



Basics of PDF Accessibility

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Housekeeping

- Recording
- Captioning
- Handouts
- Q and A



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Handouts

exploreaccess.org/handouts/



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Alternative Ways of Navigating

- Screen readers:
Voiceover, JAWS/Fusion, NVDA
- Magnification Software
- Braille display
- Voice recognition software
- Keyboard only navigation
- Other mouse alternatives



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Why PDF?

- PDF stands for Portable Document Format
- Often used to maintain specific look of a document
- **Advantage:** Will open across several devices and platforms 🙌
- **Disadvantage:** If not designed with access in mind, can be completely inaccessible to screen reader users 🙌



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What Makes a PDF Accessible? (1 of 2)

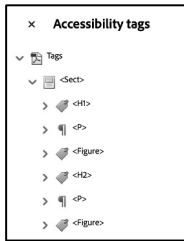
- PDFs must meet the same accessibility standards as other documents:
 - Good contrast
 - Clear, readable fonts of at least 12-point size
 - Proper heading structure
 - Meaningful link text
 - Alt text for images.
 - Well-structured tables



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What Makes a PDF Accessible? (2 of 2)

- Tagging layer:
 - Screen readers rely on the tag layer to interpret the document's structure and content.
 - Ensuring PDFs are generated correctly from the source will help ensure they are tagged.



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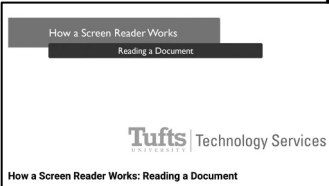
Common Barriers: PDF

- No tags
- Images missing alt text
- Missing heading structure
- Incorrect reading order
- Some content missing tags
- Improperly tagged tables
- Scanned PDFs that are an image of text
- PDF forms without correct labeling



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Screen Reader User Experience




[How a Screen Reader Works: Reading a Document\(YouTube\)](#)




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Creating an Accessible PDF from Source Document – Microsoft Word and PowerPoint

- Follow best practices for accessibility in creating the original document
- Be sure to Save as PDF rather than Print to PDF.
- On a Mac, select the radio button that is labeled "Best for electronic distribution and accessibility"
- If you have Acrobat Pro DC, use the Create PDF Add-On.



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Creating an Accessible PDF from Source Document – Other Applications

- **Adobe InDesign** can also be used to create an accessible PDF.
- **Google Docs:** File downloaded as a PDF is accessible
- **Google Slides:** Exports are untagged and therefore inaccessible.
- **Other applications:** Exporting to PDF will have mixed results.

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Accessible Source Document: MS Word

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Using Headings to Provide Structure

- Headings provide structure to your document.
- Using normal text and applying styles such as larger size, different color, or bolder text does not create a true heading.
- Don't use headings when you don't need a true heading.

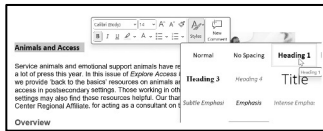


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How to Add Headings

- Highlight the text
- Click on the appropriate heading
- Or use keyboard shortcuts
 - PC: Control+Alt+1
 - Mac: Command+Option+1

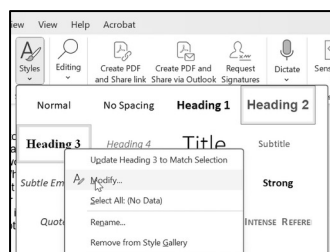


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Modify Headings

- Modify a heading by:
 - Right clicking on the heading in the styles group and choosing modify OR
 - Change the heading in your document and choosing Update Heading to Match Selection



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Alternative Text:

a text description of an image
(or other non-text content)
Also called:
alt text, image description



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Why Use Alt Text

- Without alt text, a screen reader user will not know what an image is.
- Images often convey important information.
- The screen reader will just say “graphic”



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Sample Alt Text

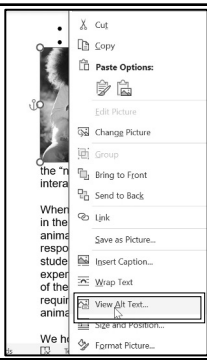
A Pomeranian wearing glasses looks down at an open book.



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How to Add Alt Text (1)

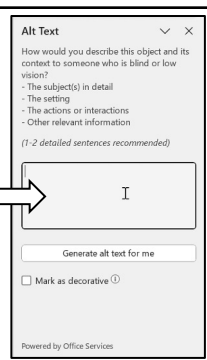
- Right click on the image
- Choose View Alt Text



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How to Add Alt Text (2)

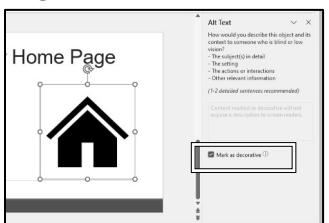
- Write the description in the box that appears to the right of the document.
- Describe what is in the image.
- No need to say “image of” or “picture of”



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Purely Decorative Image


- Images that do not add anything to the content
- Images that are redundant to the content
- Images that are visual separators



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Other Elements

- Link names should be meaningful out of context.
- Lists should use bulleted list tools within MS Word.
- Tables should have designated header rows



Organization	Number of Employees	# Participating in Training	# Earned Certificate	A11y Score
Anytown U	2124	350	200	76
ATCC	450	300	250	96
Good4Us, Inc	32	28	28	94
City of Anytown	1034	220	175	82

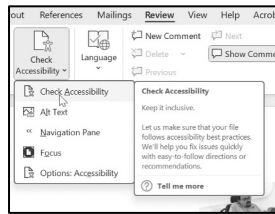
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Using the Accessibility Checker (1 of 2)

- Select Review Ribbon
- Select Accessibility Checker



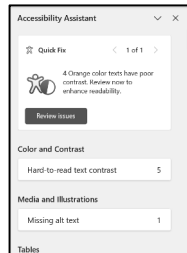
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Using the Accessibility Checker (2 of 2)

- Panel opens to the right
- Identifies accessibility issues



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Save as PDF

- Always “Save As” PDF instead of Printing to PDF
 - Newer versions: Save a Copy and then choose PDF from dropdown menu
- If using a Mac, also choose “Best for electronic distribution and accessibility”



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Demo: MS Word to PDF



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Existing PDFs

How Do I Know It Is Accessible



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Is the PDF Accessible?

- Is there actual text?
- Is the PDF tagged?
- Are there accessibility errors?



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Demo: Checking Existing PDFs

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Free Accessibility Checkers

- [PDF Accessibility Checker \(Windows\)](#)
- [AxesCheck](#)



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Fixing Inaccessible PDFs




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Got Source Document?

- Fix issues in the source document
- Resave to PDF
- Recheck for accessibility



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Problem: PDF is a Scanned Image

Use Optical Character Recognition (OCR) to recognize and render text.

If the scan is a quality one, you may be able to fix the problem using Acrobat Pro.

- Windows: Select View > Tools > Recognize Text
- Mac: Select Edit > Scan and OCR > Recognize Text > In File

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Problem: PDF is Untagged

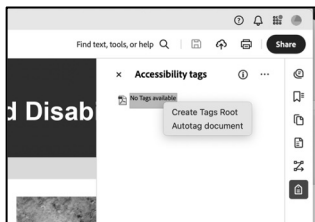
Use Adobe Acrobat Pro to auto-generate tags.



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Auto-Tagging a PDF

- Open tags panel
- Right click on No tags available
- Choose Autotag document



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Problem: PDF is Tagged But Has Significant Accessibility Issues

Export document to MS Word (or MS PowerPoint).

- Simple documents may export well to MS Word.
- More complex documents may be better edited in MS PowerPoint.



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Exporting PDF to MS Word

- Choose All Tools
- Then Export a PDF
- Then Microsoft Word (or PowerPoint)

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Problem: PDF is Tagged with Minor Accessibility Errors

Fix accessibility errors in tag tree or using the Reading Order tool in Acrobat Pro.

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Remediating a PDF Using Tag Tree

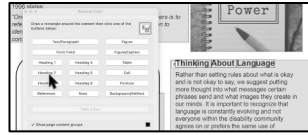
- Those who are familiar with HTML may prefer fixing errors using the Tag Tree.
- To view the tags panel, select View > Show/Hide > Side Panel > Tags.

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Remediating a PDF Using Reading Order Tool

- To access the Reading Order tool, select All Tools > Prepare for Accessibility > Fix reading order.



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Demo: Fixing Existing PDFs



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Other PDF Accessibility Remediation Tools

- [AccessibilityNow Remediate \(Crawford Technologies\)](#)
- [CommonLook PDF \(Allyant\)](#)
- [Equidox PDF Accessibility Software](#)
- [Grackle PDF](#)
- [PDFix](#)
- [PREP Document Remediation Software \(Continual Engine\)](#)



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PDF Accessibility Resources

- [Adobe: PDF accessibility](#)
- [Deque: 8 Step PDF Accessibility Checklist](#)
- [Deque: Quick Reference Guide: Basic PDF Accessibility \(PDF\)](#)
- [Harvard: PDF Accessibility](#)
- [University of Arizona: PDF Accessibility](#)
- [University of Colorado – Boulder: Understanding PDF Accessibility](#)
- [University of Washington: Checking PDFs for Accessibility](#)
- [WebAIM: PDF Accessibility](#)
- [W3C: PDF Techniques](#)



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Other Digital Accessibility Resources

- [Explore Access: Designing an Accessible Online Course](#)
- [DOE: OCR Video Series](#)
- [WebAIM](#)
- [W3C: Web Accessibility Initiative](#)



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Thanks to our funders

- iCAN (Increasing Capabilities Access Network) is the Arkansas statewide Assistive Technology program designed to make technology available and accessible for everyone who needs it.
- The Southwest ADA Center is the Southwest's leading resource on the Americans with Disabilities Act and related disability rights laws. The Center is part of the ADA National Network.



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Upcoming Webinars

- Dates to be determined:
 - Universal Design and Instruction
 - Accessible Tables and Excel Worksheets
 - Accessibility with Canva
 - Creating an Accessible Campus
- Visit: uofapartners.uark.edu/news-events



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