



Building a Library Mobile Website

Ken MacAlpine

Who am I

Ken MacAlpine

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- Reformed Civil Engineer
- Game Developer turned mobile developer
- Graduate of USQ Science + Engineering
- Gaming - Graphics – Software Engineering

The Team Members:

Sam Moffatt

The Brief

- Development of a USQ Library Mobile Service
- Determine the features needed
- Source of Information
- Content configured for mobile devices
- Provision of existing services
- Availability of content and services
- Wish list

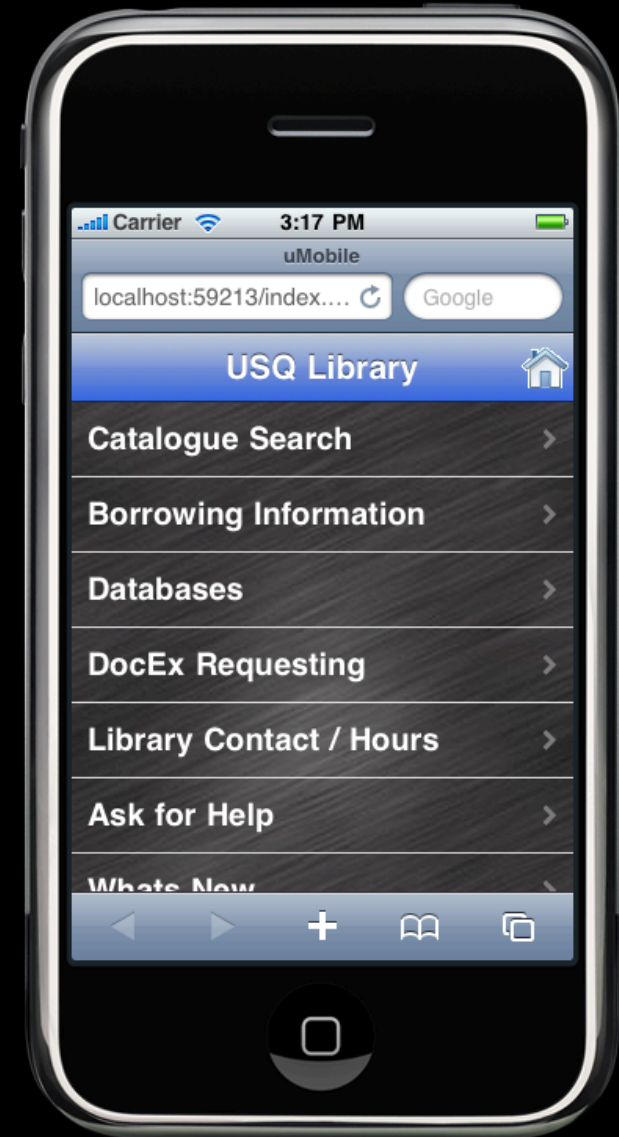
The Dream

- Extend access to content and services
- RefChatter
- VuFind for mobile
- MyLibrary for loans fines
- Mobile version of Access all Databases
- Find a book
- Lectures

Attempt 1 Dashcode

- Dashcode, Xcode
- App vs Webpage

- **Native Application** installed on iPhone
- **Web Application** runs in the browser



Dashcode



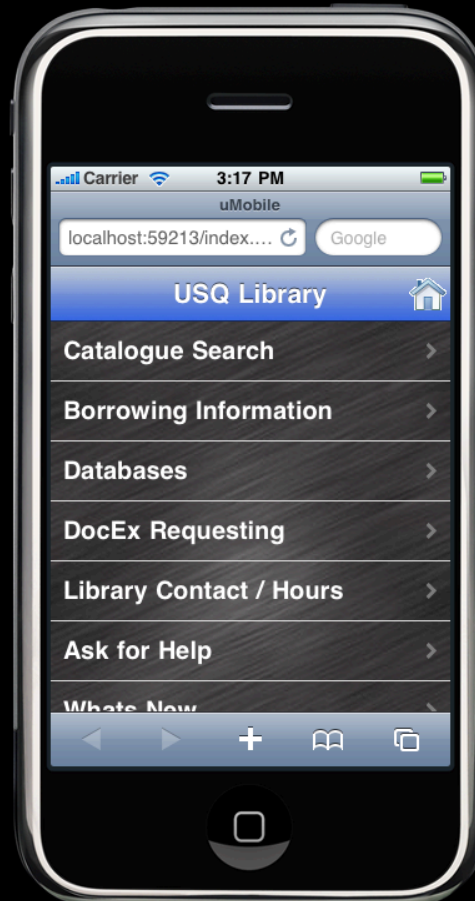
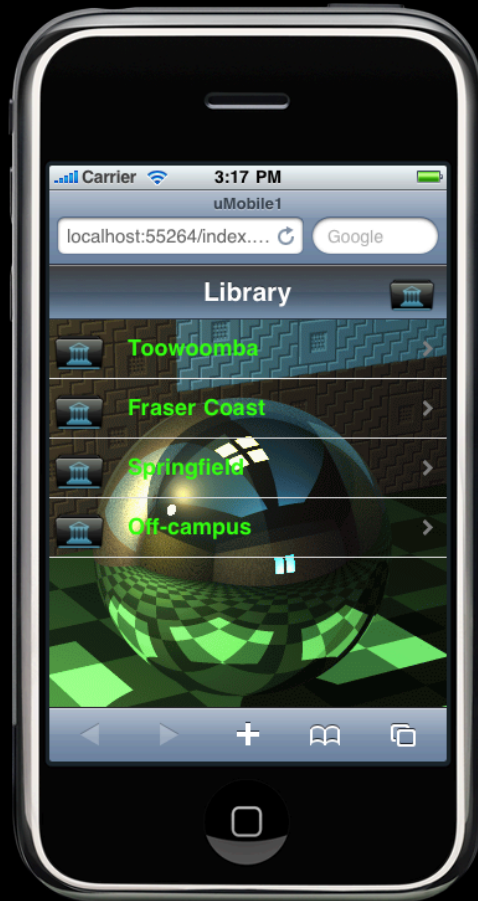
Building using Parts Library
Lists and Navigation

XML Web Feed

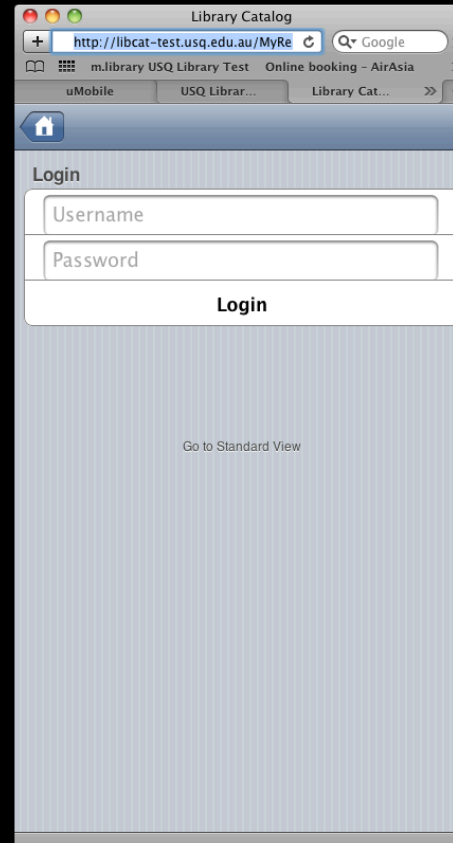
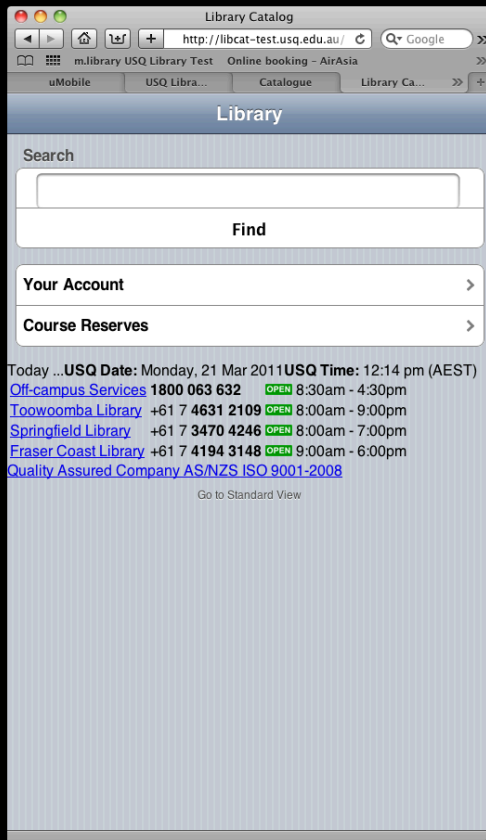
```
1 <records date="Thu 09 Sep 2010 09:30:58 (AEST)">
2   <libinfo id="1">
3     <site>
4       <name>Toowoomba</name>
5       <address>West Street</address>
6       <suburb>Toowoomba, QLD 4350</suburb>
7       <contact>+61 7 4631 2109</contact>
8       <logo>../Images/logo1.png</logo>
9       <web>
10        http://www.usq.edu.au/library/atlibrary/toowoomba.htm
11      </web>
12    </site>
13    <status>
14      <usqdate>Thu 09 Sep 2010</usqdate>
15      <usqtime>09:30am (AEST)</usqtime>
16      <current>OPEN</current>
17      <opening>8:00am - 9:00pm</opening>
18    </status>
19    <maps>
20      <campus>
21        http://www.usq.edu.au/campusmaps/maps/toowoombacampus
22      </campus>
23      <site>
24        http://www.usq.edu.au/campusmaps/maps/~/media/USQ/Campuses%20and%20Centres/
25        Toowoomba/08704aUSQTmbaMap2008RGBv12gif.ashx
26      </site>
27    </maps>
28    <info>
29      <news>Toowoomba News</news>
30      <description>Toowoomba DESC</description>
31    </info>
32  </libinfo>
33  <libinfo id="2">
34    <site>
35      <name>Fraser Coast</name>
```

An interface to display the opening hours

uMobile Stages



VuFind

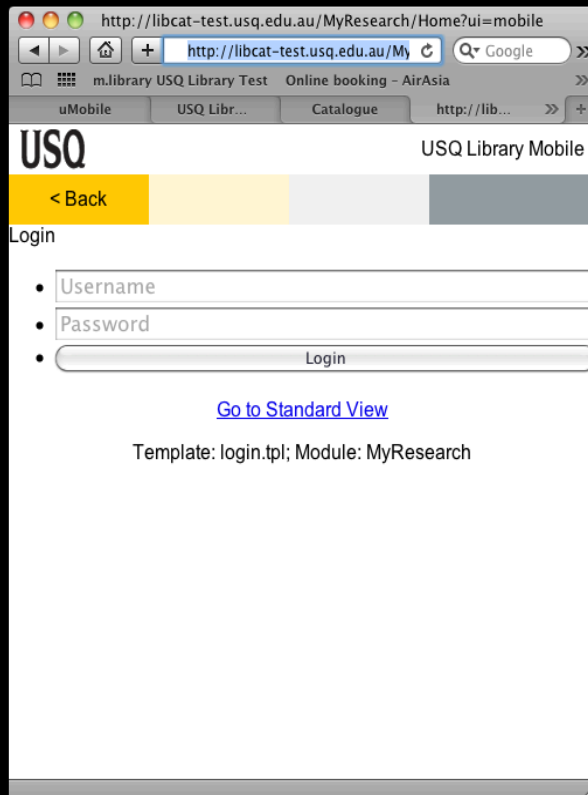


Search tool that provides a simple, flexible and customisable interface

Rebuild from scratch

A mobile version of the Library website considered better option

Maintenance



Menu Manager

#		Title	Type	Menu Item(s)
1	<input type="radio"/>	Main Menu	mainmenu	
2	<input type="radio"/>	mobile	mobile	
3	<input type="radio"/>	mobile_borrow	mobile_borrow	
4	<input type="radio"/>	mobile_databases	mobile_databases	
5	<input type="radio"/>	mobile_contact	mobile_contact	
6	<input type="radio"/>	mobile_help	mobile_help	
7	<input type="radio"/>	mobile_whatcaniborrow	mobile_whatcaniborrow	

Using Joomla

Joomla! an open source content management system

The screenshot shows the Joomla! administration interface for 'USQ Library Mobile', version 1.5.21. The interface includes a navigation menu with options like Site, Menus, Content, Components, Extensions, Tools, and Help. The 'Menus' section is active, displaying the 'Menu Manager' tool. A table lists the menu items with columns for ID, Title, Type, Menu Item(s), # Published, # Unpublished, # Trash, # Modules, and ID. Below the table is a 'Display # 20' dropdown menu.

#		Title	Type	Menu Item(s)	# Published	# Unpublished	# Trash	# Modules	ID
1	<input type="radio"/>	Main Menu	mainmenu		1	-	-	-	1
2	<input type="radio"/>	mobile	mobile		8	1	-	6	2
3	<input type="radio"/>	mobile_borrow	mobile_borrow		5	1	-	1	3
4	<input type="radio"/>	mobile_databases	mobile_databases		3	-	-	1	4
5	<input type="radio"/>	mobile_contact	mobile_contact		4	-	-	1	5
6	<input type="radio"/>	mobile_help	mobile_help		5	1	-	1	6
7	<input type="radio"/>	mobile_whatcaniborrow	mobile_whatcaniborrow		8	-	-	1	7

Display # 20

Joomla in action

Menu Item Manager: [mobile]

Filter: Max Levels 10 - Select State -

#	<input type="checkbox"/>	Menu Item	Default	Published	Order ▲ ▼	Access Level	Type	ItemID
1	<input type="checkbox"/>	Catalogue Search		✓	▼ 1	Public	Url	2
2	<input type="checkbox"/>	Borrowing Information		✓	▲ ▼ 2	Public	Articles » Article	4
3	<input type="checkbox"/>	Databases		✓	▲ ▼ 3	Public	Articles » Article	5
4	<input type="checkbox"/>	DocEx Requesting		✓	▲ ▼ 4	Public	Url	6
5	<input type="checkbox"/>	Library Contact / Hours		✓	▲ ▼ 5	Public	Articles » Article	7
6	<input type="checkbox"/>	Ask for Help		✓	▲ ▼ 6	Public	Articles » Article	3
7	<input type="checkbox"/>	What's New		✓	▲ ▼ 7	Public	Url	8
8	<input type="checkbox"/>	About		✗	▲ ▼ 8	Public	Articles » Article	9
9	<input type="checkbox"/>	Feedback		✓	▲ 9	Public	Url	10

Display # 20

Joomla in action

Article: [Edit]

Preview
 Save
 Apply
 Close
 Help

Title	<input type="text" value="Placing requests"/>	Published	<input type="radio"/> No <input checked="" type="radio"/> Yes
Alias	<input type="text" value="placing-requests"/>	Front Page	<input checked="" type="radio"/> No <input type="radio"/> Yes
Section	<input type="text" value="Main"/>	Category	<input type="text" value="Borrowing"/>

Article ID:	5
State:	Published
Hits:	35 <input type="button" value="Reset"/>
Revised:	1 Times
Created:	Thursday, 04 November 2010 07:10
Modified:	Not Modified

▼ Parameters (Article)

Author	<input type="text" value="Administrator"/>
Author Alias	<input type="text"/>
Access Level	<input type="text" value="Public"/>
Created Date	<input type="text" value="2010-11-04 07:10:49"/>
Start Publishing	<input type="text" value="2010-11-04 07:10:49"/>
Finish Publishing	<input type="text" value="Never"/>

► Parameters (Advanced)

► Metadata Information

```

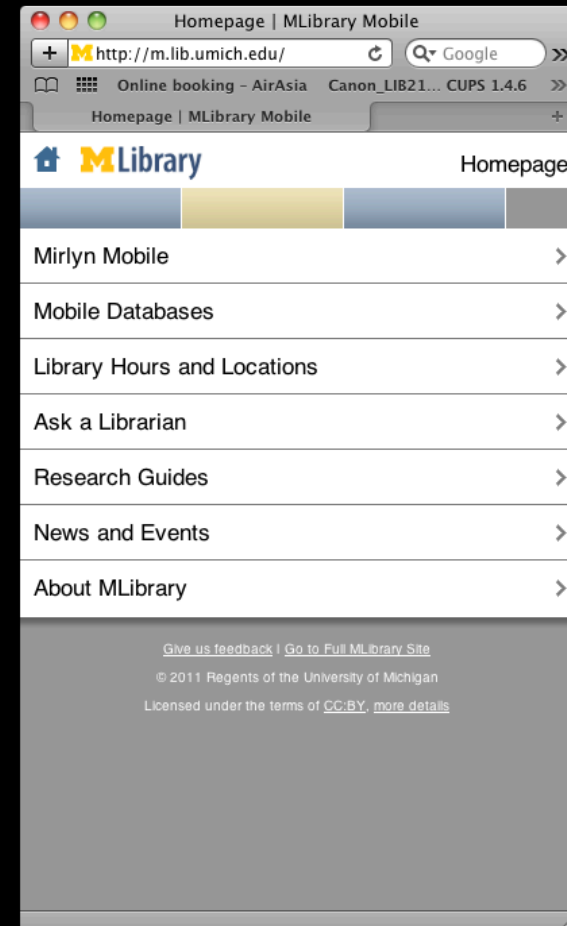
<p><span class="Apple-style-span" style="border-collapse: separate; color: #000000; font-family: 'Times New Roman'; font-style: normal; font-variant: normal; font-weight: normal; letter-spacing: normal; line-height: normal; orphans: 2; text-indent: 0px; text-transform: none; white-space: normal; widows: 2; word-spacing: 0px; font-size: medium;"><span class="Apple-style-span" style="font-family: Arial, Helvetica, sans-serif;">
<h1 class="content-title">Placing requests</h1>
<h2>Off-campus students and staff</h2>
<p>As an off-Campus student or staff, you can place request that loans be posted or documents be scanned to you.</p>
<p>This is done via <a href="http://lib5.usq.edu.au/zportal/zengine?VDXaction=LoginPage">DocEx</a>, the USQ Library's online loan and photocopy request system.</p>
<p>Refer to the <a href="http://library.usq.edu.au/m.php?url=http://www.usq.edu.au/library/mobile/m_offcamp">off-campus support page</a><span class="Apple-converted-space"> </span>for more details about the Library services to off-campus students.</p>
<p>Guides on using DocEx for <a href="http://www.usq.edu.au/-/media/USQ/Library/DocEx/Step%20by%20step%20Guide%20to%20using%20DocEx%20Offcampus%20simplified.ashx">off-campus requesting</a><span class="Apple-converted-space"> </span>and <a href="http://www.usq.edu.au/-/media/USQ/Library/DocEx/DocExforILLUserGuidepdf.ashx">interlibrary loan requesting</a><span class="Apple-converted-space"> </span>are available.</p>
<h2>On-campus students and staff</h2>
<p>If an item is on loan to another person you can place a request for that
                    
```

A new dream

- Managed content
- Update control
- New services
- News and Blogs

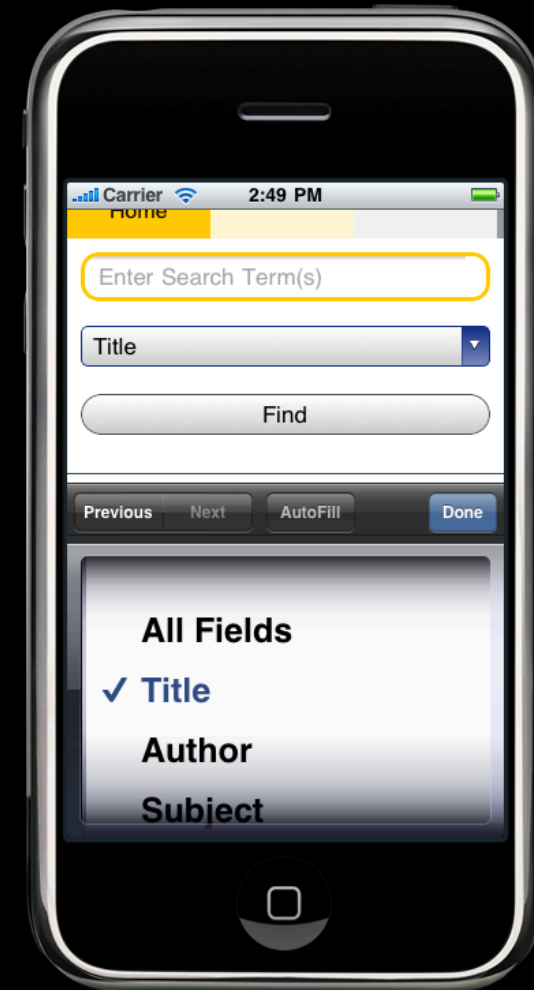
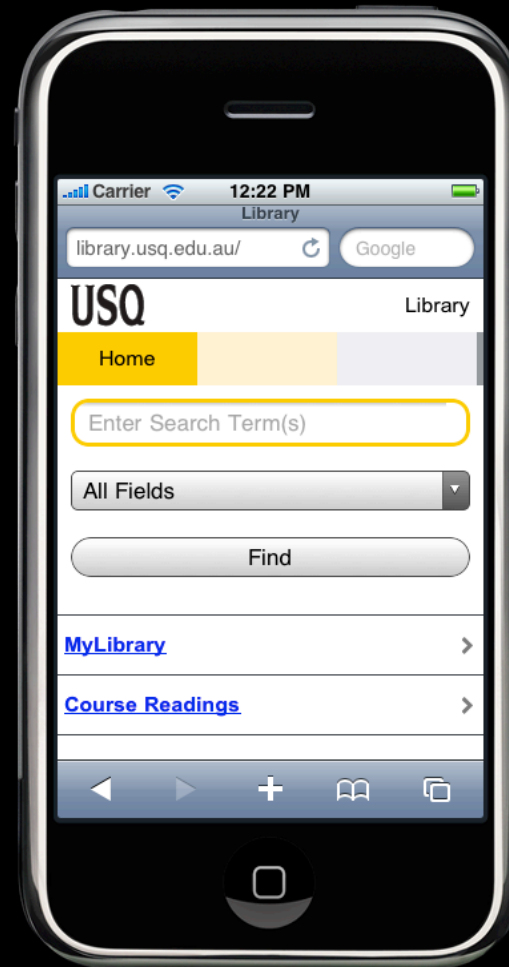


Similar projects University of Michigan



Reskin

- Branding
- Simplicity
- Viewport



Joomla Reskin

Menu Item Manager: [mobile_contact]

Filter: Max Levels: 10 - Select State -

#	<input type="checkbox"/>	Menu Item	Default	Published	Order	Access Level	Type	ItemID
1	<input type="checkbox"/>	Toowoomba			1	Public	USQ Library Opening Hours » Usqhours	18
2	<input type="checkbox"/>	Fraser Coast			2	Public	USQ Library Opening Hours » Usqhours	19
3	<input type="checkbox"/>	Springfield			3	Public	USQ Library Opening Hours » Usqhours	20
4	<input type="checkbox"/>	Off-campus			4	Public	USQ Library Opening Hours » Usqhours	21

Display # 20

- Reskin with Joomla tools

CMS managed pages

Article: [Edit]

Preview
 Save
 Apply
 Close
 Help

Title	<input type="text" value="Catalogue Search"/>	Published	<input type="radio"/> No <input checked="" type="radio"/> Yes
Alias	<input type="text" value="catalogue-search"/>	Front Page	<input checked="" type="radio"/> No <input type="radio"/> Yes
Section	<input type="text" value="Uncategorised"/>	Category	<input type="text" value="Uncategorised"/>

Article ID:	1
State	Published
Hits	208 <input type="button" value="Reset"/>
Revised	11 Times
Created	Thursday, 04 November 2010 06:30
Modified	Monday, 21 March 2011 02:21

```

<form method="post" action="http://libcat.usq.edu.au/Search/Results?ui=mobile"
name="searchForm">
<div id="searchBox">
  <div id="text">Search the Library Catalogue.</div>
  <div id="columnLayout">
    <div style="position: relative; display: table-cell; vertical-align: top;
height: auto; width: 59%;">
      <div id="column"><input id="search" type="text" name="lookfor" /></div>
    </div>
    <div style="position: relative; display: table-cell; vertical-align: top;
height: auto; width: 41%;">
      <div id="column1">
        <div id="btnSearch">
          <div style="position: absolute; top: 0px; left: 0px; right: 0px; bottom: 0px;
margin-left: 7px; margin-right: 7px; line-height: 22px; overflow: hidden;"><span
style="position: static; display: inline; "><input type="submit" name="search"
value="Search" /></span><img border="0" style="vertical-align: middle; display:
none; " /><br style="display: none; " /></div>
          
```

Parameters (Article)

Author	<input type="text" value="Administrator"/>
Author Alias	<input type="text"/>
Access Level	<input type="text" value="Public"/>
Created Date	<input type="text" value="2010-11-04 06:30:54"/>
Start Publishing	<input type="text" value="2010-11-04 06:30:54"/>
Finish Publishing	<input type="text" value="Never"/>

Parameters (Advanced)

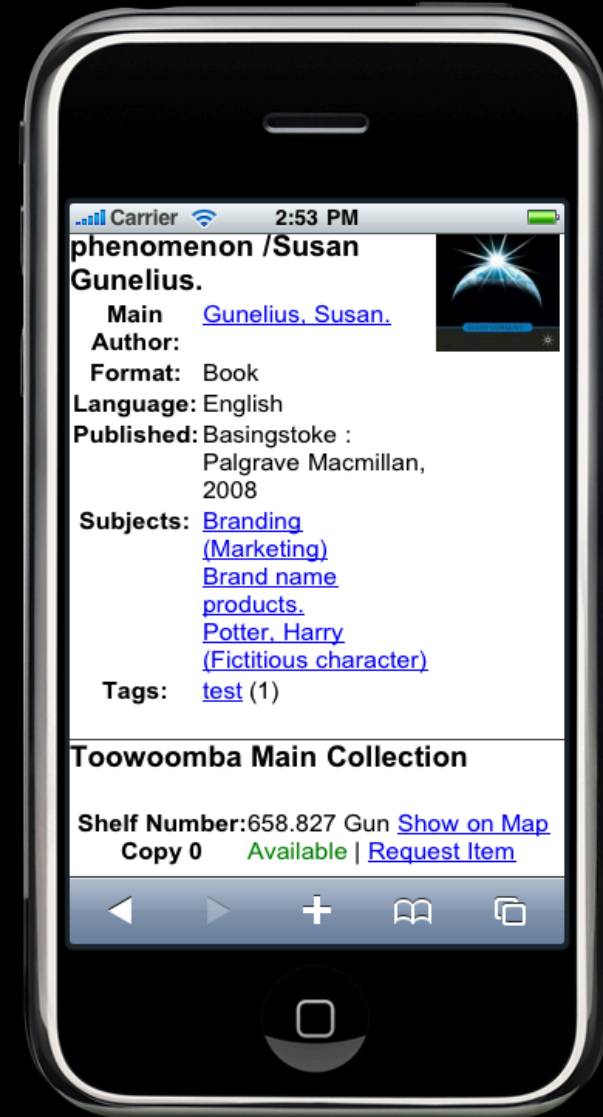
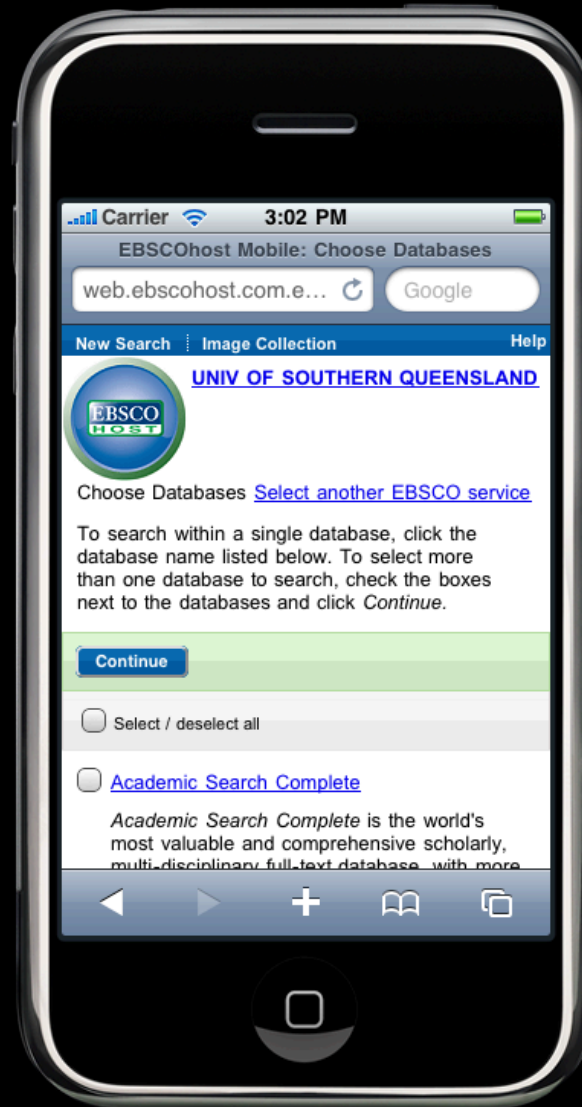
VuFind changes

- Search
- Show on Map

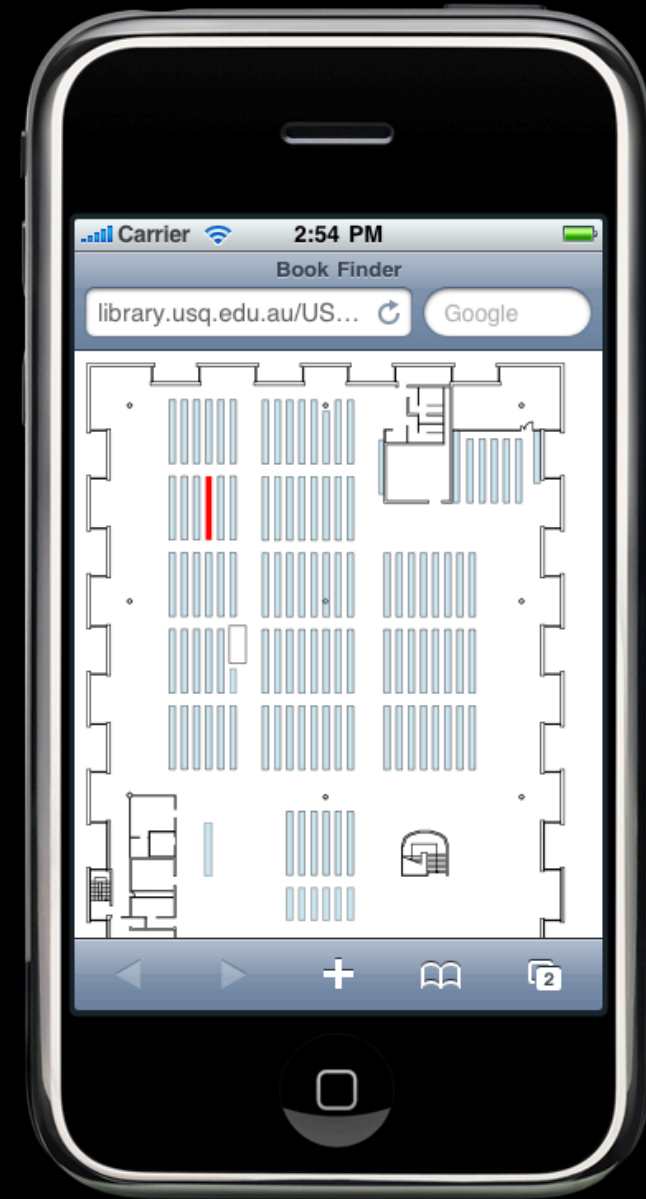
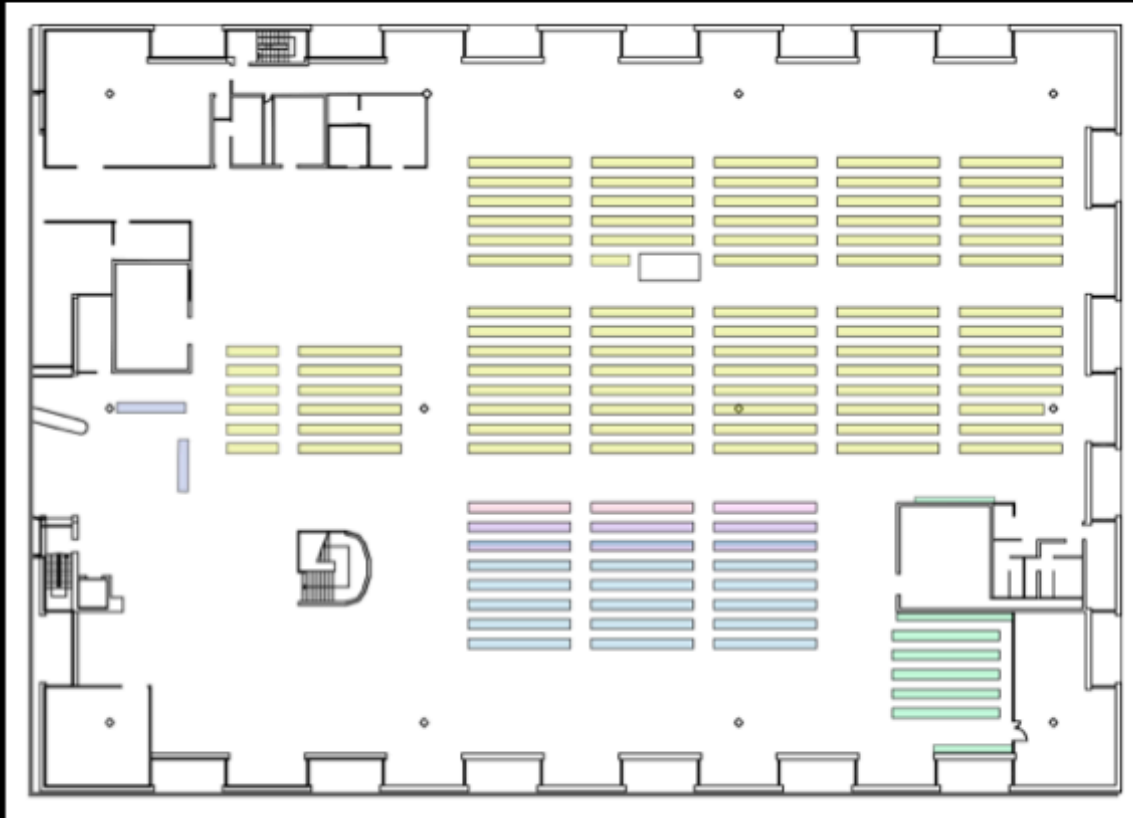


Resources

- Show on Map
- EBSCO Host
- Site maps



Maps



Lessons Learned

- research is important and useful with tools
- need to be more agile with tool selection however
- an easily skinnable interface makes life easier
- integration with existing services to leverage more flexibility
- build on existing systems where possible to reduce requirement for time to live



Where to from here

- Refinement and improvement in functionality for VuFind
- Better integration of different systems to make the mobile experience more consistent
- Transporting non-mobile inflexible systems to be more flexible
- Integrating iTunes U into current lecture recording system

Q & A

