just below the title/author/publication information, above the location table. We decided to break up the buttons to move less-frequently used buttons to the bottom.
- Course Reserves
- My Library
Tour of the **Responsive Catalog**: Results Screen
Tour of the **Responsive Catalog**: Record Screen
Tricky Problems

- Mobile drop-down on search screen: this caused headaches for Megan, then when we started working on our scoped page it was the first thing we broke. Problem had to do with loading JavaScript files in the proper order.
- Advanced keyword tab: initially a puzzle to figure out why it was coded the way it was, then making it work.
- 856 script for hiding non-Truman links.
- SMS ("text-a-call-number") script. Was not finding a title in any record that did not include a colon. Solved with Sierra Bib API (Hooray! It’s useful!)
- Direct link to course reserves did not work. Solution was to rewrite all links in scoped pages to explicitly include scope
Implementation & Reception

- October 2015: Begin work editing MCO’s responsive template
- Details in MCO ticket #63484
- December 4, 2015: Megan’s last day at MCO
- December 7-11: Finals week
- Rest of December: Justin & I worked out some lingering issues.
- January 19: Live
Integration with MobileCat

- User enters Truman-scoped search in MobileCat? Redirect to full site.
- Removed mobile redirect script from Truman-scoped toplogo.
Complaints/Suggestions/Things to Think About

- Monochrome color scheme
- Multiple “Submit” buttons on search pages: the proper Submit button must be clicked, or searches don’t work
- Location pages: not very attractive
- “Enter” key not parsed as “Submit” to open My Library account
- Tables in My Library Account
- New course reserves display in bib records (available with 2.1)
Some Other Options

- University of Arkansas
  [http://library.uark.edu/search/](http://library.uark.edu/search/)

- “Responsive design” example set: loaded onto Lance staging 6/12/2016