



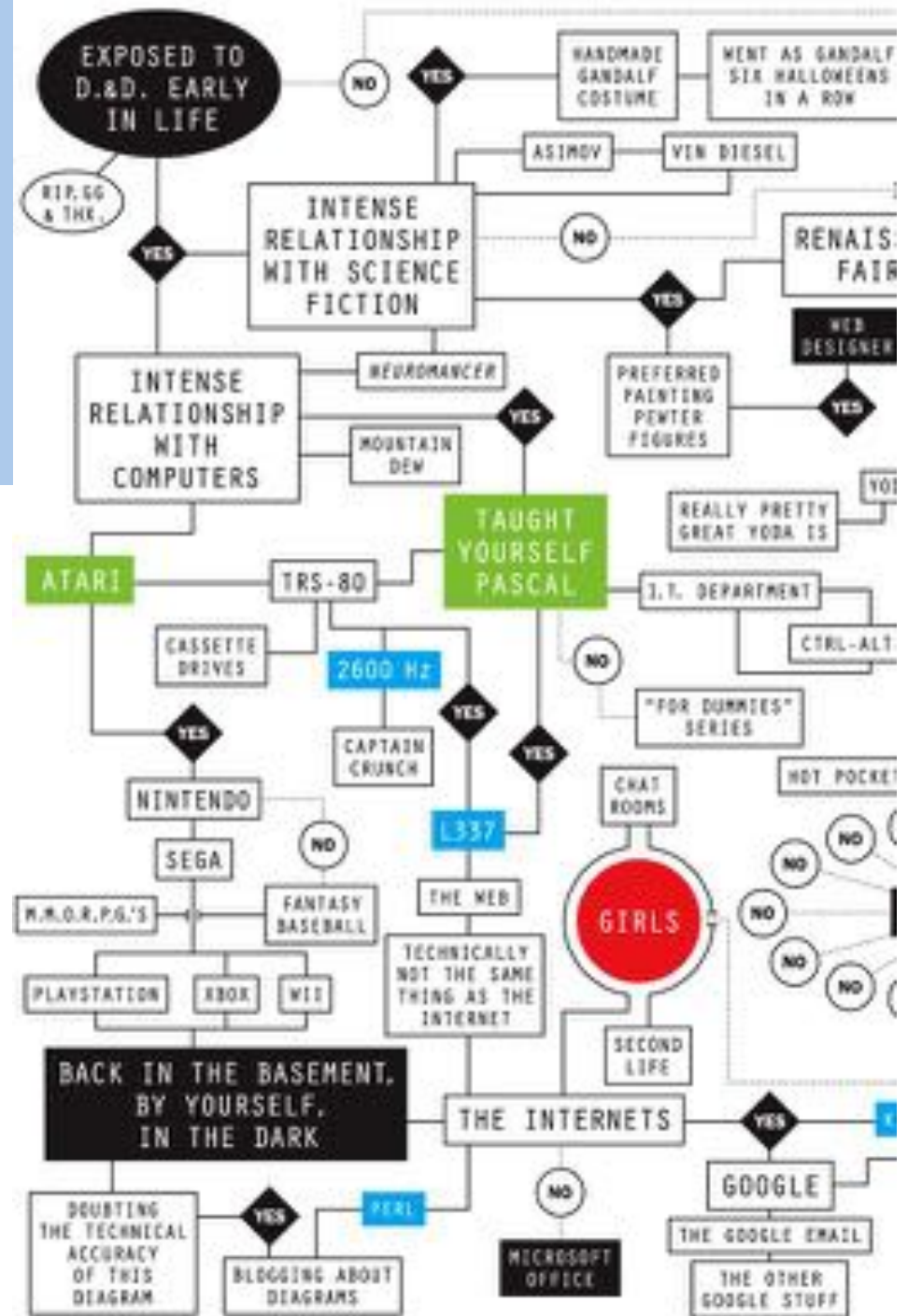
# Under the Hood: Our UX-Driven Mobile Site Redesign

**Courtney Greene**  
**Bret Davidson**  
Handheld Librarian VI | 2.1.12

before we go any further...

what kind of geek are *you*?

*respond in the polls*



# 2009

## IU Libraries Mobile

[Libraries & Hours](#)  
[Contact Us](#)  
[Text Us \(812-671-0275\)](#)  
[Chat \(for Smartphones\)](#)  
[Renew](#)  
[Recall](#)  
[Wells Library Collections Directory](#)  
[News & Events](#)  
[Getting to IU](#)  
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IU Libraries

### Problem:

Initial mobile site launched as test. Minimal staffing.  
Full participation in campus sponsored app impossible.  
User experience nil.

# 2011

## IUB Libraries Mobile

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Home Send Feedback Full Site

### Solution:

Modify existing site - minimal work for maximum impact.

# 2009

## Problem:

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## Focus:

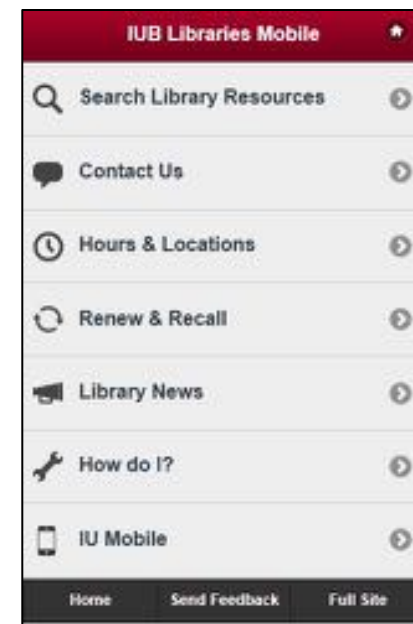
Improve existing information architecture, aesthetic

Cross platform solution

Increase traffic to mobile site

Leverage new technologies:  
HTML5, jQuery Mobile, etc

# 2011



## Solution:

Modify existing site - minimal work for maximum impact.

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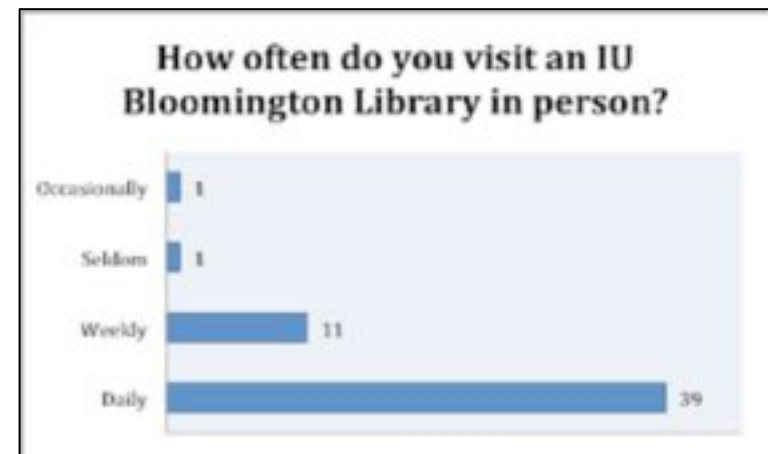
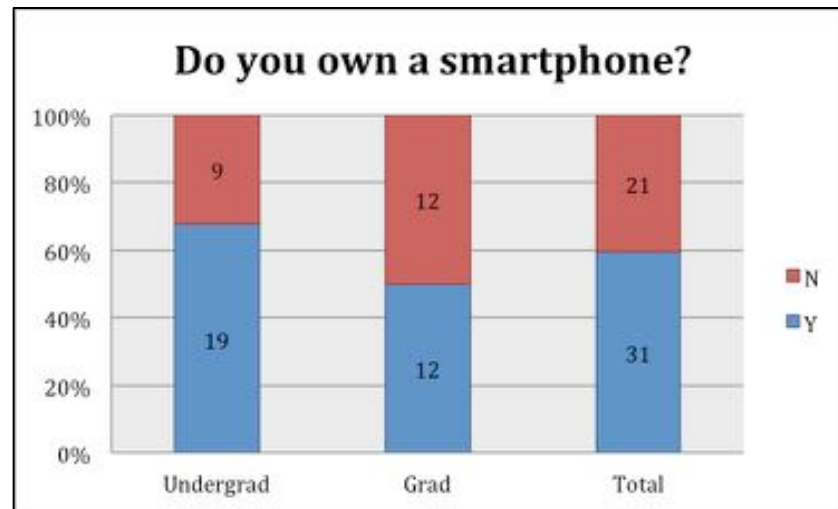
vention

# needs assessment

Surveyed 52 students about use of libraries, library site, smartphones.

Most frequently used sites? Facebook, Google, & IU e-mail; also OnCourse (campus LMS) & OneStart (campus portal).

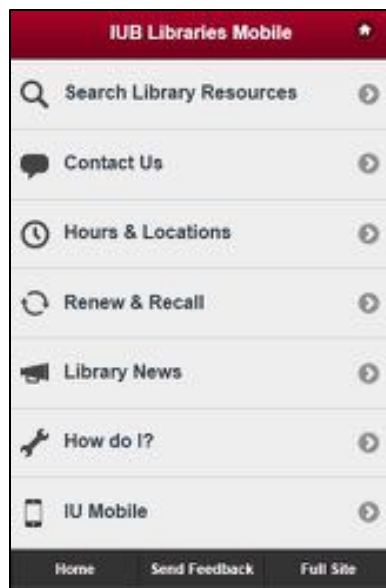
Most heavily used services on the Library site were also the most requested additions to mobile site: IUCat (library catalog) & databases.



# prototyping

Touch screens – new tools, new ways.  
Used paper prototypes + new system  
for logging user paths.

**Tools used:** Omnigraffle,  
iPhone stencils



# framework

jquerymobile.com

extends jQuery  
uniform UX  
theme roller

The screenshot shows the jQuery Mobile website. At the top left is the jQuery logo with the text "mobile framework" and "A Touch-Optimized Web Framework for Smartphones & Tablets". Below this is a welcome message: "Welcome. Browse the jQuery Mobile components and learn how to make rich, accessible, touch-friendly websites and apps." There are two main navigation menus. The left menu, titled "Overview", includes: "Intro to jQuery Mobile", "Quick start guide", "Features", "Accessibility", and "Supported platforms". The right menu, titled "Components", includes: "Pages & dialogs", "Toolbars", "Buttons", "Content formatting", "Form elements", "List views", "API", "Configuring defaults", "Events", "Methods & Utilities", "Data attribute reference", and "Theme framework". A yellow "Final" badge is visible in the top right corner of the page.

jQuery  
mobile framework  
A Touch-Optimized Web Framework for Smartphones & Tablets

Welcome. Browse the jQuery Mobile components and learn how to make rich, accessible, touch-friendly websites and apps.

Overview

- Intro to jQuery Mobile
- Quick start guide
- Features
- Accessibility
- Supported platforms

Components

- Pages & dialogs
- Toolbars
- Buttons
- Content formatting
- Form elements
- List views
- API
- Configuring defaults
- Events
- Methods & Utilities
- Data attribute reference
- Theme framework

Final

© 2011 The jQuery Project





# geolocation

A Modern, Lightweight Open-Source JavaScript Library for Interactive Maps by [CloudMade](#)

Overview Features Examples Documentation Download

Leaflet is a modern, lightweight BSD-licensed JavaScript library for making tile-based interactive maps. It was developed by [CloudMade](#) to form the core of its next generation JavaScript API.

It is built from the ground up to work efficiently and smoothly on both platforms, utilizing modern browser technologies. Its priorities are usability, performance, small size, [A-grade](#) browser support, flexibility and extensibility. It is designed to be modular, extensible and very easy to understand. Find out more on the [project page](#).

leaflet.cloudmade.com

lightweight  
cross browser  
well documented  
extensible

Tweet 566 Follow @LeafletJS Like 541 likes. Sign Up to see what's new

**IUB Libraries Mobile**

- All Libraries
- Wells Library
- East Tower
- Information Commons (1st Floor West)
- West Tower (Floors 2-5)
- Closest Library
- Business/SPEA Information Commons

You are here!

Powered by Leaflet — Map data © 2011 OpenStreetMap contributors, Imagery © 2011 CloudMade

Home Contact Us Full Site

Copyright © 2011 The Trustees of Indiana University  
[Privacy Policy](#)

A pretty CSS3 popup.  
Easily customizable.

Powered by Leaflet — Map data © 2011 OpenStreetMap contributors, Imagery © 2011 CloudMade

**prepare yourselves.  
we're going to show some code.**



```
navigator.geolocation.getCurrentPosition(success_callback);
```

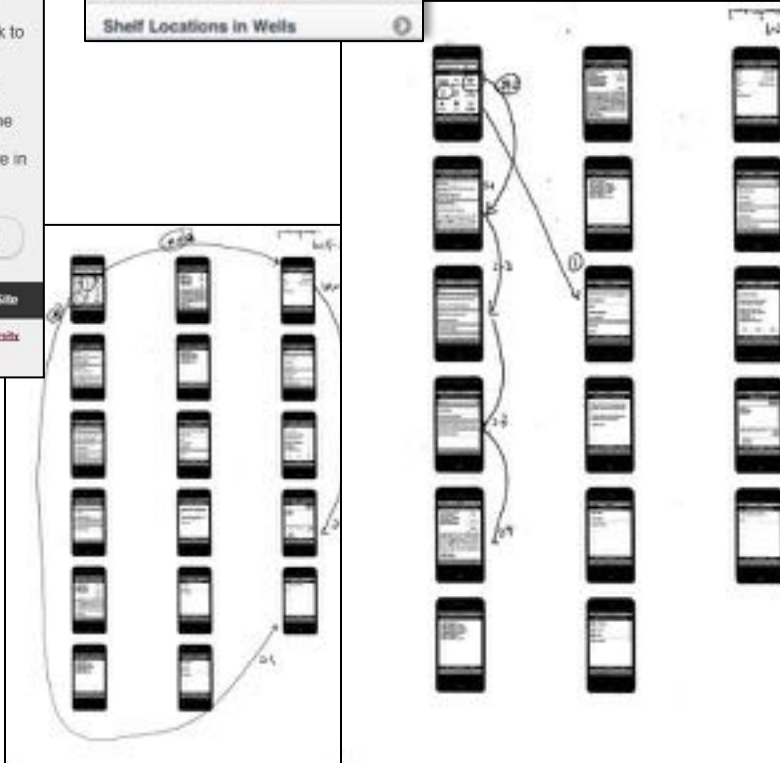
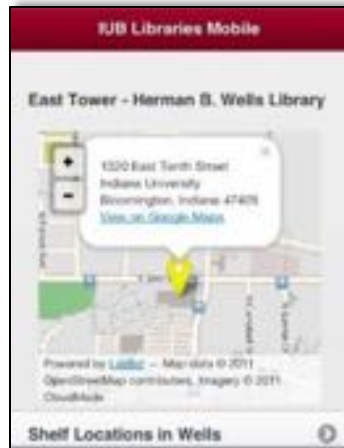
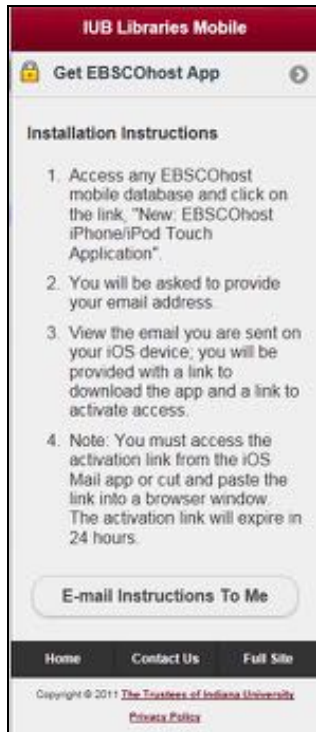
```
navigator.geolocation.watchPosition(success_callback);
```

```
1 navigator.geolocation.watchPosition(  
2     success_callback,  
3     error_callback,  
4     {maximumAge: 75000, enableHighAccuracy: true, timeout: 5000}  
5 );
```



```
6     function testAccuracy(loc) {
7         var acc = loc.coords.accuracy;
8
9         if (acc <= 100) {
10            navigator.geolocation.clearWatch(watchProcessId);
11
12            if (timeoutId) {
13                clearTimeout(timeoutId);
14            }
15
16            locationMap.success(loc);
17        } else {
18            i += 1;
19
20            if (i > 1) {
21                clearTimeout(timeoutId);
22            }
23
24            if (i >= 3) {
25                navigator.geolocation.clearWatch(watchProcessId);
26                locationMap.error();
27            } else {
28                timeoutId = setTimeout(function () {
29                    navigator.geolocation.clearWatch(watchProcessId);
30                    locationMap.error();
31                }, 3000);
32            }
33        }
34    }
```

# testing



**Development:** conducted five tests with paper prototype, focused on labels, site structure, icons. Resulted in a total shift in approach.

**Informal feedback:** candy bars & surveys at Welcome Week event.

**Live site:** six tests, focused on mapping function, information architecture, and labeling.

**Take  
our  
survey!**

A candy bar for your time!

# takeaways







slides + more:

<http://bit.ly/hhl6-ux>

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