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DAT “Light” Web Accessibility Audit | [Product]
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Using this document

To create a report:
● Make a copy of this document
● Follow protocol
● Record information within the tables
● Complete the final Summary
● Delete all instruction text
● Move Summary to start of document

Set-up

Before testing a digital resource, prepare your set of tools and determine the scope of the resource to be tested.

Tools

The test procedures in this protocol use the following tools and technologies
● Chrome Web Browser
● WAVE (Chrome Extension)
● aXe (Chrome Extension)
● Web Developer (Chrome Extension)

Please note that the WAVE and Web Developer extensions are accessed by their respective icons in the Chrome Web Browser toolbar.

● WAVE: W (W in a circle)
● Web Developer: 🔄 (Gear icon)

However, the aXe extension is accessed through the built-in Chrome Developer Tools. To use aXe, open Chrome Developer Tools by right clicking within the browser window and selecting “Inspect.” See more about how to use aXe from Chrome in this video.

Familiarize yourself with these tools before beginning a test.

Scope

To test a digital resource, select representative sample to stand in for the whole. The sample may be a set of pages (e.g. Home Page, Search Page, Results Page) or a set of essential
functions (e.g Reserve a Room, Select a Book, Send a Message). For a light review, try to keep the sample at around 3 selections (pages, functions, or other parts).

Record the sample and the associated URL’s.

### Pages Tested
- [Page Title and URL]
- [Page Title and URL]

### Essential Functions Tested
- [Essential Function]
  - Includes [Page Title and URL]
  - Includes [Page Title and URL]
- [Essential Function]
  - Includes [Page Title and URL]
  - Includes [Page Title and URL]

---

### Determine categories

This testing protocol is organized into categories, but not all categories will be relevant to every testing sample.

Before you begin the test, determine whether the following features are present within the sample.

**Table**

Is there a table within the sample?  
☐ Yes  ☐ No

A table usually looks like a chart or spreadsheet, with rows and columns.

**Forms**

Is there a form within the sample?  
☐ Yes  ☐ No

A form may include check boxes, radio buttons, text input fields, or drop-down menus.

Forms allow the user to make selections, perform searches, or input information. Forms can look very different in different contexts, so look closely and inspect items.
Multimedia

Is there multimedia within the sample?  ☐ Yes  ☐ No

For this test protocol, multimedia includes video and audio.

Moving Content

Is there moving content within the sample?  ☐ Yes  ☐ No

For this test protocol, moving content includes anything beside a video that automatically changes, updates, or refreshes.

Test

This test protocol will consist of automatic and manual tests

Automatic Tests

Open the sample
Run WAVE

Headings

Headings must be marked up as headings and ordered and nested correctly.

Review WAVE Details

- check Alerts for "Possible heading"
  - verify if Possible heading should be marked up as heading
- check Alerts for "Skipped heading level"

Review WAVE Document

- Confirm that headings are used and used logically

<table>
<thead>
<tr>
<th>Headings</th>
<th>[Good] [Warning] [Problems]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results</td>
<td>[Summary of findings]</td>
</tr>
</tbody>
</table>

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Consequences

Headings communicate the organization of the content on the page. Web browsers, plug-ins, and assistive technologies can use them to provide in-page navigation. When used in proper order and nesting, they can create a useful document "outline." When used out of proper order or nesting, they can be confusing to the user.

If headings are merely styled to look important, but not marked up in the code, web browsers, plug-ins, and assistive technologies cannot detect them, meaning that they are essentially not there for a broad range of users and technology.

Resources

- [WAI Headings Tutorial](https://www.w3.org/WAI/tutorials/page-structure/headers/)
- [WebAIM Semantic Structure](https://webaim.org/techniques/semanticstructure/)

Source

- WCAG 2.1 1.3.1 Info and Relationships (Level A)
- WCAG 2.1 2.4.1 Bypass Blocks (Level A)
- WCAG 2.1 2.4.6 Headings and Labels (Level AA)

Images

Meaningful images or visual content must include a textual equivalent and must have some alt value.

Review WAVE Details

- Check for Error: Missing alternative text
- Check for Alert: Suspicious alternative text
  - Review “suspicious” text

Images

[Good] [Warning] [Problems]

Results

[Summary of findings]

Consequences

Alt text and other descriptive text provide information about the content and purpose of images for users who cannot access the original—because of visual impairments, slow connections, or because they are listening to the content read aloud. Good text equivalents
for images and visual content ensure that all users have equitable access to the information no matter how they access it.

<table>
<thead>
<tr>
<th>Resources</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>- <a href="#">WebAIM Alt Text</a></td>
<td>- WCAG 1.1.1, Non-text Content (Level A)</td>
</tr>
<tr>
<td></td>
<td>- WCAG 1.4.5 Images of Text (Level AA)</td>
</tr>
</tbody>
</table>

**Contrast**

There must be sufficient contrast between text and background to make text legible.

**Resources**

- [Deque University Section on Color Contrast](#)
- [Color Accessibility Workflows (A List Apart)](#)
- [Accessible U: Color & Contrast (UMN)](#)

**Source**

- [WCAG 1.4.3 Contrast (Minimum)](#)
  Level AA
- [WCAG 2.1 1.4.11 Non-text Contrast (Level AA)](#)

**Results**

[Summary of findings]

**Consequences**

Text and user interface components with insufficient contrast will be difficult to read or interpret, especially at smaller sizes. This issue will potentially affect users with low vision, users on mobile phones, and users viewing content on a variety of devices, including older monitors and large projection screens.

**Contrast**

<table>
<thead>
<tr>
<th>Good</th>
<th>Warning</th>
<th>Problems</th>
</tr>
</thead>
</table>

**Resources**

- [Deque University Section on Color Contrast](#)
- [Color Accessibility Workflows (A List Apart)](#)
- [Accessible U: Color & Contrast (UMN)](#)

**Source**

- [WCAG 1.4.3 Contrast (Minimum)](#)
  Level AA
- [WCAG 2.1 1.4.11 Non-text Contrast (Level AA)](#)
If: Table

Tables must be marked up so they can be perceived and navigated on all devices.

Review WAVE Details
- Check for any of the following
  - Empty table header
  - Layout table
  - Data Table
- Check that each data table is marked as a “data table”
- Check that each data table has a table header

<table>
<thead>
<tr>
<th>Tables</th>
<th>[Good] [Warning] [Problems]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results</td>
<td>[Summary of findings]</td>
</tr>
<tr>
<td>Consequences</td>
<td></td>
</tr>
<tr>
<td>Data tables present tabular information in</td>
<td></td>
</tr>
<tr>
<td>a grid, or matrix, and have special</td>
<td></td>
</tr>
<tr>
<td>columns or rows (headers) that provide</td>
<td></td>
</tr>
<tr>
<td>context for the information in the grid.</td>
<td></td>
</tr>
<tr>
<td>Some users can quickly scan a table to</td>
<td></td>
</tr>
<tr>
<td>understand how the context and</td>
<td></td>
</tr>
<tr>
<td>information is related, but some users</td>
<td></td>
</tr>
<tr>
<td>cannot. In particular, people using</td>
<td></td>
</tr>
<tr>
<td>screen readers rely on proper markup to</td>
<td></td>
</tr>
<tr>
<td>determine how information within the table</td>
<td></td>
</tr>
<tr>
<td>is related, and what context is available</td>
<td></td>
</tr>
<tr>
<td>for each data table “cell.”</td>
<td></td>
</tr>
</tbody>
</table>

Resources
- [WebAim Creating Accessible Tables]

Source
- WCAG 2.1 1.3.1 Info and Relationships (Level A)

If: Forms

Clear labels, instructions, and error messages are needed for forms.

Run aXe tool
- Review aXe violations
- Check for “Form elements must have labels”

| Forms                                      | [Good] [Warning] [Problems] |
## Results

[Summary of findings]

## Consequences

All form elements should have labels “programmatically associated” with them, that is, not just displayed next to elements but linked to them in the code. This means that people using a variety of devices can understand the meaning and purpose of each element, and access the elements using the label.

## Resources

- Form labels - MDN Web docs

## Source

- WCAG 2.1 3.3.2 Labels or Instructions (Level A)
- WCAG 2.1 1.3.1 Info and Relationships (Level A)
- WCAG 2.1 1.3.3 Sensory Characteristics (Level A)

## Manual Tests

Open the sample

## Page Title

Each web page must have unique, meaningful, readable title in the HTML document <head>.

Read the title that appears in the web browser window or tab.

- Make sure title is meaningful and accurate
- Check additional pages to ensure that each title is unique
- Check that multiple pages put unique information first (e.g. “Ask a Librarian - University of Michigan Library,” not “University of Michigan Library - Ask a Librarian”)

<table>
<thead>
<tr>
<th>Page Title</th>
<th>[Good] [Warning] [Problems]</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Results</th>
</tr>
</thead>
</table>

[Summary of findings]

| Consequences |
Page titles are particularly important for orientation — to help people know where they are and move between pages open in their browser. The first thing screen readers say when the user goes to a different web page is the page title. Furthermore, unique titles help users distinguish between pages when they are navigating among multiple pages.

### Resources

- Providing descriptive titles for Web pages: technique for meeting WCAG
- Deque University on title rules and importance

### Source

- WCAG 2.1 2.4.2 Page Titled (Level A)

---

**Color**

Color alone should not be used to convey information, indicate an action, prompt a response, or distinguish a visual element.

Scan the page for elements in different colors, paying special attention to the following areas:

- **Links**: ensure that link text is distinguishable from surrounding text by means other than color alone (underline, font, size, layout, etc.)
- **Info**: ensure that information in tables, charts, and interactive controls is communicated by means other than color alone (labels, texture, icons, etc.)
- **Forms**: ensure that form errors and prompts are communicated by means other than color alone (outlines, text, highlight, etc.)

### Results

[Summary of findings]

### Consequences

Differences in color cannot always be perceived, especially by users with color blindness, but also by many users with normal vision. Providing additional means of distinguishing important elements ensures that more users can perceive and understand the content.

### Resources

- Deque University Section on Color Contrast
- Color Accessibility Workflows (A List Apart)
- Accessible U: Color & Contrast (UMN)

### Source

- WCAG 1.4.1 Use of Color (Level A)
Links

Scan the page for links. (Note: keyboard browsing may be helpful to discover all links.)

- Ensure that link text conveys purpose or destination
- If purpose or destination is not clear, ensure that it can be determined from the text that immediately precedes it

<table>
<thead>
<tr>
<th>Links</th>
<th>[Good] [Warning] [Problems]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results</td>
<td>[Summary of findings]</td>
</tr>
</tbody>
</table>

Consequences

Inaccessible link elements pose great barriers to accessibility, as links are a fundamental component of a website.

As much as possible, the text of links should be self explanatory, so that they immediately make sense to someone scanning the page for links, whether with a screen reader or a visual browser. If the link does not describe its own purpose or destination, there should be a good design reason for this.

<table>
<thead>
<tr>
<th>Resources</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Links and Hypertext (WebAIM)</td>
<td>- 2.4.4 Link Purpose (In Context) (Level A)</td>
</tr>
</tbody>
</table>

Keyboard

All interactive elements must be accessible from keyboard; keyboard focus should be visible and follow logical order.

<table>
<thead>
<tr>
<th>Keyboard</th>
<th>[Good] [Warning] [Problems]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results</td>
<td>[Summary of findings]</td>
</tr>
</tbody>
</table>
Consequences

All interactive elements on the page must be operable with a keyboard. Keyboard operability is a good indicator that the elements will also be operable with other alternative input technologies as well (eye tracking, voice input, etc.). The visual keyboard focus indicator, and a logical focus order that reflects the visual order, are crucial for a user to find and orient themselves within the content.

Resources

- WebAIM Keyboard Accessibility

Source

- WCAG 2.1
  - 2.1.1 Keyboard (Level A)
  - 2.1.2 No Keyboard Trap (Level A)
  - 2.4.3 Focus Order: (Level A)
  - 2.4.7 Focus Visible: (Level AA)

If: Multimedia

Multimedia content must include text equivalents for audio information and visual information.

Scan the page for multimedia: video or audio.

For video

- Ensure that video includes captions of acceptable quality (i.e. not auto-generated)
- Ensure that video includes a transcript
- Check for text that describes the visual content of the video, either in the transcript or in an “Audio Description” track.

For audio

- Ensure that text provides equivalent information to the audio track

Multimedia

[Good] [Warning] [Problems]

Results

[Summary of findings]

Consequences

Like visual media, multimedia must be made accessible to users who do not have access the original. This may include users who are deaf or hard of hearing, whose connection is too slow to stream content, who are blind, or who are using search technology to find content on the page. For these cases an alternative is required, in static text, or synchronized media, or
If: Moving Content

Users must have control to pause, stop or hide moving content, unless the content is essential to their activity. User should have enough information to understand moving/updating content that is essential to their activity. Don’t cause seizures.

Scan the page for moving, blinking, scrolling, or updating content. Note that some moving/updating content may only move or change upon a user action.

For moving content
- Check that there is a control to stop the motion (either at the top of the page or next to the moving, blinking or scrolling content).
- Ensure that the control works as expected.

For updating content
- Check that user has control to stop or initiate an update
- Check that user has enough information to understand the update (NOTE: some updating information will require ARIA to be accessible to screen readers -- beyond the scope of Light Audit but worth noting as Warning)

For blinking content
- Determine if the blinking stops in 5 seconds or less.
Consequences

Some users will not be able to see moving content, and some users will be distracted by moving content, making it difficult to see anything else. Some moving content may cause motion sickness. Some flashing content (more than three flashes/second) can trigger seizures. Any content that moves, flashes, or updates should have a good design reason.

<table>
<thead>
<tr>
<th>Resources</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Seizure Disorders article (WebAIM)</td>
<td>WCAG 2.1</td>
</tr>
<tr>
<td>- Designing Safer Web Animation for Motion Sensitivity (A List Apart)</td>
<td>- 2.2.2 Pause, Stop, Hide: (Level A)</td>
</tr>
<tr>
<td></td>
<td>- 2.3.1 Three Flashes or Below Threshold: (Level A)</td>
</tr>
</tbody>
</table>

DAT “Light” Digital Accessibility Evaluation | [Product]

Product: [Product or resource tested]
Contact: [Client contact]
DAT Reviewers: [2 DAT members]

[Statement of request with specifics and scope, if applicable.]

Pages Tested

[Insert Pages Tested and Essential Functions Tested here]

Summary

Accessibility is not a simple “yes” or “no”. The standard we aim for is Level AA Conformance to WCAG 2.1 guidelines. There are violations when the success criteria in the WCAG 2.1 guidelines are not met.

Violations/errors in the following areas:

- [summary of most important violations]
- [summary of most important violations]

Warnings were found in the following areas:

- [summary of significant warnings]
● [summary of significant warnings]

[Good accessibility was found in the following areas (if applicable)]

[Summarizing statements. What are the implications of these findings? What judgements can we make about the product or resource? What information can we give the client to advise their next steps?]

[Additional information, if applicable.]

Findings

Please see below for the detailed findings of the light accessibility audit summarized above. Findings are organized by category. There are manual checks and automated checks (aXe and WAVE). Results are noted by which system found the error if applicable.

[Insert findings by category.]