Digital Accessibility

Websites and Documents

Learning Takeaway Resource for:
Website Accessibility: The Ramps and Rails of the Digital World
Document Accessibility: Can you read this?

View the webinars at DisabilityInclusionPgh.org.
Digital Accessibility: Websites and Documents

Digital Accessibility Defined

Digital accessibility is the ability of a website, mobile application or document to be easily navigated and understood by a wide range of users, including those users who have disabilities.

Digital Accessibility Benefits

15% of the Global Population are People with Disabilities, or Approximately 1B People Worldwide – World Health Organization

- Disability Community Connection Benefits
  - Widen the talent pool
  - Increase donor contributions & program participation
  - Engage with diverse perspectives
- Americans with Disabilities Act (ADA) Compliance

Website Content Accessibility Guidelines (WCAG)

- Technical standard
- Provides best practices to make web content more accessible

Website Accessibility Statements

**Tips**
- Indicate that accessibility is important to your organization
- Provide a link for how to request support for accessing information on your website
- Provide a link to report accessibility errors

**Sample Language**

At Company Name, we believe it is important to provide digital information in an accessible format. That is why our organization is committed to continually updating our site to address accessibility concerns. Request support to access information on this website. Report an accessibility error.
How Users with Disabilities Interact with a Website

**Vision**

**Assistive Technology Examples:**
- Screen Readers
- Screen Magnifiers

**Interaction Considerations:**
- Keyboard Navigation
- Text Descriptions for Non-Text Elements
- Descriptive Link Text
- Skip Navigation
- Semantic Markup
- Color to Convey Meaning

**Auditory**

**Assistive Technology Examples:**
- Captioning
- Video Relay Services (VRS)

**Interaction Considerations:**
- Audio-only content or Signals

**Intellectual**

**Assistive Technology Examples:**
- Voice Recognition Software
- Specialized Fonts

**Interaction Considerations:**
- Consistency and Predictability
- Placeholder Text
- Visually Cluttered Content
- Timed Tasks
- Simplified Content

Digital Accessibility Success

**Navigation**

- Elements do not automatically activate
- User can tab through the site in an organized way
- Clear visual indicators of navigation destinations are provided
- Form fields are correctly labeled and used
- Navigational language is not duplicated
- Links and anchors are named and understandable
- Content is uncluttered and well organized

**Disabilities Affected:**
Vision, Mobility, Intellectual

**Accessibility Concern:**
User ability to obtain relevant information easily

**Solution Applied:**
Performed site audit for non-visual navigation ease and correct application of headings, links and anchors
## Digital Accessibility Success

<table>
<thead>
<tr>
<th>Topic</th>
<th>Disabilities Accommodated:</th>
<th>Accessibility Concern:</th>
<th>Solution Applied:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Headings</strong></td>
<td>- Vision, Mobility, Intellectual</td>
<td>- User ability to easily navigate site and identify needed information</td>
<td>- Content clearly outlined to create site and page structure</td>
</tr>
<tr>
<td></td>
<td>• Convey content flow</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Provide hierarchical flow (h1, h2, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Not used aesthetically or to establish spacing</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Levels are not skipped or used inconsistently</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Not confused with paragraph tags</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tables</strong></td>
<td>- Vision, Mobility</td>
<td>- User ability to consume content in a meaningful way</td>
<td>- Identified where tables are used within website, determined purpose for use of</td>
</tr>
<tr>
<td></td>
<td>• Used only to present tabular data</td>
<td></td>
<td>tables, and adjusted captioning and layout where necessary</td>
</tr>
<tr>
<td></td>
<td>• Not used for layout or aesthetic purposes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Headers are used to categorize information</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Table title is provided by inserting a table caption</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Color Contrast</strong></td>
<td>- Color Blindness</td>
<td>- User ability to distinguish one color from another, resulting in nonvisible</td>
<td>- Applied color contrast testing tool to identify contrast errors; Selected a</td>
</tr>
<tr>
<td></td>
<td>• Color is not used as the only visual means of</td>
<td>elements</td>
<td>color palette template that easily meets color contrast standards to minimize</td>
</tr>
<tr>
<td></td>
<td>conveying information</td>
<td></td>
<td>errors</td>
</tr>
<tr>
<td></td>
<td>• Sufficient contrast exists between text and images</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Sufficient contrast exists between text and background</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Video Content</strong></td>
<td>- Deaf, Hard of Hearing, Vision, Mobility</td>
<td>- User ability to consume content or effectively interact with player</td>
<td>- Engaged with captioning providers to create process for self-captioning videos;</td>
</tr>
<tr>
<td></td>
<td>• Live and recorded video content is captioned</td>
<td></td>
<td>Provided captioners with correct spelling of names of people and products in</td>
</tr>
<tr>
<td></td>
<td>• Transcripts are provided for audio only content</td>
<td></td>
<td>advance; Performed quality assurance on all videos to ensure accuracy of captioning;</td>
</tr>
<tr>
<td></td>
<td>• Captioning is easy to turn on and off</td>
<td></td>
<td>Employed the embedded YouTube video play</td>
</tr>
<tr>
<td></td>
<td>• Captioning is free of spelling errors</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Media player controls are accessible</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Vision, Mobility, Intellectual</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5 Key Takeaways for Document Accessibility

1. Use Headings to Convey Content Flow
2. Create Accessible Templates for Organizational Use
3. Download Bender’s HighTest Alt Text User Guide
4. Use Built-in Software Automated Testing Resources
5. Test Navigation Using Only the Keyboard to Access All Document Elements

5 Tips for Self-Testing

1. Using the tab key on your keyboard, start at the top of the webpage and see if you are able to navigate to all elements on the page in an orderly manner without using a mouse
2. Employ the use of a free color contrast tool to identify color contrast issues
3. Review video captioning to determine if there are typos or errors that need to be fixed
4. Ensure all images with essential content have alt-text and ensure decorative images are marked as decorative or have blank alt-text
5. Review links to determine if they describe the link destination

Accessible Auditing Lifecycle

- Train Employees
- Conduct Testing
- RemEDIATE Errors
### Digital Accessibility: Websites and Documents

#### Microsoft Office Solutions

**Styles Headings and Layouts**
- Don't use color as the only way to convey information
- Use headings and styles to organize your document
- Do not skip heading levels
- Do not apply heading/styles based on aesthetics
- Don't include essential content in headers/footers
- Give every slide/sheet a unique title or name
- Delete blank slides/sheets
- Use outline view to check if content is readable
- Use a table of contents in longer documents

**Formatting Tables & Basic Worksheets**
- Don't use tables for non-tabular data
- Use captioning or worksheet tabs to add titles
- Provide table description in table properties
- Make simple tables that have defined headers
- Ensure each heading is unique
- Ensure correct color contrast between text and table style
- Consider using table styles that alternate colors between rows for following data across rows
- Delete blank or unused rows or columns

**Images, Illustrations & Tapestry**
- Include alt text for all images
- Text within an image should be considered essential and provided in the alt text
- For decorative images, designate as decorative in alt text
- Limit alt text to 125 characters
- Essential images should be placed in line with related text
- Avoid use of ‘image’, ‘link’, or ‘graphic’ when labeling
- Add descriptive hyperlink text

**Text Boxes, Smart Art & Charts**
- Text boxes are always read at the end of the page for screen reader users
- When inserting smart art into a document, do not manipulate the objects to change flow
- Instead use the outline pane to organize data
- Use captioning to title smart art, rather than creating a text box for this purpose
- When using charts, ensure headings and labels are correctly applied using the built-in chart features
- Use alt text to describe smart art and charts as needed

**Slide Master Features**
- Allows you to create a template with multiple slide types
- Begin with a blank deck or start from a template
- Allows you to identify the type of layout for each slide
- Allows you to designate if content type
- Any elements not in the slide master are unreadable by screen readers

**Check Accessibility Feature**
- Generates a list of possible errors in a document
- Provides suggestions on addressing the issues identified
- Will report on items such as images missing alt text, possible reading order mistakes, skipped headings, etc.
- Can be turned on while creating a document or run after the document is created

**Additional MS Office Tips**
- All links and anchors should use unique descriptive text
- Correct color contrast used when designing documents
- All fonts should be at least 12pt size in documents
- All fonts should be at least 18pt size in slide decks
- Documents should be created with easy to read fonts
- When embedding videos into a presentation or document, they should include captioning
<table>
<thead>
<tr>
<th>Step 1: Source Document Review</th>
<th>Source Document Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Getting Started</strong></td>
<td>• What kind of source document is it?</td>
</tr>
<tr>
<td>• There are many paths you can take to create a PDF</td>
<td>• Does it contain text, pictures, tables, etc.?</td>
</tr>
<tr>
<td>• Understand your conversion tool</td>
<td>• What work needs to be done to make each piece accessible?</td>
</tr>
<tr>
<td>• How many steps you need to take depends on the accessibility of your source document</td>
<td>• Do you need to go back to the source document?</td>
</tr>
<tr>
<td>• Starting with an accessible source document will always result in a more accessible PDF</td>
<td>• Will it be quicker to update the source document for accessibility before creating the PDF or after?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 2: Make Text Accessible</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• This step can be relatively easy</td>
<td>• If these text designations do not carry over, or were not in the source document, it will need to be marked using tags</td>
</tr>
<tr>
<td>• If appropriate styles (i.e. headers) were used in the source document, they will be marked in the PDF</td>
<td>• Check tags for text disguised as images</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 3: Make Tables Accessible</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ensure data tables are formatted using table elements</td>
<td>• Merged row and columns need to have appropriate tags</td>
</tr>
<tr>
<td>• Tables should use header tags to identify header cells</td>
<td>• Add table descriptions to summarize the table’s purpose</td>
</tr>
<tr>
<td>• Define column headers across page breaks</td>
<td>• Organizational tables can be turned into plain text by changing tags</td>
</tr>
<tr>
<td>• Associate table row and column headers with data cells</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 4: Make Images Accessible</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• People using screen readers benefit from alt text</td>
<td>• If you need to edit alt-text manually</td>
</tr>
<tr>
<td>• To use this access the Accessibility Tools to “add Alt Text”</td>
<td>• Access the Tags tool or Reading Order tool in Adobe</td>
</tr>
<tr>
<td>• This will cycle through all the images in your document</td>
<td>• Access the properties of the image you wish to edit</td>
</tr>
<tr>
<td>• Allows you to mark images “decorative” or add alt text</td>
<td>• Add alt text to the dialogue box</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 5: Ensure Correct Reading Order</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ensure that content is listed in the correct order</td>
<td>• Drag and drop the items in the list to the correct order</td>
</tr>
<tr>
<td>• Ensure that when using a keyboard to navigate the document, it moves in the correct order</td>
<td>• Ensure the visual display of the content is not altered</td>
</tr>
<tr>
<td>• Use the “Reading Order Panel” for more advanced changes</td>
<td>• Redefining content or clearing the reading order</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 6: Specify Document Language and Title</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Do not assume that the correct language specification is applied to the document</td>
<td>• Set the “Title” of the document, the Author, and any other helpful information for accessibility in document properties</td>
</tr>
<tr>
<td>• To check this, use document properties to determine if the language is specified</td>
<td>• For example, subject, keywords, or additional metadata</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 7: Employ the Accessibility Checker</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• The checker may identify some potential problem areas</td>
<td>• Will not find all errors, but is a good place to start</td>
</tr>
<tr>
<td>• Examples of errors include images without alt text</td>
<td>• May specify some areas that require a “manual check”</td>
</tr>
<tr>
<td>• Color contrast, Logical reading order</td>
<td></td>
</tr>
</tbody>
</table>
Disability Inclusion & Access: Moving Forward

FISA Foundation and The Heinz Endowments convened nearly 250 nonprofit and foundation leaders on November 21st 2019 to launch www.disabilityinclusionpgh.org. We believe that our community is at its best when everyone is included, and no one is left out. Disability Inclusion & Access: Moving Forward is a new initiative to support nonprofits, foundations and community organizations to be more welcoming and inclusive of people with disabilities.

About Bender Consulting Services

With 25 years of experience in supporting corporate and federal recruitment, workplace mentoring, and technology accessibility initiatives, Bender Consulting Services, Inc. is the leading national expert in disability employment solutions for private and public sector employers. To learn more about how to start your career with Bender Consulting Services, Inc., please visit our website at www.benderconsult.com.

Additional Resources

- Bender Consulting Services
- iDisability: Civil Rights of Americans with Disabilities Free eLearning Module
- FISA Foundation
- Heinz Endowments
- Disability Inclusion & Access
- Job Accommodation Network
- Caption First
- 3Play Media
- We Will Slaughter Stigma Campaign
- AudioEye
- WCAG
- Section 508.GOV
- Color Contrast Analyzer