Libraries Templates Screen Reader Accessibility Review

Screen reader review conducted at the request of Peter Pinch
Accessibility: Rich Caloggero

Updated: Monday, December 10, 2012

Templates reviewed: http://mitlibraries.seangw.com/_templates/
http://mitlibraries.seangw.com/_templates/3col.html
http://mitlibraries.seangw.com/_templates/locations.html
http://mitlibraries.seangw.com/_templates/rotch.html

All Templates

Image with alt "Ask Us / Tell Us"
Use alt="" instead.

Your Account

This link is not wrapped in the navigation region, but it occurs on all templates and immediately follows all main nav links. Seems like it should be wrapped in the main nav region?

Breadcrumbs

These are nice to have, but always difficult to find. Either wrap the entire thing in a heading, or place it in a region with landmark role. Then you can navigate to them via next/previous heading or landmark keys.

For example, the following:

```html
...<div role="navigation" title="Breadcrum trail">
  <h2 id="breadcrumTrail">
    path - to - this - page
  </h2>
</div>
...
```

produces the following with Jaws:

```html
...breadcrum trail navigation region start
  path -> to -> this -> page
navigation region end
...
```

"Study Spaces" and "News and Events"
On all templates except "Locations", there is an h3 "Find a Study Space", immediately followed by an image whose alt="Study Space". Use alt="" on this image.

Also, seems as if these headings and the content which follows could be part of the main navigation discussed below?

(on locations template, I see a heading "in the libraries" instead of "news" and "find a study space", but similar comments apply)

**contentinfo region**

All of them have a region labeled with the landmark role "contentinfo". However, inside this region we have a huge set of nav links. For instance:

```
...  
  Search
  list of 5 items
  - Barton Catalog
  - Vera Multi-Search
  - HathiTrust
  - MIT's WorldCat
  - Overview of search options
  list end

  Hours & Locations
  list of 12 items
  - Barker Library
  - Dewey Library
  - Hayden Library
  ...

  About Us
  list of 7 items
  - Contact us
  - Calendar of events | News
  - Exhibits & galleries
  ...
```

My suggestion is to wrap this in a div with role="navigation" and aria-label="sitewide"

Also, remove it from inside the contentinfo div and place it before this div. The contentinfo div should only include content info - i.e.:

```
...
  content info region start
  MIT Libraries
  Libraries Home
  Find us on
  Twitter
  Facebook
  RSS
  Flickr
```
Expanding sections
This page contains headings, which if clicked add text to the page.

First, no need to place each in its own region. Remove the role="region" from the surrounding containers; the heading is enough to introduce each one. landmark roles and role="region" should be reserved for a few top-level blocks which can be navigated to quickly; adding too many will decrease their usefulness.

Second, These are not technically "accordions" since each section can be toggled independantly, however the following implementations of accordion (with my aria additions) should help illistrate how to make this kind of thing much more accessible, with very little extra work.

http://www.mit.edu/~rjc/aria/jQueryToolsAccordion.html

The crux of the solution is to add aria state attributes to the triggers and dynamically update them to reflect the current state of affairs. The jQuery tools I'm using fire events when the state of the accordion changes so very little work need be done to update these attributes. If the code your using is custom, then simply update them in the javascript and be done with it.

The thing you need be aware of is that these aria state attributes only provide info to the screen reader when used with specific roles (very annoying, but that's the spec). aria-expanded only works on buttons; aria-pressed only works on toggle buttons. A toggle button is a button (button element or role="button" which also has aria-pressed).

You can provide state via a textual indicator (or image plus appropriate altText). This one uses jQuery-ui package and textual indicators which are moved off-screen via CSS (we assume sighted visitors can see whether the section is opened or closed). However, maybe they are worth providing visually to show the user that the trigger can be clicked to expand/collapse the section. I have two versions, one which uses strictly text indicators, and one which uses other aria attribute aria-expanded (which only works on role="button").

http://www.mit.edu/~rjc/aria/accordion.html
http://www.mit.edu/~rjc/aria/buttonAccordion.html
Locations
http://mitlibraries.seangw.com/_templates/locations.html

Rotch Library
http://mitlibraries.seangw.com/_templates/rotch.html

Images
All of these images seem redundant. Use alt="" on all of them.

The slideshow links and the images inside them should also get role="presentation".

[h2] Rotch Library
[h3] Architecture & Planning
617-253-5692
show on map:
[link] 7-238
[img] Rotch Library
   [img] [link] content/rotch-thumb-01
   [img] [link] content/rotch-thumb-02
   [img] [link] content/rotch-thumb-03
   [img] [link] content/rotch-thumb-04
   [img] [link] content/rotch-thumb-05
   [img] [link] content/rotch-thumb-06
Today's hours:
9am-midnight
[link] See all hours
list of 2 items
   [link] About Rotch
   Our experts, our guides
   [link] Study Spaces
   Find a sunny spot to study, book a room, and more
list end
[img] Michelle Knight

wrap all the following in the same heading

<h3>
   Meet our experts:
   Michelle Knight
   Urban Studies & Planning and GIS Librarian/ Reference Coordinator
</h3>