CURRENT ACCESSIBILITY TOPICS

- UC Accessibility Policy
- Technical discussions on code solutions
- Automated Tests
  - SSB Bart Group AMP
  - WebAIM WAVE
WHAT IS MISSING?

- Tests for elements that can only be evaluated by a human.
  - Color Contrast
  - Captions
  - Navigation
- Non technical assessment tools
- Practical / Case based analysis
WHY QUICK TESTS?

AMP automated tests still show many items that require human judgment of accessibility (AMP scores show either 100% or 0% success)

<table>
<thead>
<tr>
<th>Name</th>
<th>Modules</th>
<th>Total Points</th>
<th>Compliance Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Text equivalent of non-text items</td>
<td>13 / 16</td>
<td>14 / 18</td>
<td>77%</td>
</tr>
<tr>
<td>(b) Provide synchronized alternatives for media</td>
<td>16 / 16</td>
<td>6 / 6</td>
<td>100%</td>
</tr>
<tr>
<td>(c) Information should not be conveyed only with color</td>
<td>16 / 16</td>
<td>4 / 4</td>
<td>100%</td>
</tr>
<tr>
<td>(d) Documents must be readable without style sheets</td>
<td>16 / 16</td>
<td>2 / 2</td>
<td>100%</td>
</tr>
<tr>
<td>(e) Redundant text link for server-side image maps</td>
<td>16 / 16</td>
<td>1 / 1</td>
<td>100%</td>
</tr>
<tr>
<td>(f) Client side images maps should be used</td>
<td>16 / 16</td>
<td>3 / 3</td>
<td>100%</td>
</tr>
<tr>
<td>(g) Identify table headers</td>
<td>16 / 16</td>
<td>10 / 10</td>
<td>100%</td>
</tr>
<tr>
<td>(h) Associate table and header cells</td>
<td>16 / 16</td>
<td>6 / 5</td>
<td>100%</td>
</tr>
<tr>
<td>(i) Properly title frames</td>
<td>16 / 16</td>
<td>4 / 4</td>
<td>100%</td>
</tr>
<tr>
<td>(j) Avoid causing pages to flicker</td>
<td>16 / 16</td>
<td>4 / 4</td>
<td>100%</td>
</tr>
</tbody>
</table>
We aim to create a fast process to make many of those human-judgment assessments.

We do not attempt to show how to fix accessibility errors in this talk.
QUICK TESTS GOALS

- Further prioritize the 21 Level A WCAG checkpoints. (Most can be checked by AMP.)
- Do verifiable, repeatable tests for the 13 AA items (that mostly require human judgment).
- Find simple, quick tests that can be applied to large amounts of content.
THE TESTS

- Consistent Navigation
- Color Contrast
- Double-Size Test
- Copy Test
- Logical Structure
- Focus Visible
- Captions
- Image Accessibility
3.2.3 Consistent Navigation: Navigational mechanisms that are repeated on multiple Web pages within a set of Web pages occur in the same relative order each time they are repeated, unless a change is initiated by the user. (Level AA)
3.2.4 Consistent Identification: Components that have the same functionality within a set of Web pages are identified consistently. (Level AA)
Maximum 5 min: Are there unusual changes to the navigation or other page components?

Things to check:

- Consistency between Front page and secondary page navigation
- Choose a common navigation element and use keyboard only to get there.
1.4.3 Contrast (Minimum): The visual presentation of text and images of text has a contrast ratio of at least 4.5:1 (Level AA)
Run tests on 4-5 potential problem areas, concentrating on extreme cases requiring immediate fix.

- WebAIM’s Jared Smith mention readability is a continuum.
- Text at 4.4:1 isn’t suddenly totally illegible. So focus on the biggest problems.
COLOR CONTRAST

<table>
<thead>
<tr>
<th>Good Example</th>
<th>Contrast Ratio</th>
<th>Bad Example</th>
<th>Contrast Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good Example</td>
<td>21:1</td>
<td>Bad Example</td>
<td>2.77:1</td>
</tr>
<tr>
<td>Good Example</td>
<td>5.1:1</td>
<td>Bad Example</td>
<td>2.6:1</td>
</tr>
<tr>
<td>Good Example</td>
<td>8.4:1</td>
<td>Bad Example</td>
<td>1.3:1</td>
</tr>
<tr>
<td>Good Example</td>
<td>5.7:1</td>
<td>Bad Example</td>
<td>1.3:1</td>
</tr>
<tr>
<td>Good Example</td>
<td>9.5:1</td>
<td>Bad Example</td>
<td>1.2:1</td>
</tr>
</tbody>
</table>

- Color Contrast Checking tools
  - Snook.ca
    - [http://snook.ca/technical/colour_contrast/colour.html](http://snook.ca/technical/colour_contrast/colour.html)
  - Juicy Studio:
    - [http://juicystudio.com/services/luminositycontrastratio.php](http://juicystudio.com/services/luminositycontrastratio.php)
1.4.4 Resize text: Except for captions and images of text, text can be resized without assistive technology up to 200 percent without loss of content or functionality. (Level AA)

- Use CTRL-+ (CMD-+) to test whether the site is readable at 2x magnification.
1.4.5 Images of Text: If the technologies being used can achieve the visual presentation, text is used to convey information rather than images of text except for the following: (Level AA)
COPY TEST

- Browser/OS-level test
- To test if images of text are being used, try copying any “suspicious” items.
- WCAG: (1.4.5) Text that cannot be copied is likely to be inaccessible.
Headings and Labels: Headings and labels describe topic or purpose. (Level AA)

- Headings should not be used for visual effects, on large blocks of content.
- Use judiciously (too much structure without content is a problem).
LOGICAL STRUCTURE

- Are headings used for logical structure?
- Does structure make sense?
- Do not worry about skipping consecutive heading levels (even though it is a red flag in AMP).
2.4.7 Focus Visible: Any keyboard operable user interface has a mode of operation where the keyboard focus indicator is visible. (Level AA)

- Is there a clear focus indicator when tabbing with keyboard.
- On the homepage & 5 subpages, test focus by tabbing through the page.
1.2.2 Captions (Prerecorded): Captions are provided for all prerecorded audio content in synchronized media, except when the media is a media alternative for text and is clearly labeled as such. (Level A)
• Quantify & assess portion of content that is multimedia
• Ensure controls are easy to identify and to enable captioning.
• If significant in quantity or importance, play 30 sec of 3-5 clips
  • Are captions present?
  • Are they readable?
Survey Content: Appropriate Use of ALT text on Images

Check 3-5 random images (or prominent images) on a site for appropriateness of alt text.
- Fail if several of those images have alt text = the filename.
- Fail if lots of text is embedded in images.
REFERENCES

- UCLA Disabilities and Computing Program
  - http://dcp.ucla.edu
- Electronic Accessibility Leadership Team
  - http://www.ucop.edu/electronic-accessibility/
- SSB Bart Group AMP
  - https://uc.ssbbartgroup.com/uc
- WebAIM
  - http://webaim.org/
- W3c Easy Checks
  - http://www.w3.org/WAI/EO/Drafts/eval/checks