QUICK TESTING FOR WEB ACCESSIBILITY 2013

Patrick Burke

Lloyd Nicks

Chris Patterson

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)

Total: 96 / 100

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Name ↑	Modules	Total Points	Compliance Rate
(a) Text equivalent of non-text items	13 / 16	14 / 18	77%
(b) Provide synchronized alternatives for media	16 / 16	6 / 6	100%
(c) Information should not be conveyed only with color	16 / 16	4 / 4	100%
(d) Documents must be readable without style sheets	16 / 16	2 / 2	100%
(e) Redundant text link for server-side image maps	16 / 16	1 / 1	100%
(f) Client side images maps should be used	16 / 16	3 / 3	100%
(g) Identify table headers	16 / 16	10 / 10	100%
(h) Associate table and header cells	16 / 16	6 / 6	100%
(i) Properly title frames	16 / 16	4 / 4	100%
(j) Avoid causing pages to flicker	16 / 16	4 / 4	100%

QUICK TEST SCOPE

- 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

CONSISTENT NAVIGATION

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)

CONSISTENT NAVIGATION

3.2.4 Consistent Identification: Components that have the same functionality within a set of Web pages are identified consistently. (Level AA)

CONSISTENT NAVIGATION

- 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.

COLOR CONTRAST

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)**

COLOR CONTRAST

- 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

Good Example	Contrast Ratio	Bad Example	Contrast Ratio
Good Example	21:1	Bad Example	2.77:1
Good Example	5.1:1	Bad Example	2.6:1
Good Example	8.4:1	Bad Example	1.3:1
Good Example	5.7:1	Bad Example	1.3:1
Good Example	9.5:1	Bad Example	1.2:1

- Color Contrast Checking tools
  - Snook.ca
    - http://snook.ca/technical/colour_contrast/colour.html
  - Juicy Studio:
    - http://juicystudio.com/services/luminositycontrastratio.php

DOUBLE SIZE TEST

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.

COPY TEST

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.

LOGICAL STRUCTURE - WCAG 2.4.6

2.4.6 **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).

VISIBLE FOCUS – WCAG 2.4.7

[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.

CAPTIONS

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)

CAPTIONS

- 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?

IMAGES

- 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