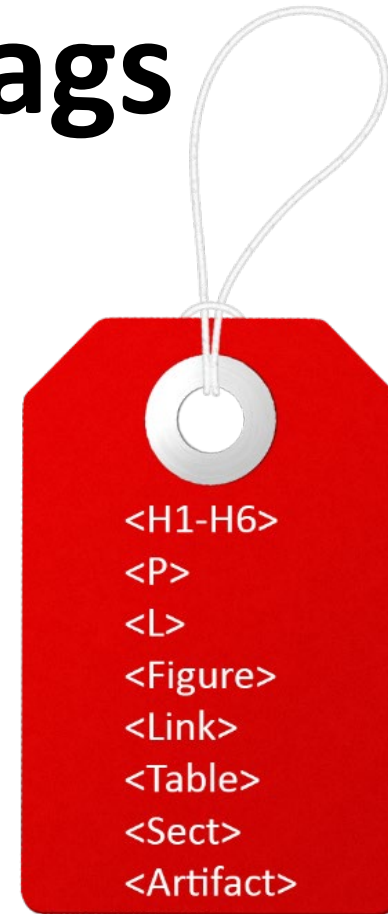


PDF Custom Tags



Adobe Acrobat DC



Accessibility (A11y)



Adobe Creative Cloud for Faculty & Staff



Adobe Acrobat DC

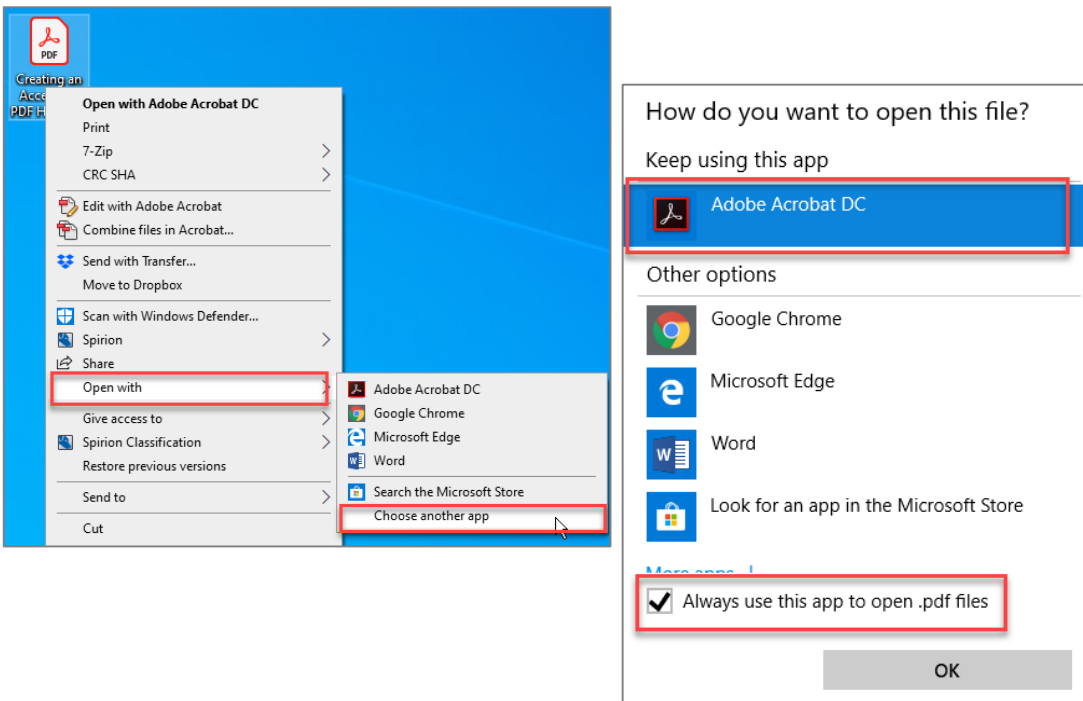
- Adobe Creative Cloud software is now available for use (at no additional charge) on all faculty and staff university-owned computers, labs and classroom devices, and for all students.
- Please note that this deployment of Adobe software is not available for use on personally-owned faculty and staff devices at this time.
- Learn more about [Adobe Creative Cloud for Faculty & Staff](#)
- ***Adobe Reader*** is for viewing, printing, signing, sharing, and annotating PDFs. *Adobe Reader doesn't have Accessibility checking tool.*



Open PDF files from Adobe Acrobat not Web Browser by default

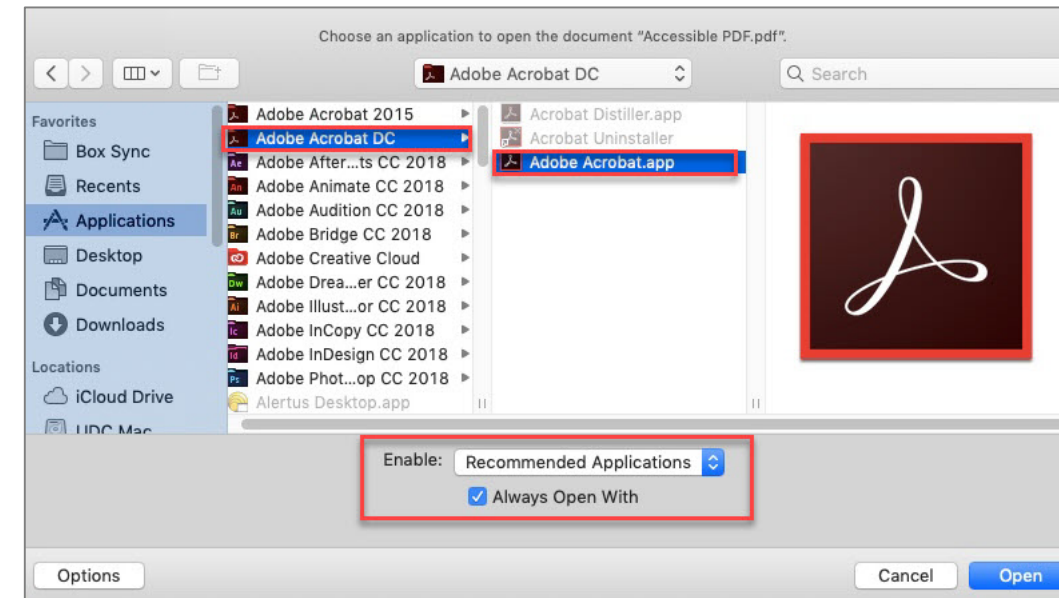
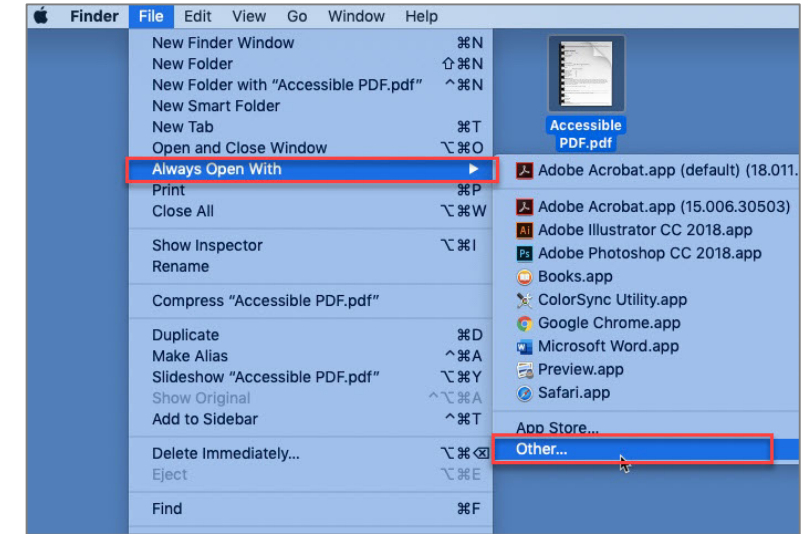
Windows

- Save PDF files on desktop
- Right-click on PDF file, select Open with, Choose another app

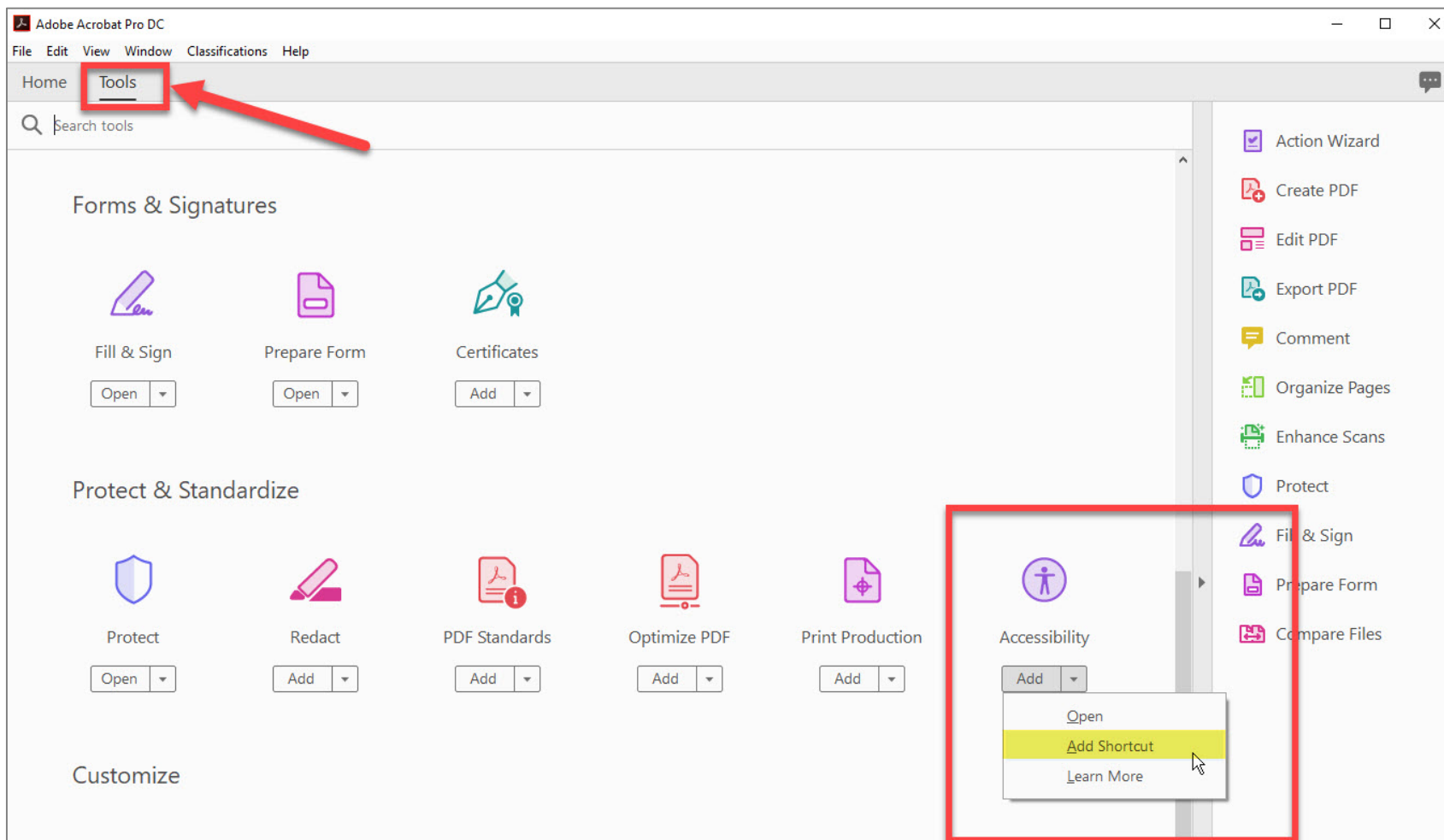


Mac

- Save PDF files on Desktop
- Select PDF (not double click)
- File tab, Always Open with, Other



Tools Pane Set Up



If this is your **first time** setting up Adobe Acrobat software

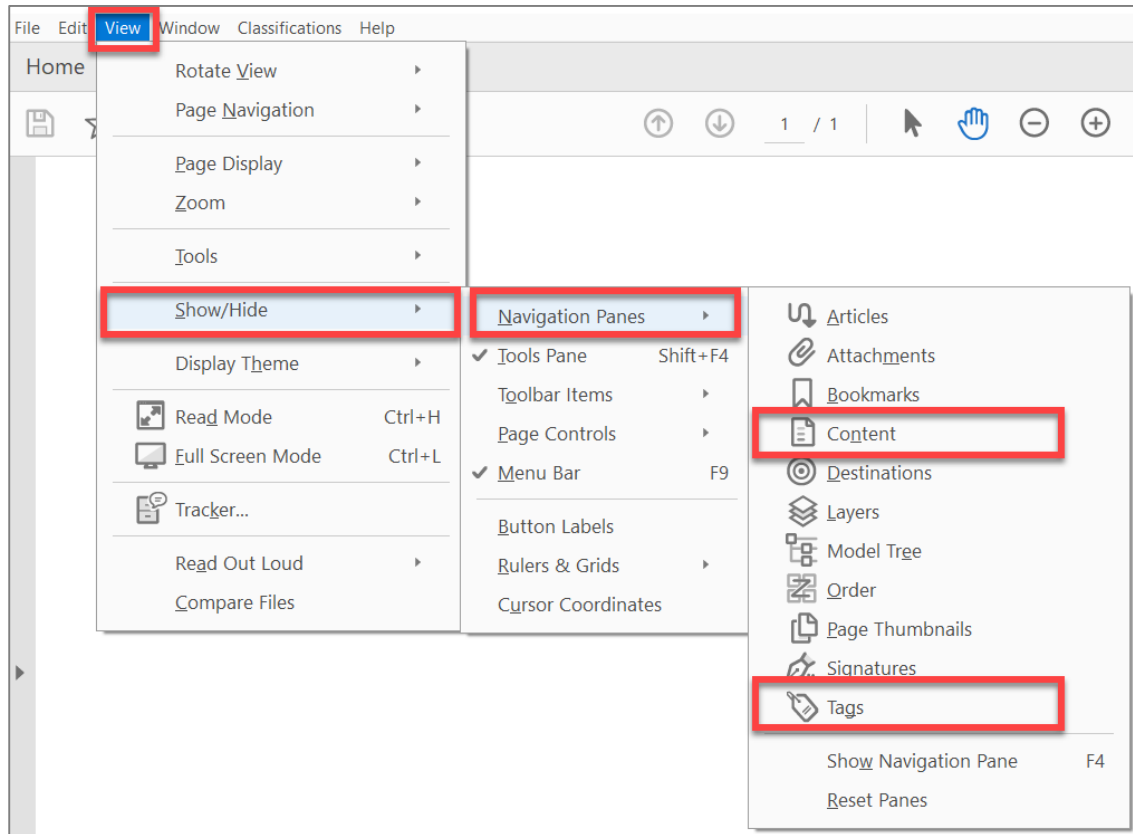
- Select **Tools** Tab
- Add Shortcut for **Accessibility**



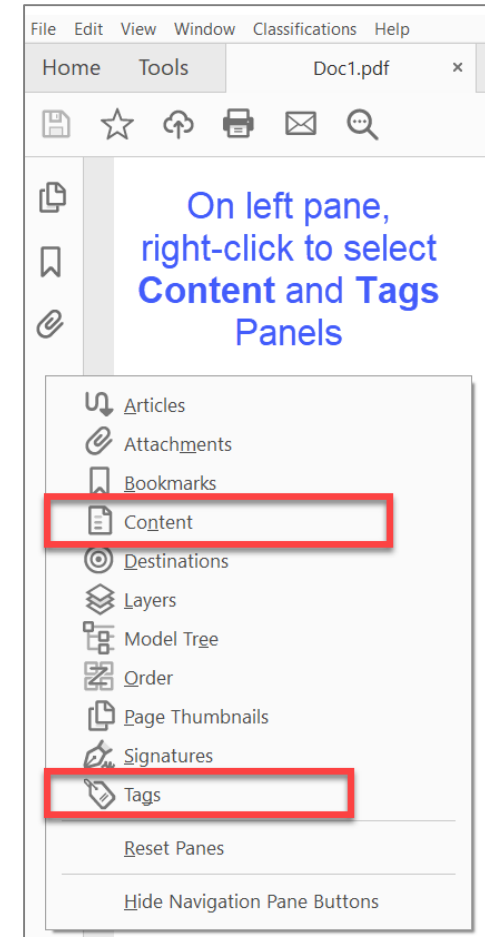
Adding Tools to Navigation Pane

These are the primary tools needed to create an accessible PDF:

Option 1: View > Show/Hide > Navigation > **Tags and Content** Pane



Option 2: On left pane, right-click to select **Tags and Content** Pane



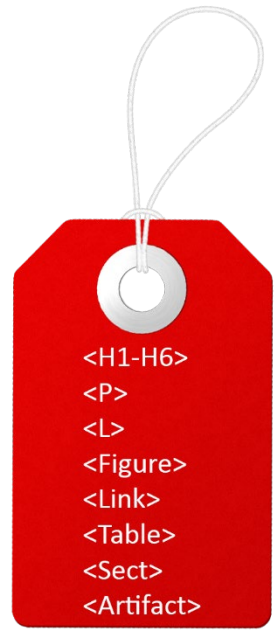
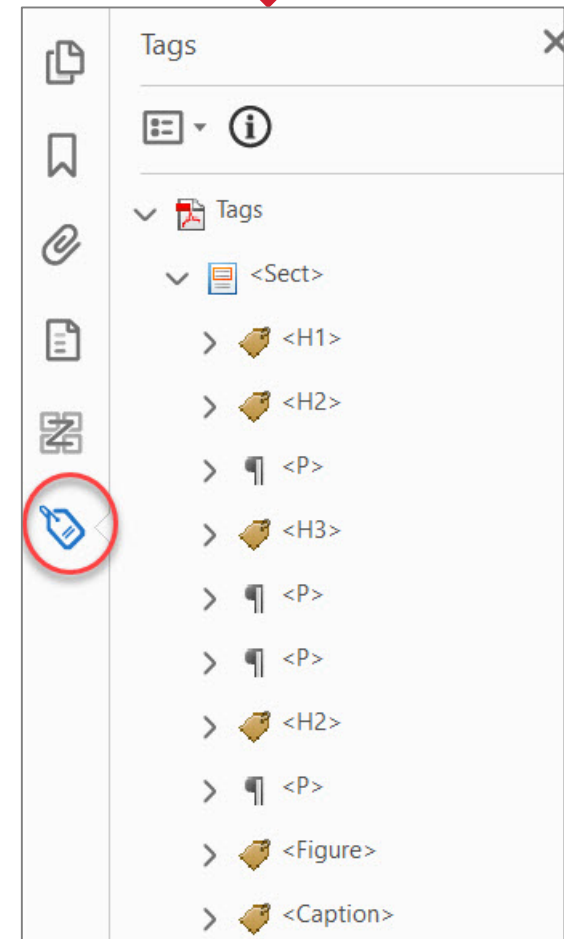
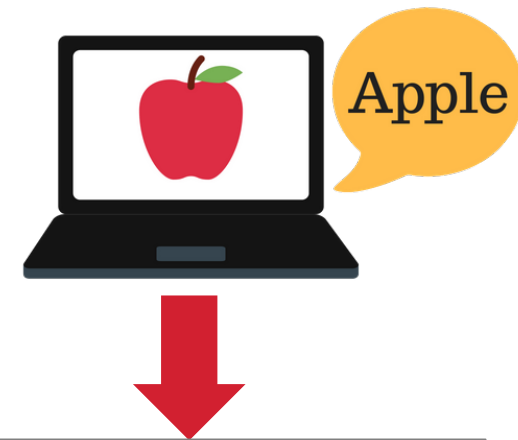
Tags Pane, 1 of 2

Accessible PDF means **every piece of content** must be tagged with the correct tag.

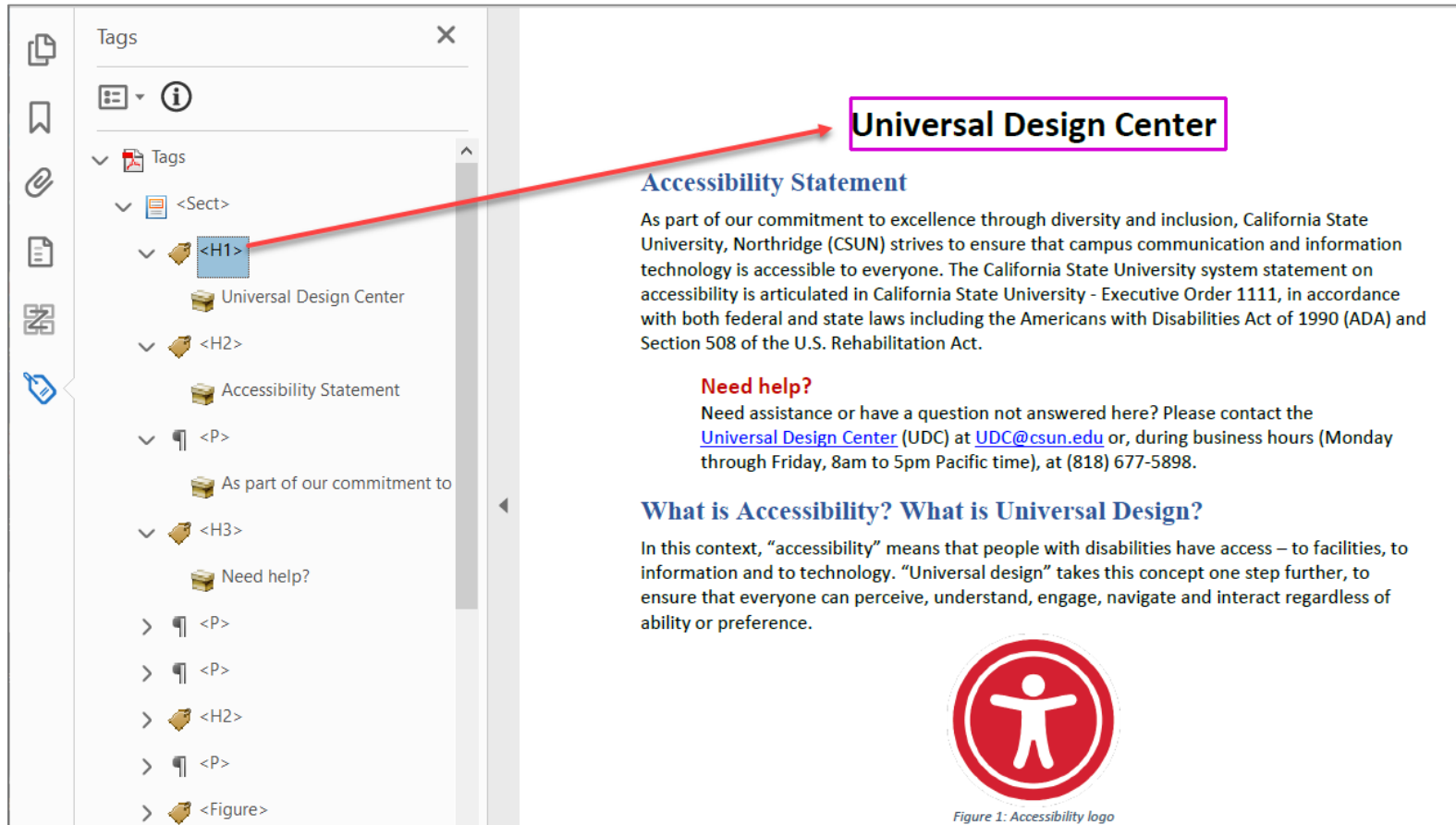
Tags are invisible identifiers that will tell **screen readers and other assistive technology (AT)** an object is...

- Paragraphs of body text: <P>
- Headings and subheads: <H1> - <H6>
- Lists: <L>,
- Tables: <Table>, <TR>, <TH>, <TD>
- Graphics have Alt-Text that describe the visual: <Figure>
- Hyperlinks: <Link>
- Captions, and other parts of a document: <Caption>
- Decorative images: <Artifact>

Ensure the tags are in the correct **logical reading order** to match the document pane.

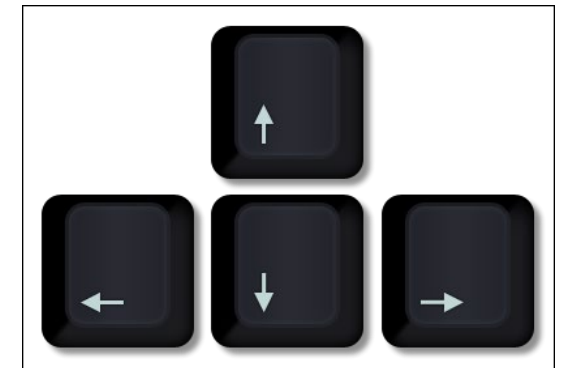


Tags Pane, 2 of 2

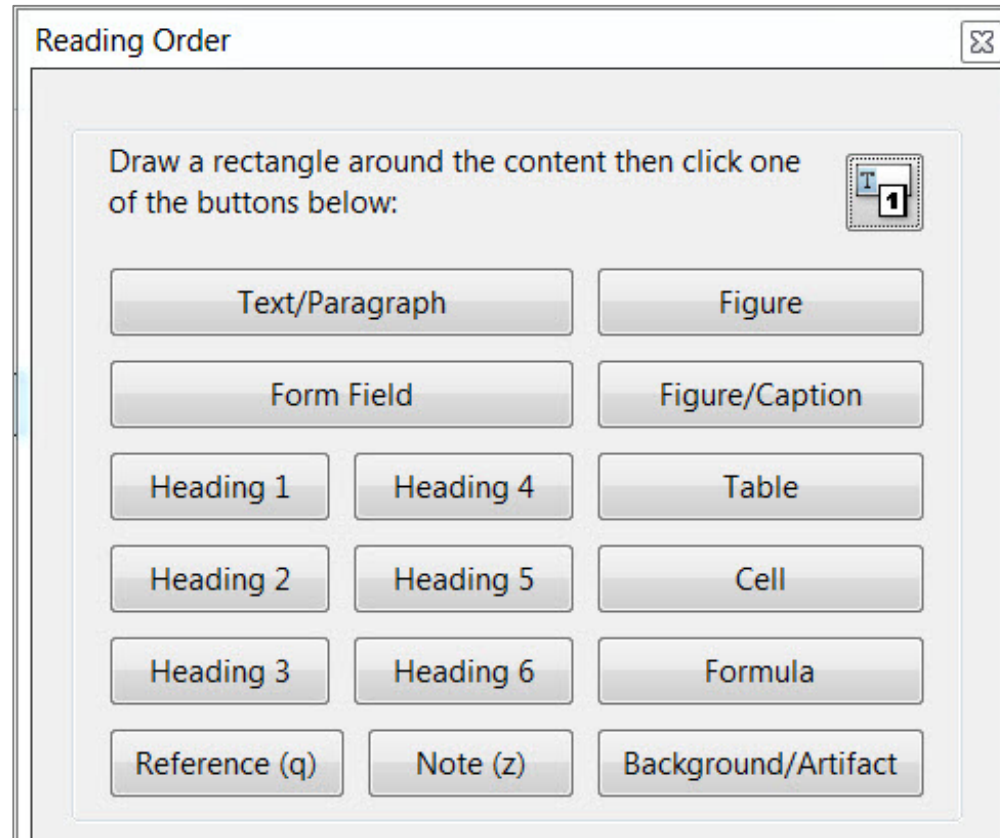
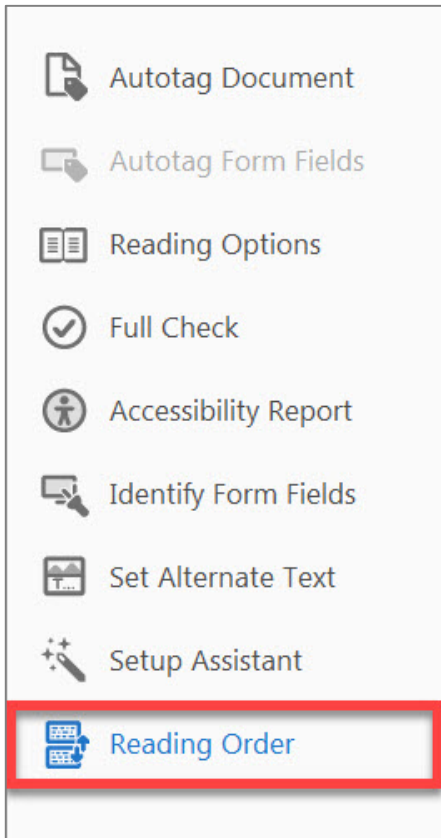


Tags are shown as an expandable “tree”

- Up and Down arrow keys to navigate tags tree.
- Right and left arrow keys to expand and collapse the text.



What is Custom Tags?



Tags such as **Link, List, List Item, Table Data Cell, Table Header Cell, Section, and so forth** that are **not listed** in the Reading Order tool, but these are essential structural elements.

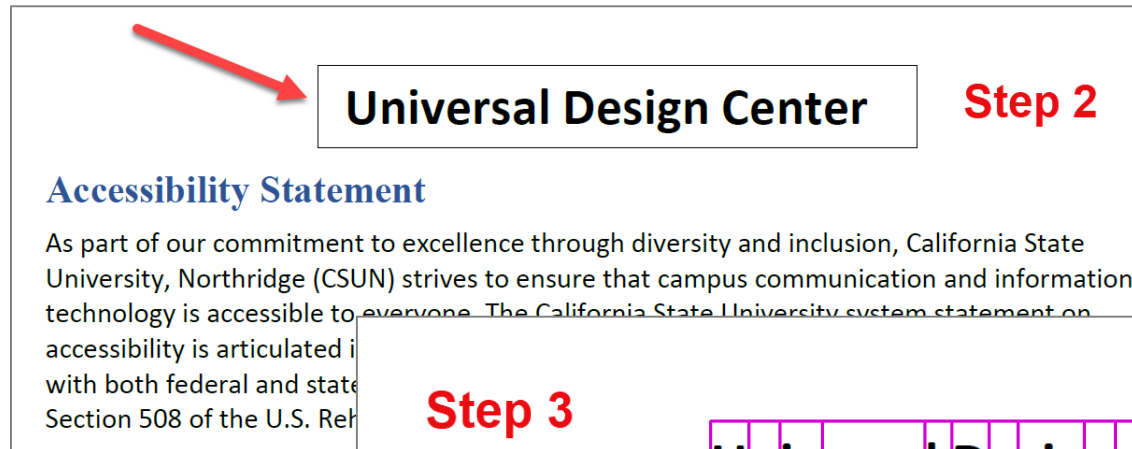
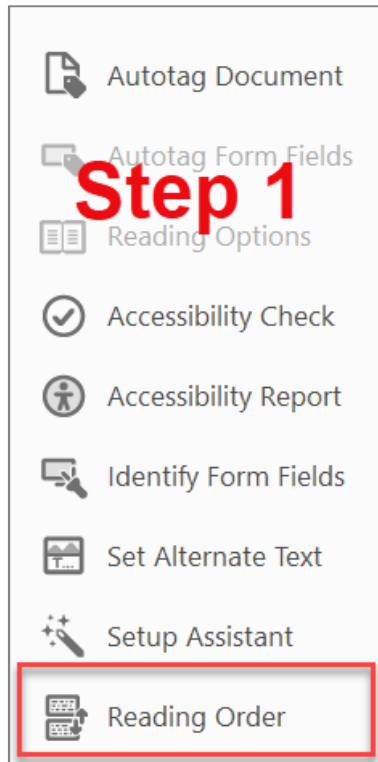
Custom tags are the only way to make it work by selecting “New Tag” from Tags Pane.

When do we use custom tags?



How to Tag a Document?

1. Open **Accessibility**, select **Reading Order** Tool
2. Draw a rectangle around the content or double-click the content
3. Select one of Reading Order buttons to tag it
4. Proceed step #2 to tag the rest of the content

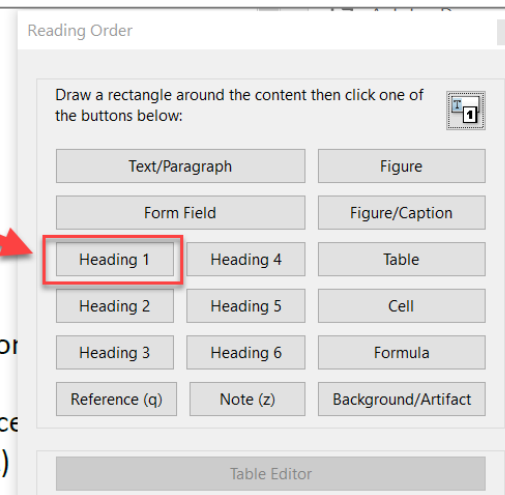


Step 3

Accessibility Statement

As part of our commitment to excellence through diversity and inclusion, California State University, Northridge (CSUN) strives to ensure that campus communication and information technology is accessible to everyone. The California State University system statement on accessibility is articulated in California State University - Executive Order 1111, in accordance with both federal and state laws including the Americans with Disabilities Act of 1990 (ADA) Section 508 of the U.S. Rehabilitation Act.

Universal Design Center



List Tags

How do we create list tags?

How to create an accessible PDF:

- Create an accessible Word document
- Convert your Word document to PDF
- Validate PDF Tags and Reading Order
- Use the accessibility checker to test your document



List Tags

❑ Tags Panel: Create New Tags

❑ List Nesting:

List **<L>**

List Item ****

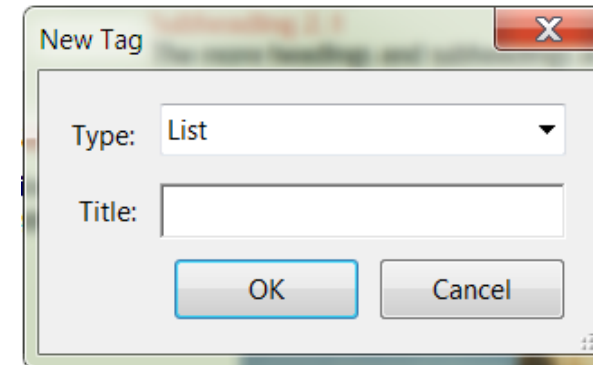
List Item Body **<LBody>**

List Item ****

List Item Body **<LBody>**

List Item ****

List Item Body **<LBody>**



List Nesting, 1 of 2

List Tags

1

How to create an accessible PDF:

- Create an accessible Word document
- Convert your Word document to PDF
- Validate PDF Tags and Reading Order
- Use the accessibility checker to test your document

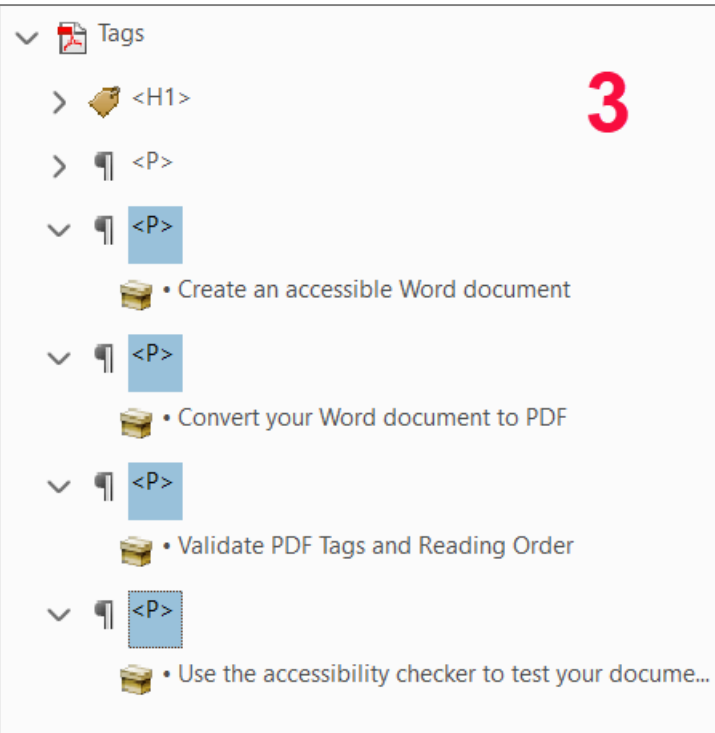
H1st Tags

2

Pow to create an accessible PDF:

- P Create an accessible Word document
- P Convert your Word document to PDF
- P Validate PDF Tags and Reading Order
- P Use the accessibility checker to test your document

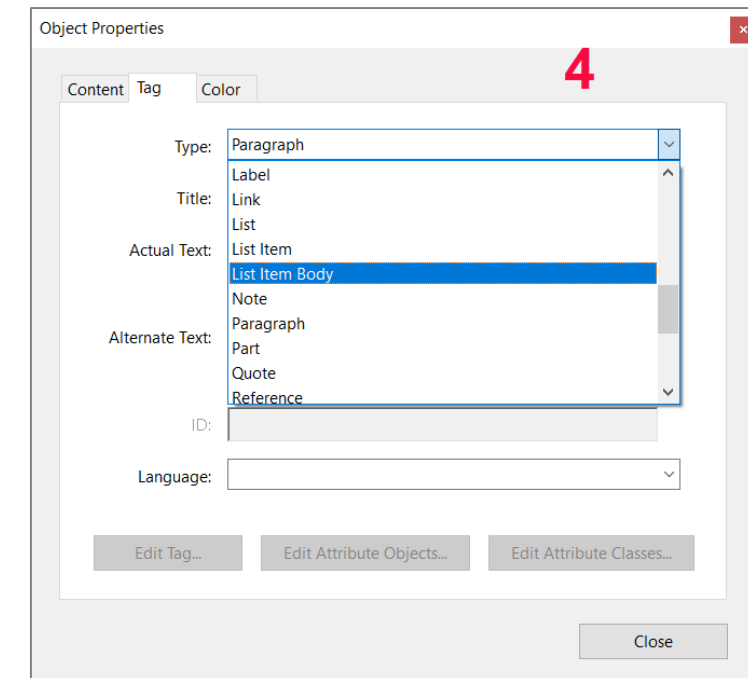
3



The screenshot shows the 'Tags' pane in a software application. It displays a hierarchical list of tags. The root tag is 'Tags'. Under 'Tags', there are four sub-tags, each preceded by a right-pointing arrow: '<H1>', '<P>', '<P>', and '<P>'. The first '<P>' tag is expanded, showing a list of four items: 'Create an accessible Word document', 'Convert your Word document to PDF', 'Validate PDF Tags and Reading Order', and 'Use the accessibility checker to test your docume...'. Each item is preceded by a small icon of a document with a checkmark.

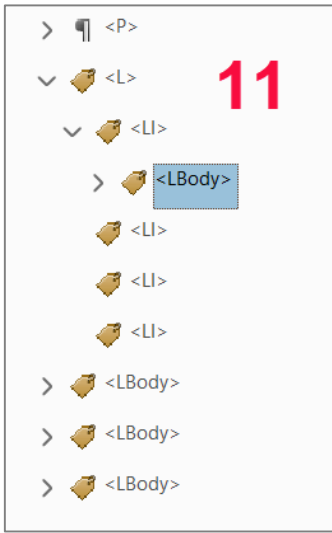
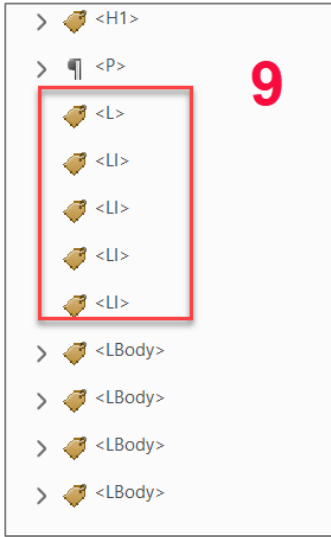
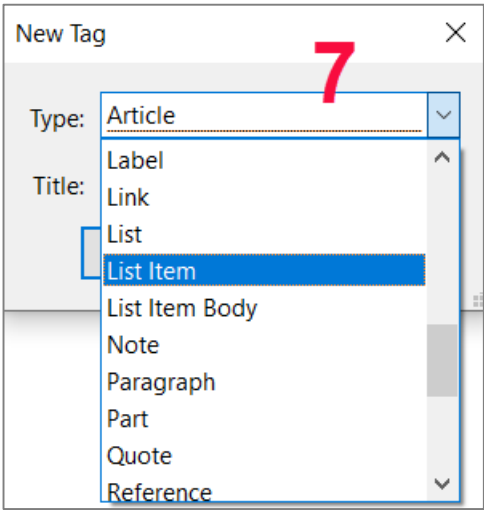
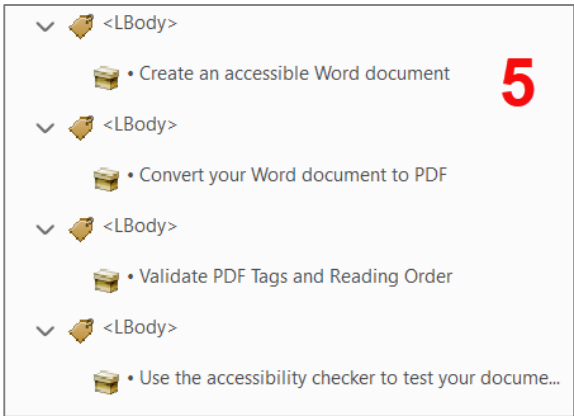
- List item needs to tag <P> line by line individually not one chunk <P>
 - Hold **Shift** key to select four <P> at the same time
 - Right-click **Properties**
 - Change Paragraph to **List Item Body**
- Note: **CTRL** is for specific selection

4

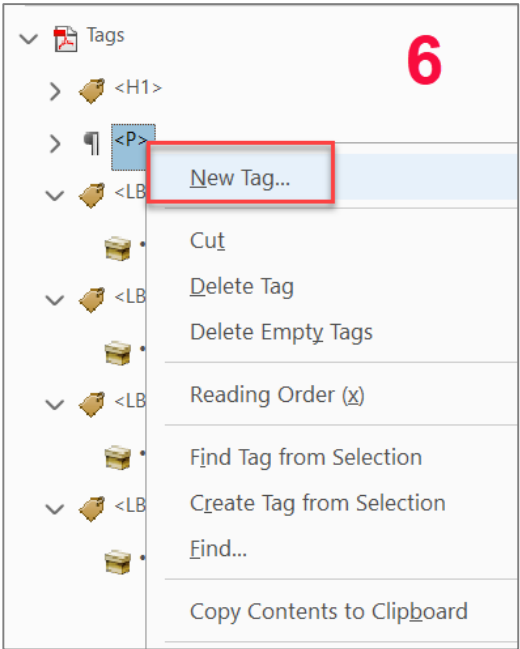


The screenshot shows the 'Object Properties' dialog box. It has three tabs: 'Content', 'Tag', and 'Color'. The 'Tag' tab is selected. In the 'Tag' tab, there is a list of tags. The 'Type' is 'Paragraph'. The 'Title' is 'Link'. The 'Actual Text' is 'List Item'. The 'Alternate Text' is 'List Item Body'. The 'ID' is empty. The 'Language' is empty. The 'List Item Body' tag is highlighted in blue. At the bottom, there are three buttons: 'Edit Tag...', 'Edit Attribute Objects...', and 'Edit Attribute Classes...'. A 'Close' button is at the bottom right.

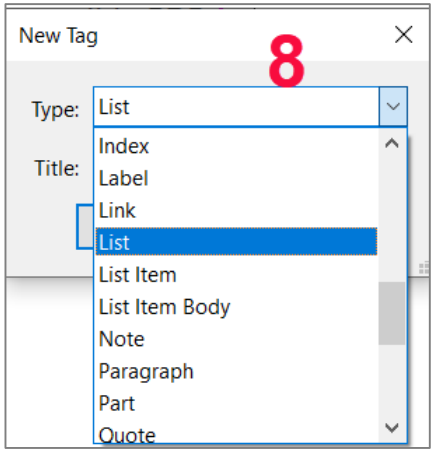
List Nesting, 2 of 2



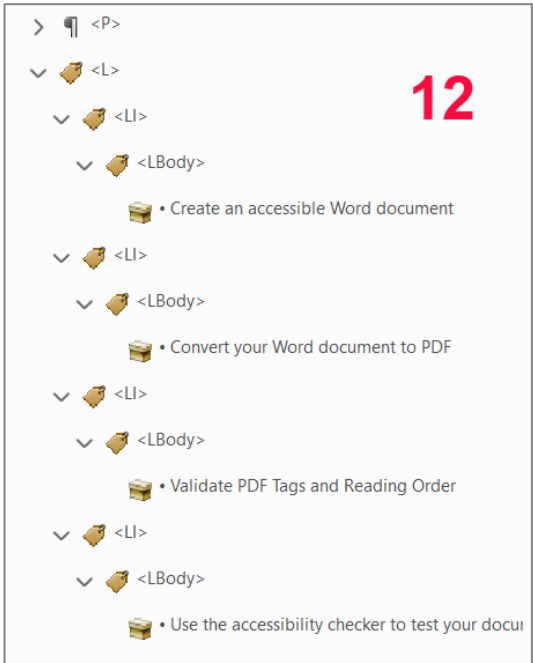
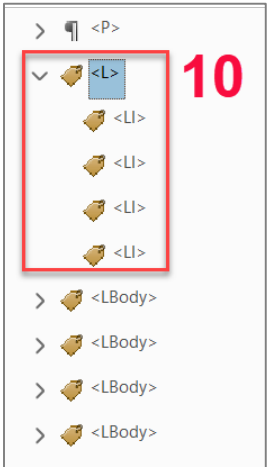
Move each <LBody> under . All list items should look like this format.



Create 4 new List Item tags and 1 new List .



Hold **Shift** to select all four move underneath <L>. <L> becomes the parent and becomes the child.



Links or Hyperlinks

- Link Tags
- Create Link

[Adobe: Create and Verify PDF Accessibility](#)

[NCDAE: Creating Accessible PDF Documents](#)

[Coblis Color Blindness Simulator](#)

[Simple Tables vs. Complex Tables](#)



Best Practices for Accessible Links

DESCRIPTION

- Link text must always properly **describe the purpose** of the link and tell a user **where** the link will take them.
- Do not use text such as “**click here**” or “**read more,**” nor web addresses (URLs).

PRESENTATION

- Each link on the page should be **visually different** from regular text on the website.
- Can be differentiated by **color**, **bold**, **underline**, or *italics*.
- Using color alone **does not** make it accessible.

FUNCTIONALITY

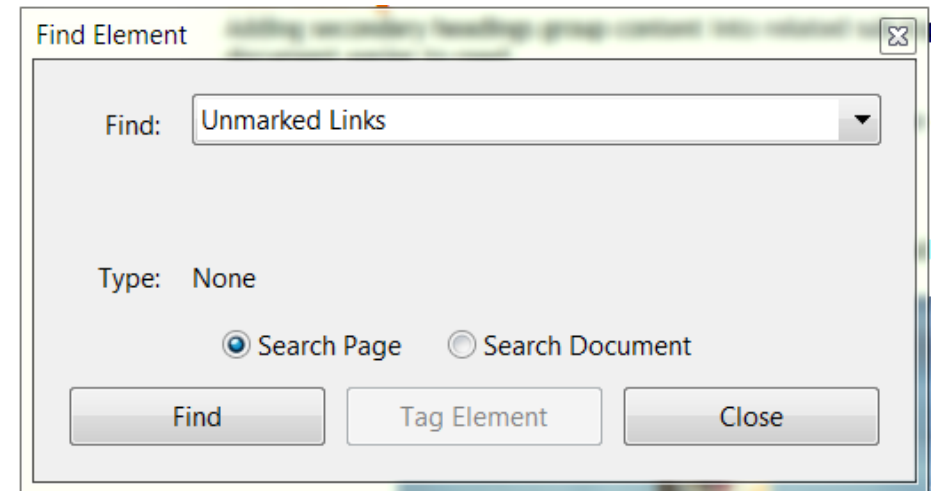
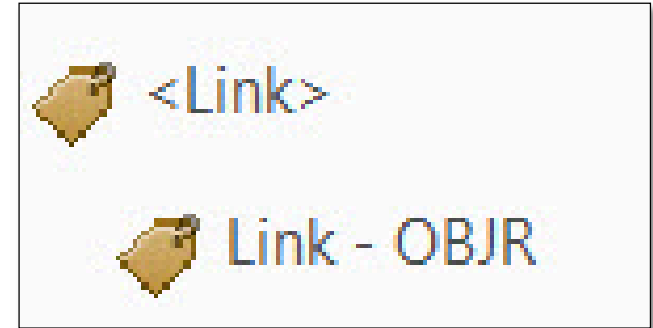
- Link functionality is about ensuring a link functions the way the user expects.
- Links must always enhance the accessibility of a webpage.
- Users must be able to access links using a mouse, keyboard, or speech recognition commands.

LINKED IMAGES

- A linked image is an image (with or without text) that is linked to another resource or webpage.
- Linked images need link descriptions as well as image descriptions (alt text).
- If the link description is different than the alt text, enter the link description in the HTML Title field.
- Visit [Linked Images](#) on the Best Practices for Accessible Images page for more information.

Link Tag

- ❑ Tags Panel: Find Unmarked Links
- ❑ Link Nesting:
 - “**OBJR**” tag must be present so link is defined correctly



Create Link, 1 of 3

Link Tags

1

[Universal Design PowerPoint Accessibility](#)

[Adobe: Create and PDF Accessibility](#)

[California State University, Northridge](#)

This example has no tag structure

H1 Link Tags

2

[Universal Design PowerPoint Accessibility](#)

[Adobe: Create and PDF Accessibility](#)

[California State University, Northridge](#)

Tags

3

<H1>

Link Tags

<P>

Universal Design PowerPoint Accessibility

<P>

Adobe: Create and PDF Accessibility

<P>

California State University, Northridge

New Tag...

5

Cut

Delete Tag

Delete Empty Tags

Reading Order (x)

Find Tag from Selection

Create Tag from Selection

Find...

Edit Class Map...

Edit Role Map...

Tag Annotations

✓ Document is Tagged PDF

✓ Apply Role Mapping to Tags

✓ Highlight Content

Properties...

Hold CTRL key
then select all
<P> tags

4

Object Properties

6

Content

Tag

Color

Type: Paragraph

Heading Level 5

Title: Heading Level 6

Index

Label

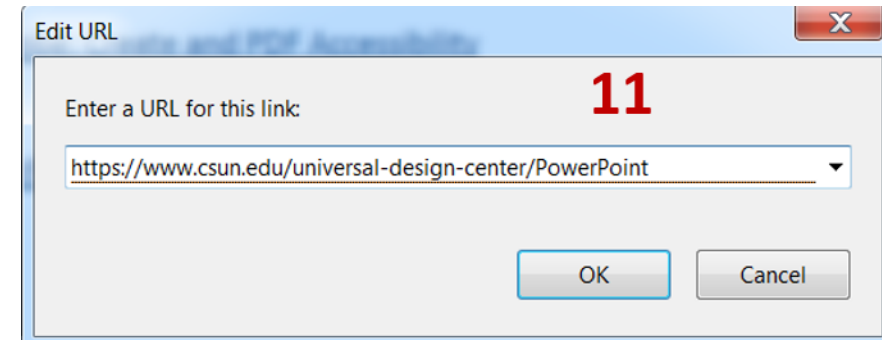
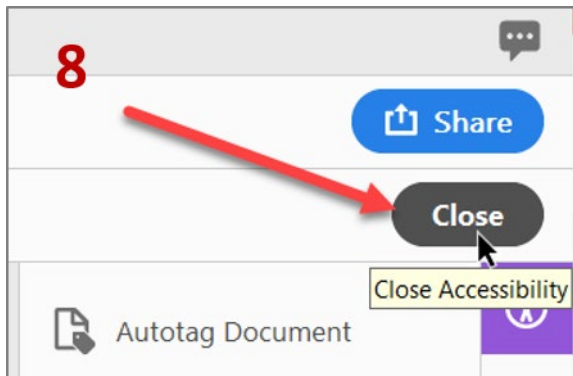
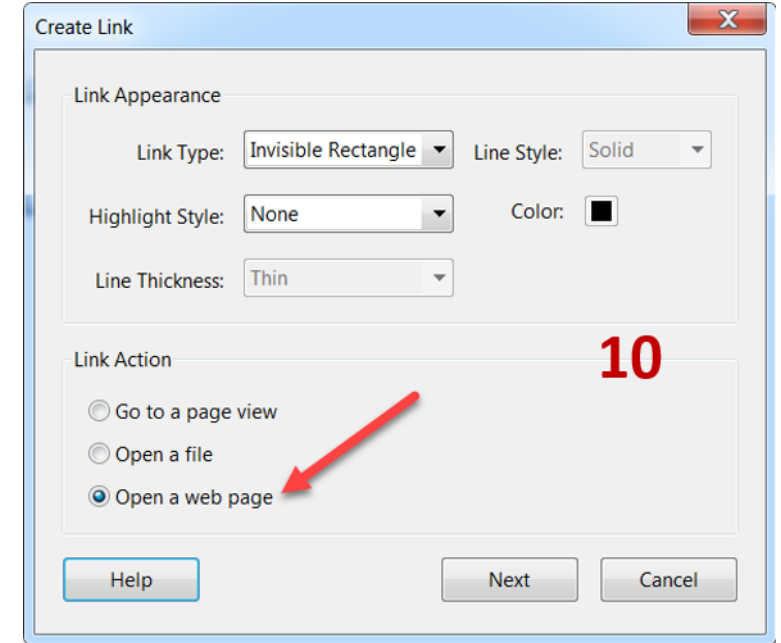
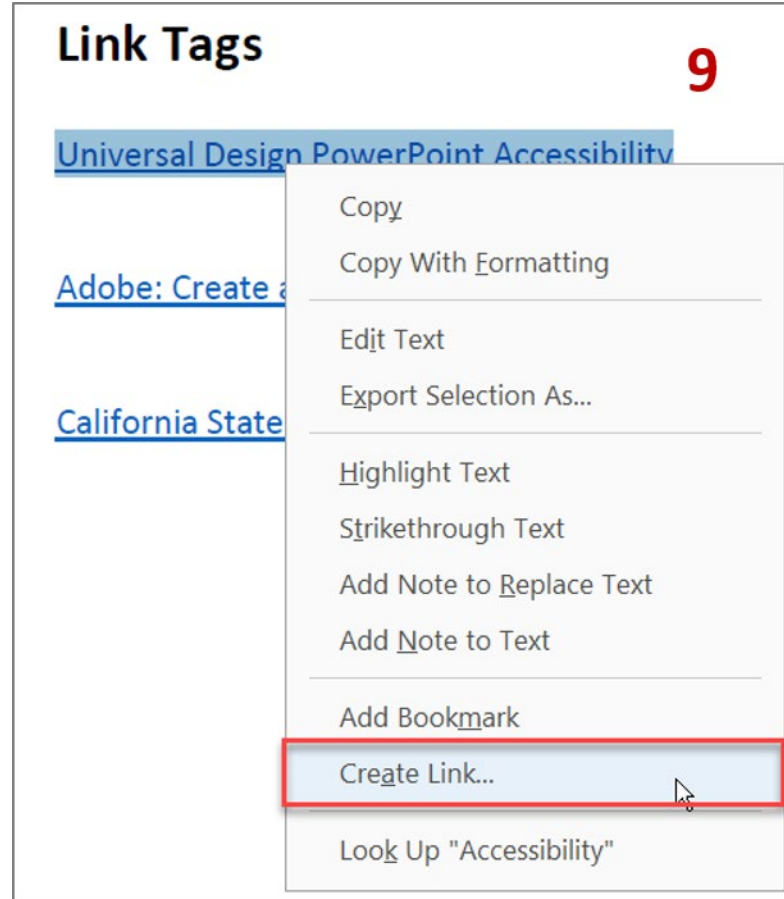
Actual Text:

Link

List

List Item

Create Link, 2 of 3

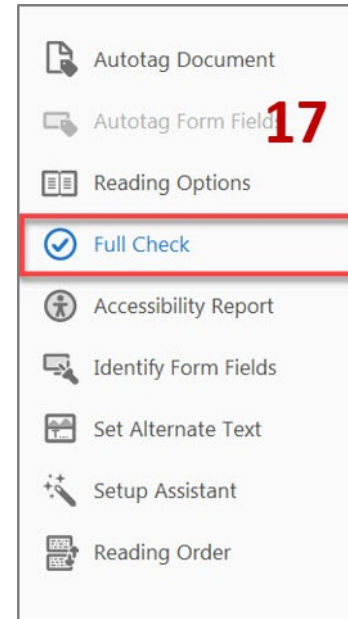
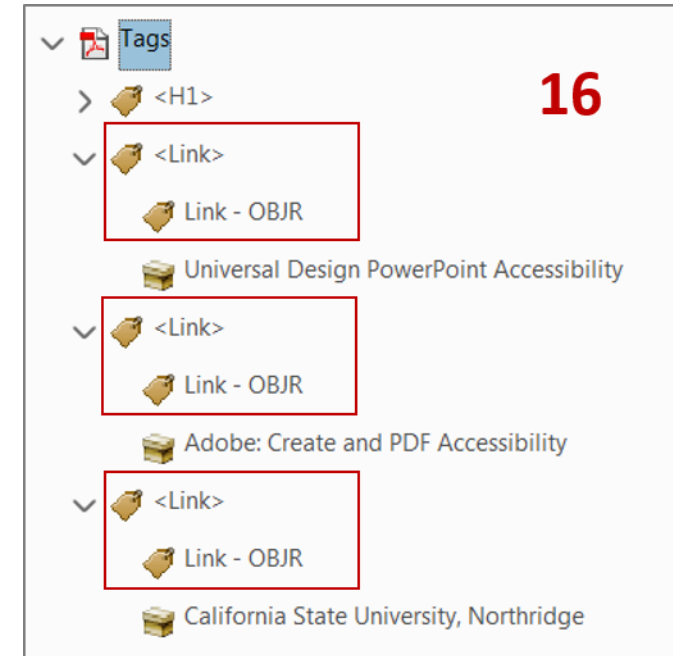
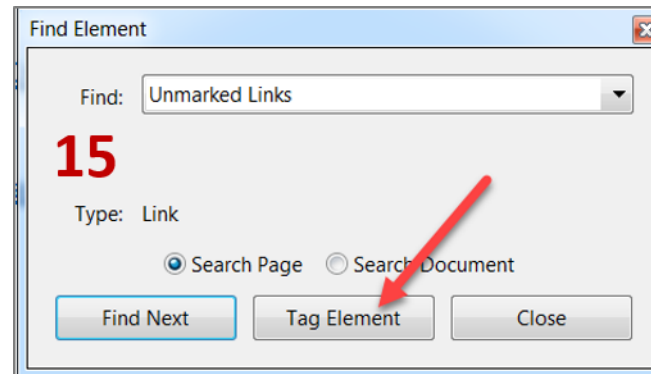
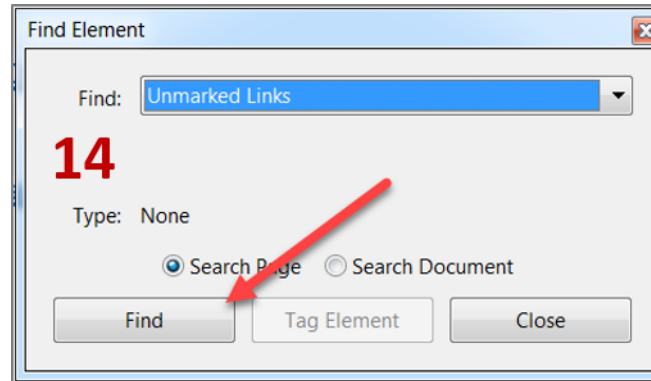
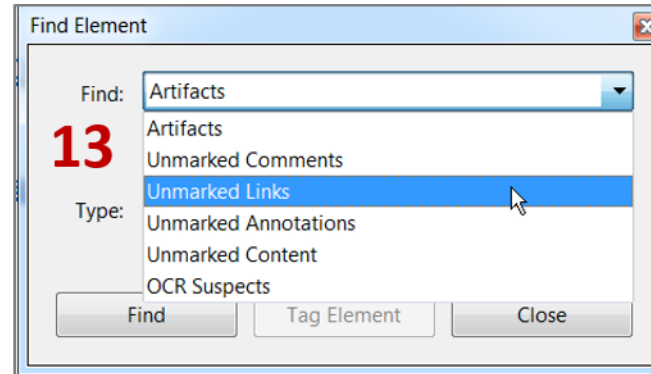
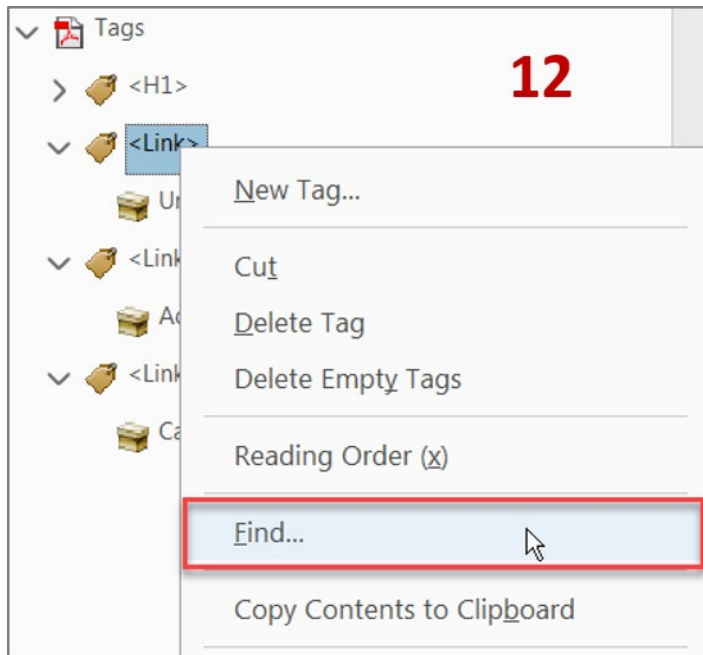


Highlight "Universal Design PowerPoint Accessibility" then right click to select **Create Link**

Create Link, 3 of 3



“**OBJR**” tag must be present
so link is defined correctly



Tables

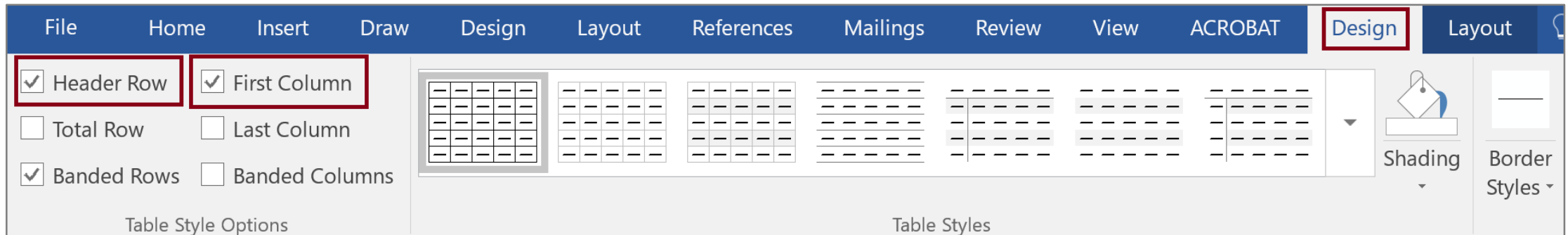
Disability	People in U.S.
Visual	1.8 Million
Hearing	1.0 Million
Cognitive Mental	4.3 Million
Ambulatory	11.8 Million

- Table Tags
- Table Editor
- Table Summary



Table Header Cells - Office

1. Table Tools added to the Ribbon when Table is created or selected
2. Header Checkboxes found under Design Tab
 - Word
 - Header Row (Column Headers)
 - First Column (Row Headers)



Fruit	2018	2017	2016
Orange	\$1,900	\$2,400	\$1,500
Strawberry	\$800	\$600	\$1,000
Avocado	\$2,000	\$1,500	\$3,000

Header Row (First row header)

Fruit	2018	2017	2016
Orange	\$1,900	\$2,400	\$1,500
Strawberry	\$800	\$600	\$1,000
Avocado	\$2,000	\$1,500	\$3,000

Header Row and First Column

Table Header Row - Office

If 'Repeat as header row at the top of each page' isn't selected, table headers will be ignored when exporting as a PDF and won't be read by screen reader.

- Right-click the **first row** of the table and select **Table Properties**.
- On the **Row** tab, make sure the checked **Repeat as header row at the top of each page** and unchecked **Allow row to break across pages**. Click **OK**.
- Repeat these steps for all tables in the document. Save the document.

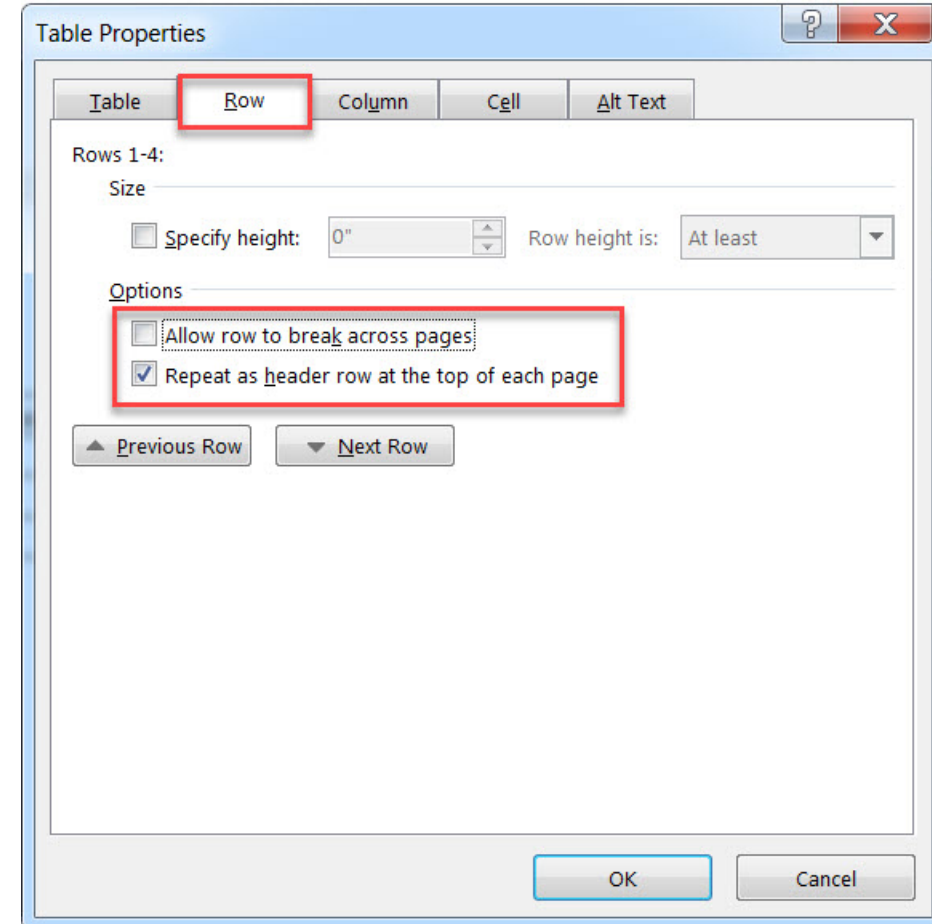
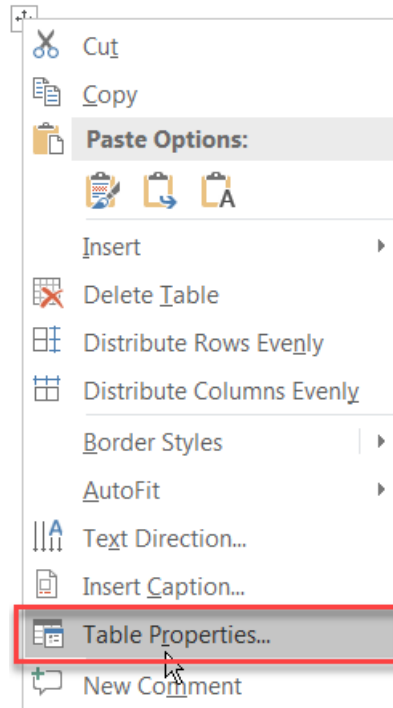


Table Editor, 1 of 2

1. Set up Table Editor

- Access via Tag Tree or Reading Order tool
- Set display color options

2. Enhancements

- Click anywhere
- Select cell

me	Title	Roles & Responsibilities
ate Sharron	Program Manager	Jane of all trades
en Davoudian	Senior Information System Analyst	Web Accessibility
ystal Monroy	Project Analyst	Procurement Accessibility
n Nguyen	Instructional Media Accessibility	Document Accessibility
erardo Rodriguez	Technical Consultant	Web Accessibility

The screenshot shows a dialog box titled "Table Editor Options" with a close button (X) in the top right corner. The dialog is divided into two main sections: "Color Options" and "Label Option".

Color Options:

- Border color: A red color swatch.
- Header cell color: A blue color swatch.
- Data cell color: A green color swatch.
- Selection color: A light blue color swatch.
- ☒ Show cells that span multiple rows or columns: A blue color swatch.
- ☒ Show cells with missing header: A yellow color swatch.

Label Option:

- ☒ Show cell type (TH or TD): A checkbox.

At the bottom right of the dialog are two buttons: "OK" and "Cancel".

Table Editor, 2 of 2

- Access from Tag Panel Option Menu
- Right-click <Table> to select **Table Editor (q)**
- Set up Options
 - Check all check boxes
 - Select display colors

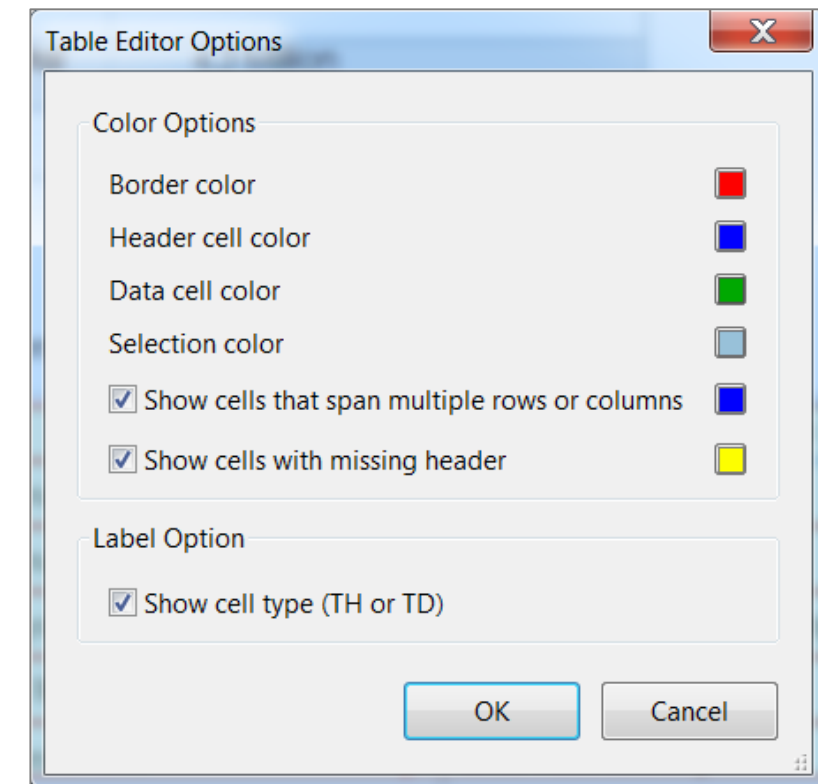
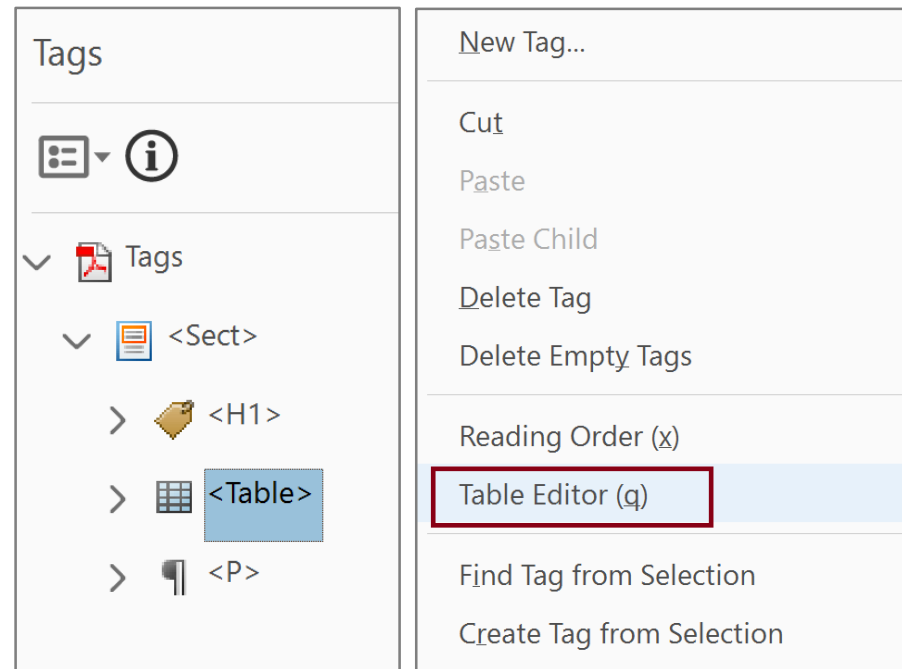
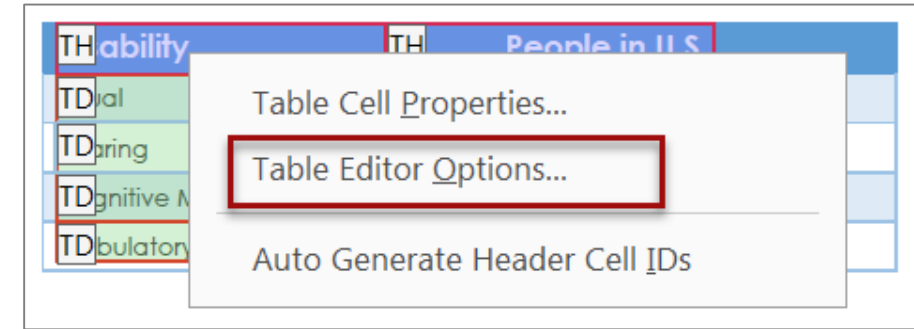


Table Tags

Tables need a <Table>, <TR>, <TH> and <TD> tags in this order

<Table>

<TR>: Table Row

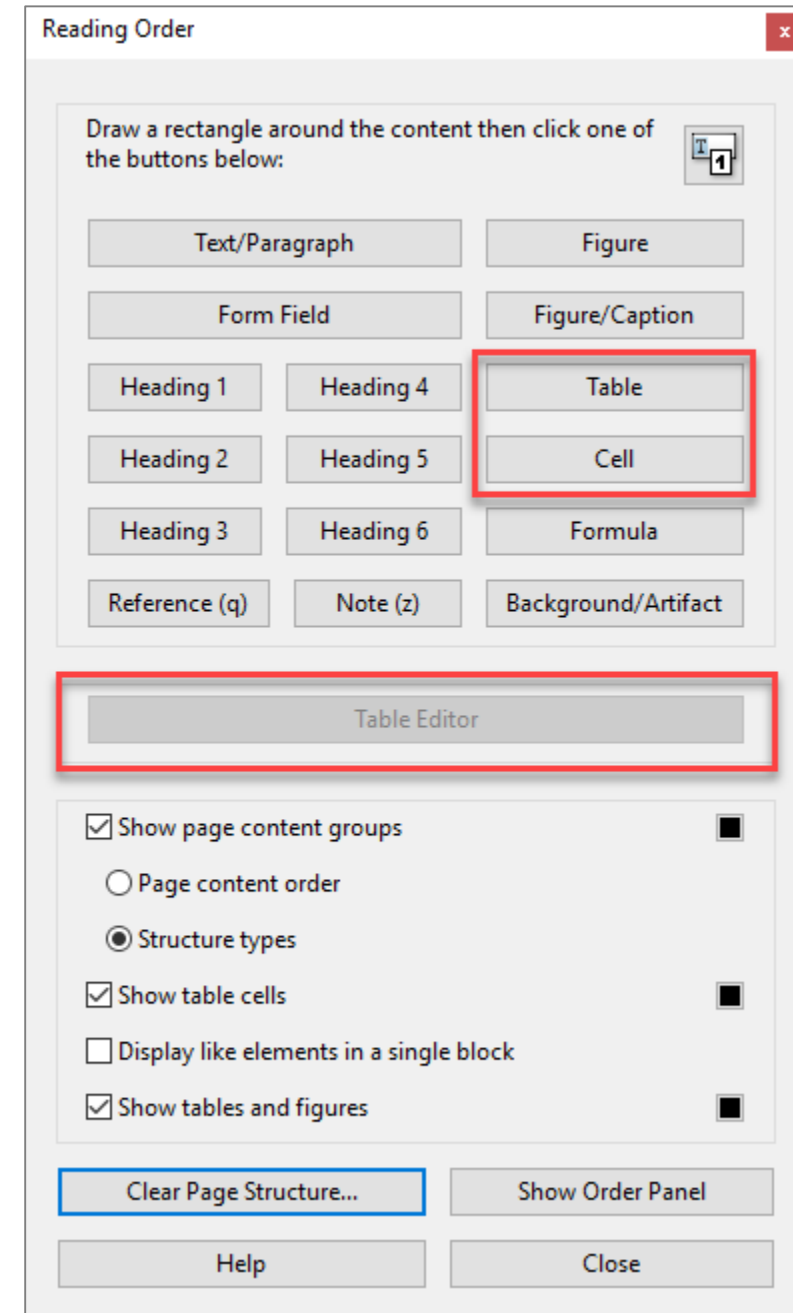
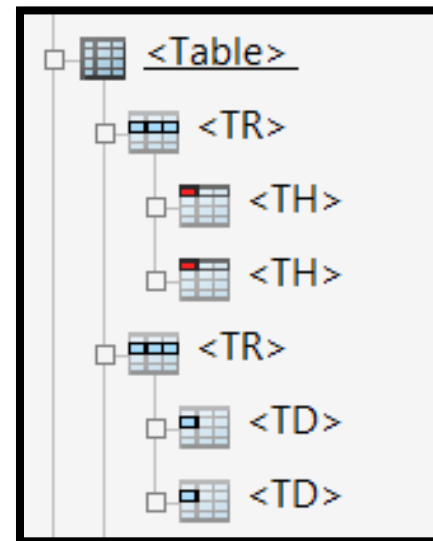
<TH>: Table Header

<TR>: Table Row

<TD>: Table Data

Column and Row Headers need to be tagged with the <TH> and data cells with the <TD> tag.

**** Use **CELL** to tag individually if Table creates the tags incorrectly.**



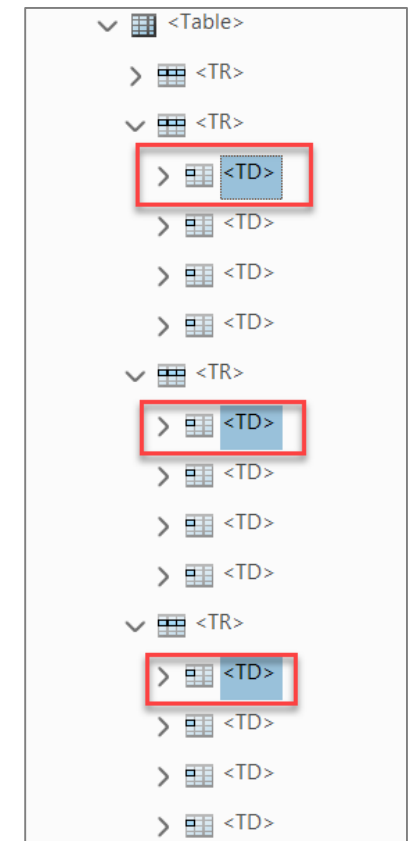
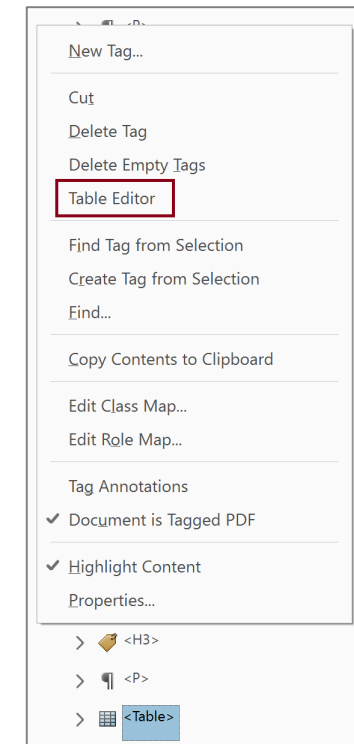
Fixing Tags – Basic Table, 1 of 2

Column and Row Headers need to be tagged with the <TH> and data cells with the <TD> tag

- Open Table Editor (context menu in Tag Tree or Reading Order tool)
- Notice row headers (Orange, Strawberry, Avocado) should be <TH> not <TD>)
- Select 1 or multiple <TD> tags change to <TH> tags

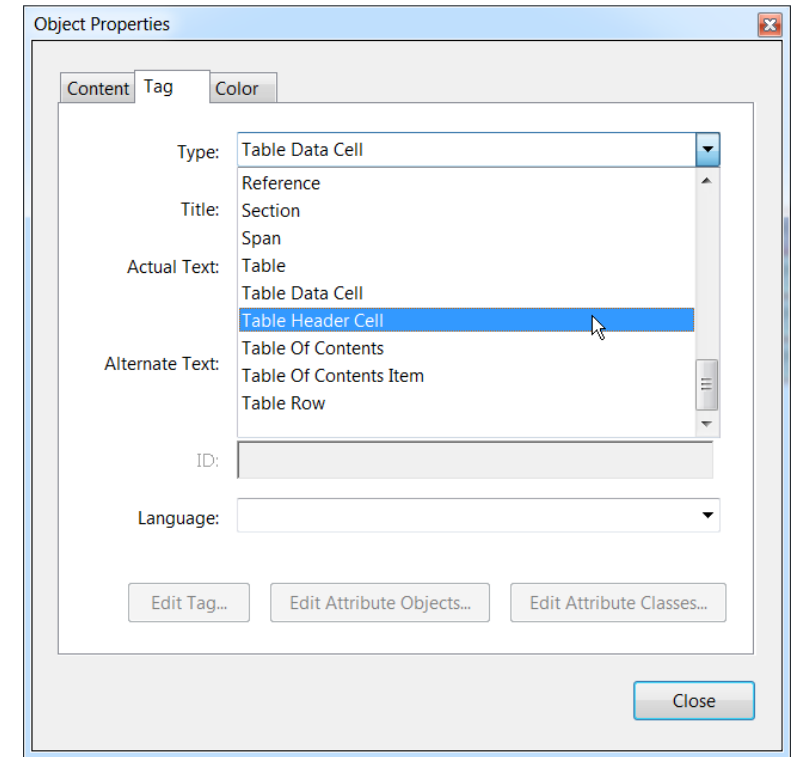
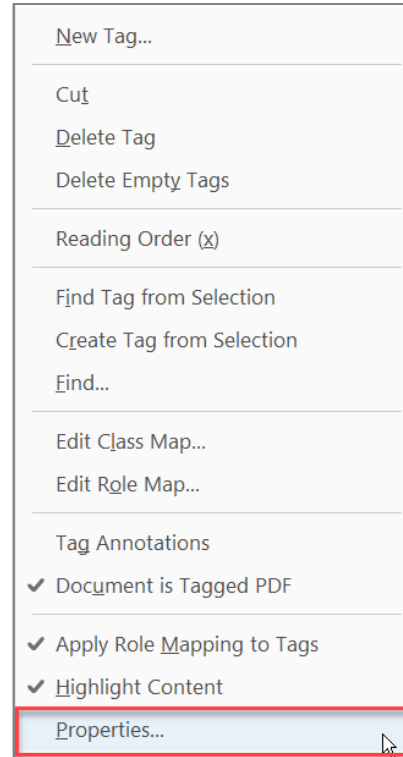
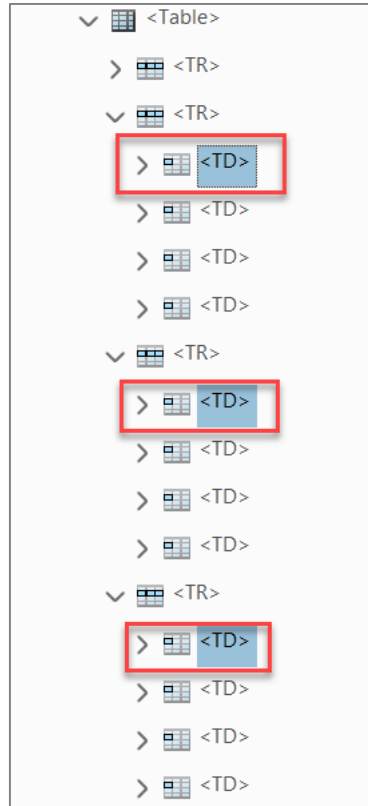
Fruit	2018	2017	2016
Orange	\$1,900	\$2,400	\$1,500
Strawberry	\$800	\$600	\$1,000
Avocado	\$2,000	\$1,500	\$3,000

TH Fruit	TH 2018	TH 2017	TH 2016
TD Orange	TD \$1,900	TD \$2,400	TD \$1,500
TD Strawberry	TD \$800	TD \$600	TD \$1,000
TD Avocado	TD \$2,000	TD \$1,500	TD \$3,000



Fixing Tags – Basic Table, 2 of 2

- Hold **Ctrl** and select multiple **<TD>** tags
- Right-click to select **Properties**
- Change Table Data Cell to **Table Header Cell**



TH Fruit	TH 2018	TH 2017	TH 2016
TD Orange	TD \$1,900	TD \$2,400	TD \$1,500
TD Strawberry	TD \$800	TD \$600	TD \$1,000
TD Pocado	TD \$2,000	TD \$1,500	TD \$3,000

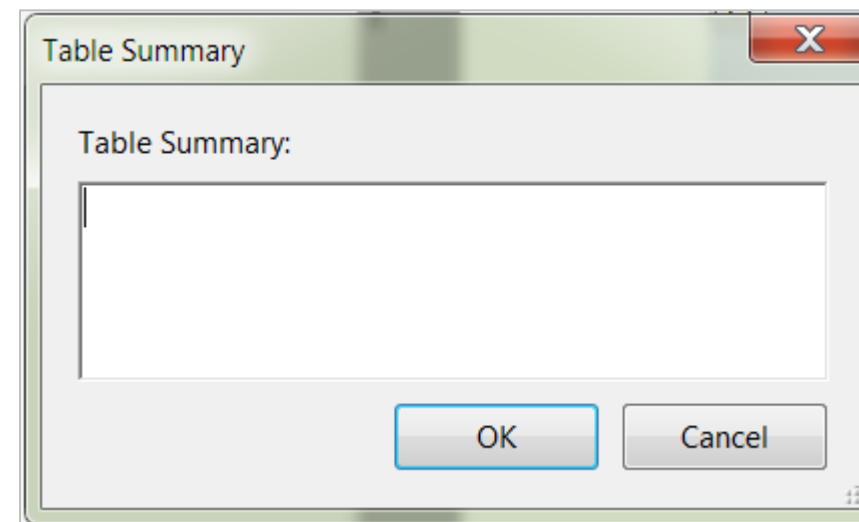
TH Fruit	TH 2018	TH 2017	TH 2016
TH Orange	TD \$1,900	TD \$2,400	TD \$1,500
TH Strawberry	TD \$800	TD \$600	TD \$1,000
TH Pocado	TD \$2,000	TD \$1,500	TD \$3,000

Table Summary

- **What is a table summary?**

A table summary is really similar to alternative text for images. It's a description of what your table represents.

- **Do I need a table summary?**




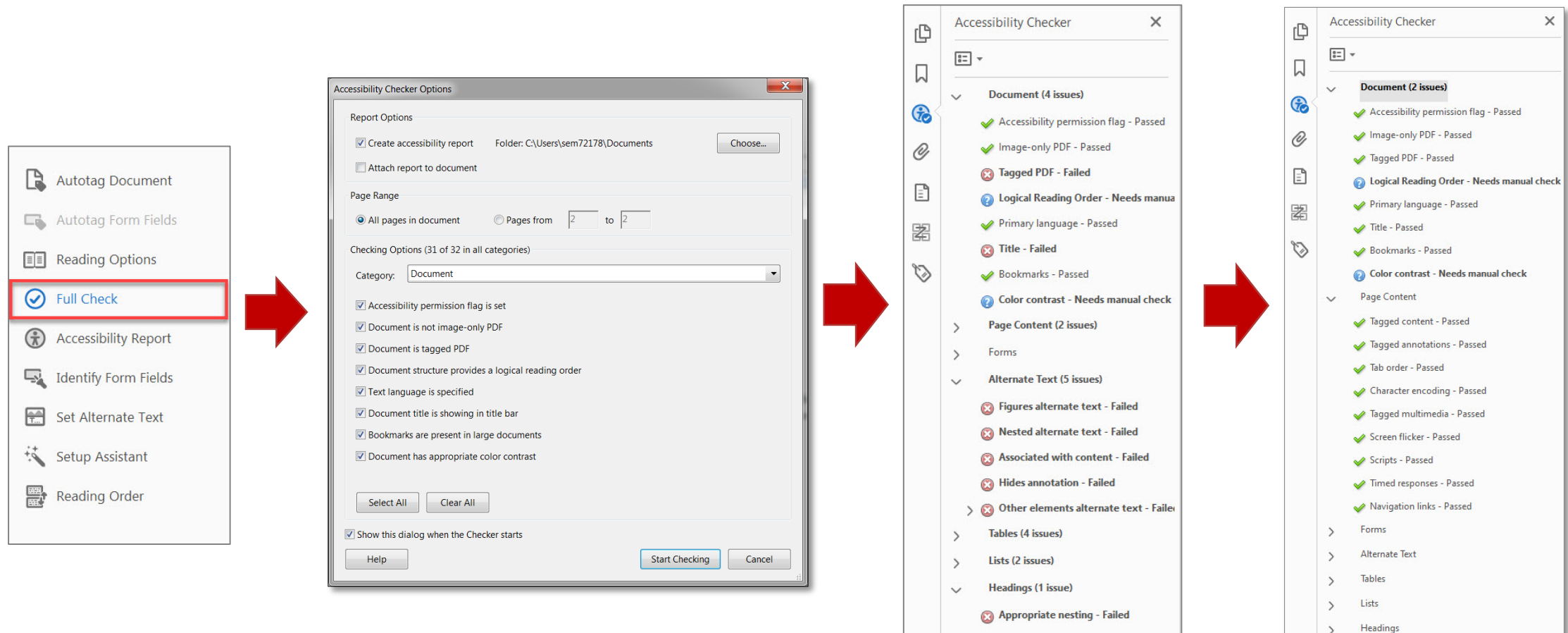
Tables Issues / Accessibility

- Table issues are unpredictable
- Problems with tables converted from Word or other programs
- May need to fix tables in Tags Panel
- To ensure accessibility, format tables with headers and **avoid** merged, split, or blank cells
- The more complex a table (merging cells, nesting multiple headings under one, adding blank lines, etc.) the **worse** it will be for accessibility
- Sample of [Simple Tables vs. Complex Tables](#) by Penn State



Check Accessibility Again...

- Go through each section that has one or more issues/failed to fix it until all sections passed.
- Two question marks  will always stay in **Document (2 issues)** section even if you right-click and select **Pass**. It just there as a reminder to conduct manual check.

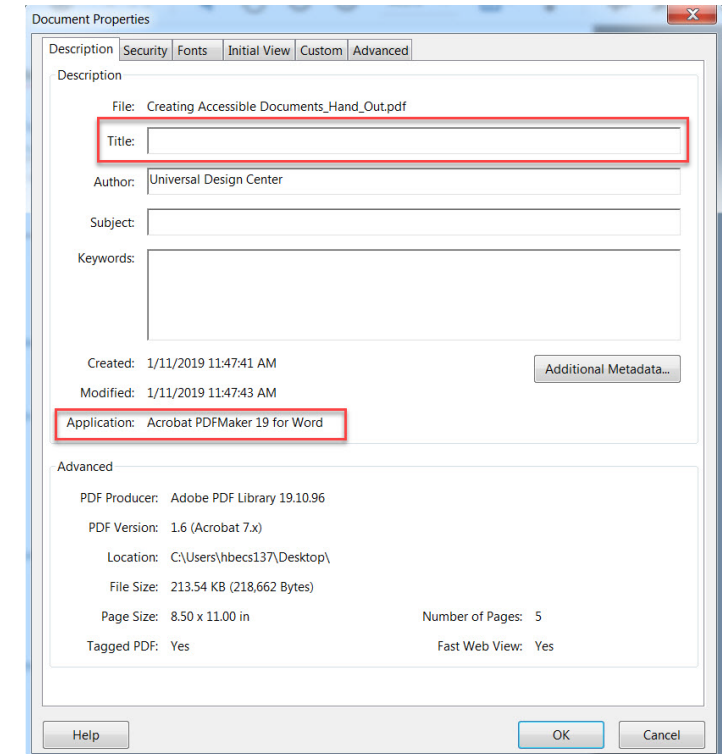
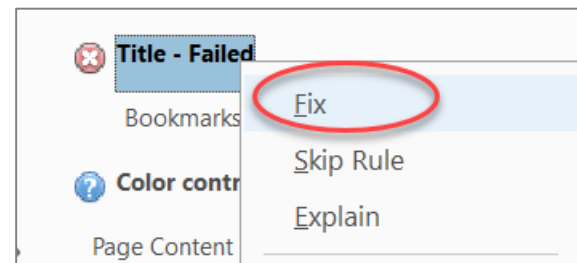
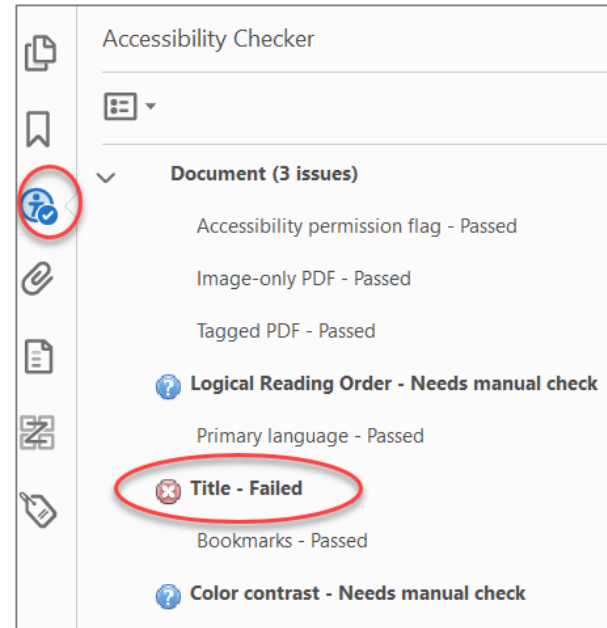


Common Issues – Title shown as a failure

Acrobat did not recognize the Title from Word Document, simply right-click Title item and select “Fix”.

The document description gives the document a proper title and language to be recognized by assistive technology.

- **Select File menu > Properties**
- **Description** tab, enter **Title** box is document title or main content heading/title (deselect **Leave As Is**, if necessary).
- **Application** box showing the source document created from Word to PDF.



What are PDF Title and Language?

Title

- A PDF title is a more descriptive and meaningful version of the file name. PDF titles are often visible in the PDF window or tab. This visibility makes it easier to distinguish multiple PDFs before diving in.
- When multiple PDFs are open, well defined PDF titles allow for easier distinction between them. This distinction is particularly useful when relying on screen readers.



Language

Screen readers can "speak" various languages—as long the content language is identified. If the screen reader does not support or cannot speak the defined language, the user might be informed of the content language, even if that content cannot be properly read.


[WebAIM: Document and Content Language](#)

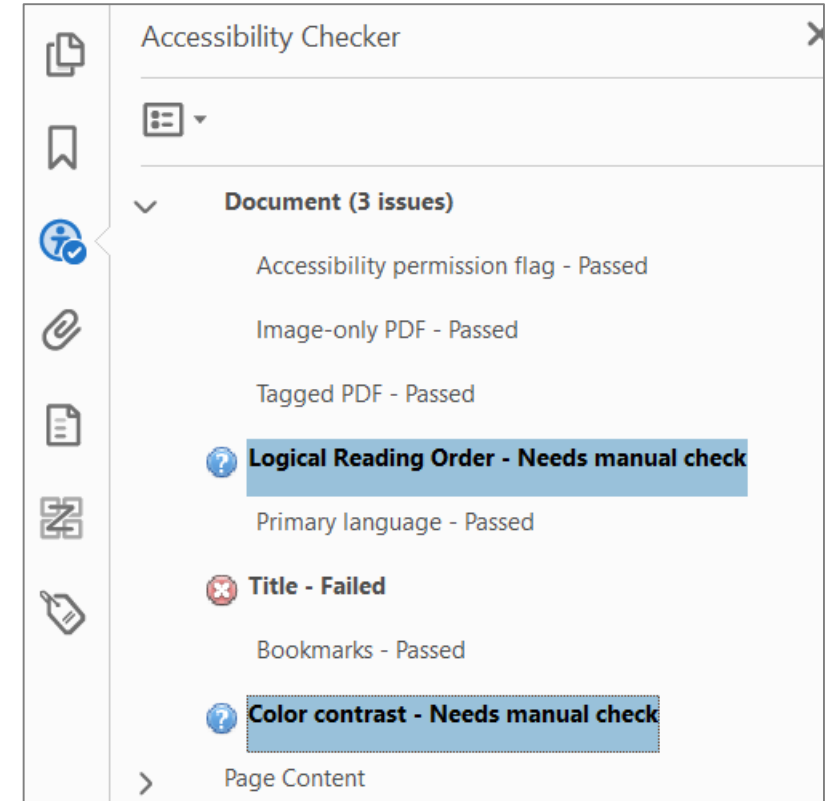


Accessibility Checker – Manual evaluation

The accessibility checker will always flag two items that require manual evaluation:

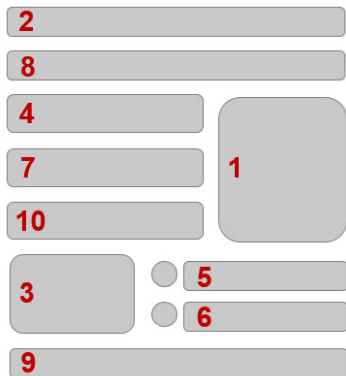
- Logical Reading Order
- Color Contrast

Two question marks  will always stay in **Document (2 issues)** section even if you right-click and select **Pass**. It just there as a reminder to conduct manual check.



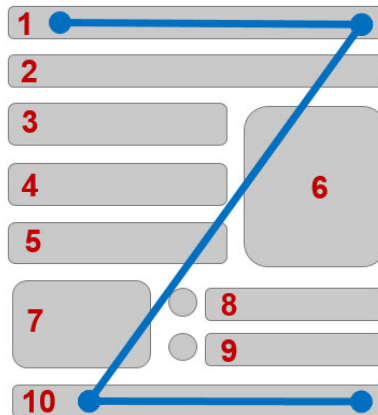
Verify Logical Reading Order

Ensure the **TAGS Tree** are in the **correct logical order** to match the document pane. Manual rearrange tags as needed in the **TAGS pane**. After making these adjustments, start from the top of the tags tree and move through the tags pane sequentially using the down arrow key. A logical reading order start from left to right, top to bottom as illustrated. The Document Pane example is a two-columns layout hence the logical reading order starts with the first column then second column.



Left: Incorrect reading order

Bottom: Correct reading order



Tags Tree

- <Document>
 - <Art>
 - <Sect>
 - <H1> Universal Design Center
 - <P> This site is a project of the Accessible Technology Initiative (ATI) of the California State University system. "It is the policy of the CSU to make information technology resources and services accessible to all CSU students, faculty, staff and the general public regardless of disability."
 - <P> All CSU programs, services, and activities should be accessible to all students, staff, faculty, and the general public. This encompasses all technology products used to deliver academic programs and services, student services, information technology services, and auxiliary programs and services.
 - <Figure> CSUN | Universal Design Center
 - <H2> UDC Mission
 - <P> Accessibility Statement

Universal Design Center

This site is a project of the Accessible Technology Initiative (ATI) of the California State University system. "It is the policy of the CSU to make information technology resources and services accessible to all CSU students, faculty, staff and the general public regardless of disability."

All CSU programs, services, and activities should be accessible to all students, staff, faculty, and the general public. This encompasses all technology products used to deliver academic programs and services, student services, information technology services, and auxiliary programs and services.

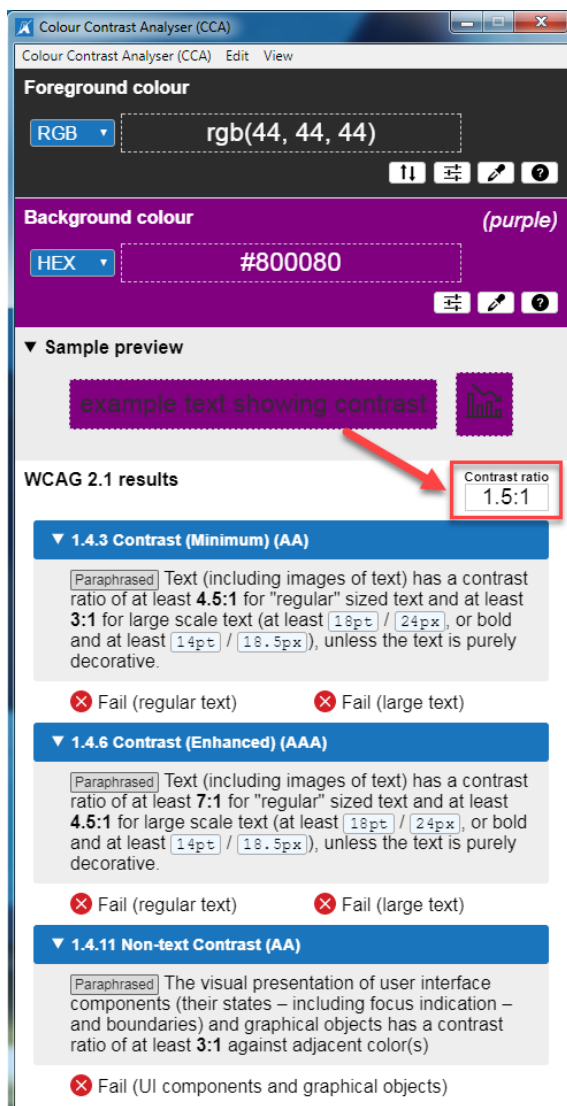
UDC Mission

The UDC supports the campus community in their efforts to make it possible for individuals to learn, communicate, and share via information and communication technology. One way we do this is by assisting the campus community to ensure their information and communication technology is interoperable, usable and accessible, so that individual learning and processing styles and/or physical characteristics are not barriers to access.

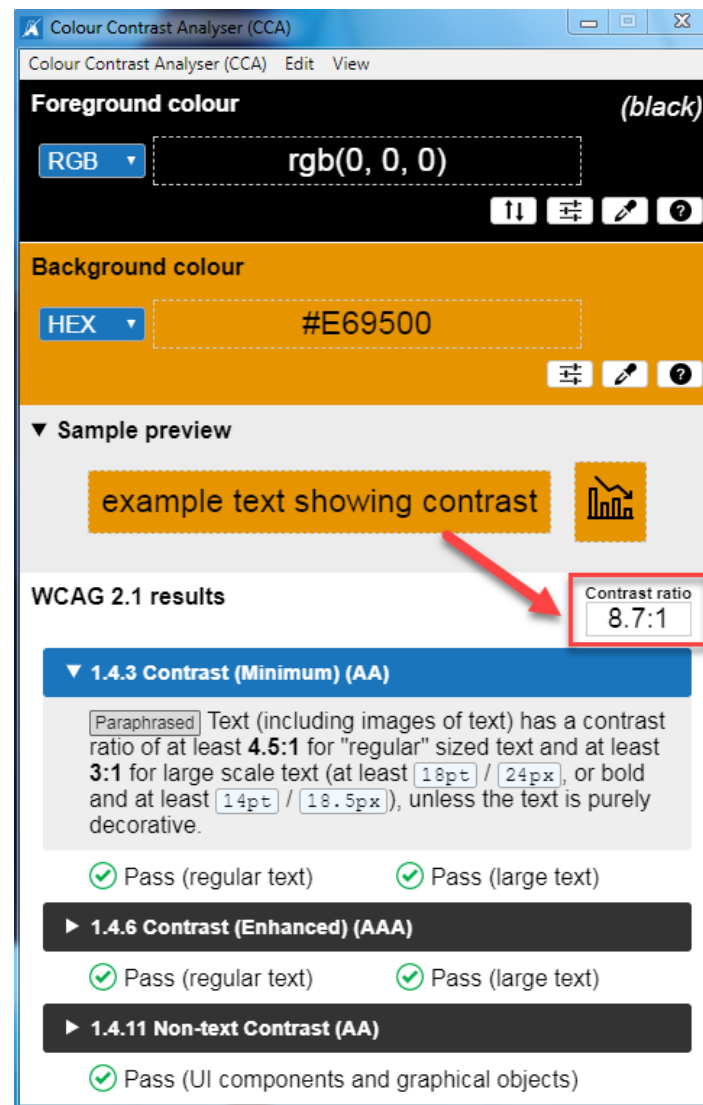
Campus Responsibility

Everyone has a part in creating accessible and usable information. The responsibility of creating and maintaining accessible content falls to the entire campus community.

Document Pane



People who have low vision or colorblind could encounter some difficulty distinguishing text color from a background color if the contrast is insufficient contrast ratio 1.5:1.



This example has a great color contrast ratio of 8.7:1. The contrast is sufficient for those who have color deficiencies

Verify Color Contrast

Bad Examples	Good Examples
Red on black is bad	Yellow on black is good
Blue on orange is bad	Black on orange is ok
Red on green is bad	White on green is good
Grey on purple is bad	Aqua on purple is ok

- Download [Colour Contrast Analyser](#) onto your computer (PC/Mac) to ensure accessible contrast or use an online contrast checker from [WebAIM](#).
- WCAG Level AA requires a contrast ratio of at least **4.5:1** for regular sized text (12 or 14 pt. font) and **3:1** for large text (18 pt. font).
- [Coblis Color Blindness Simulator](#)

Accessibility Tips

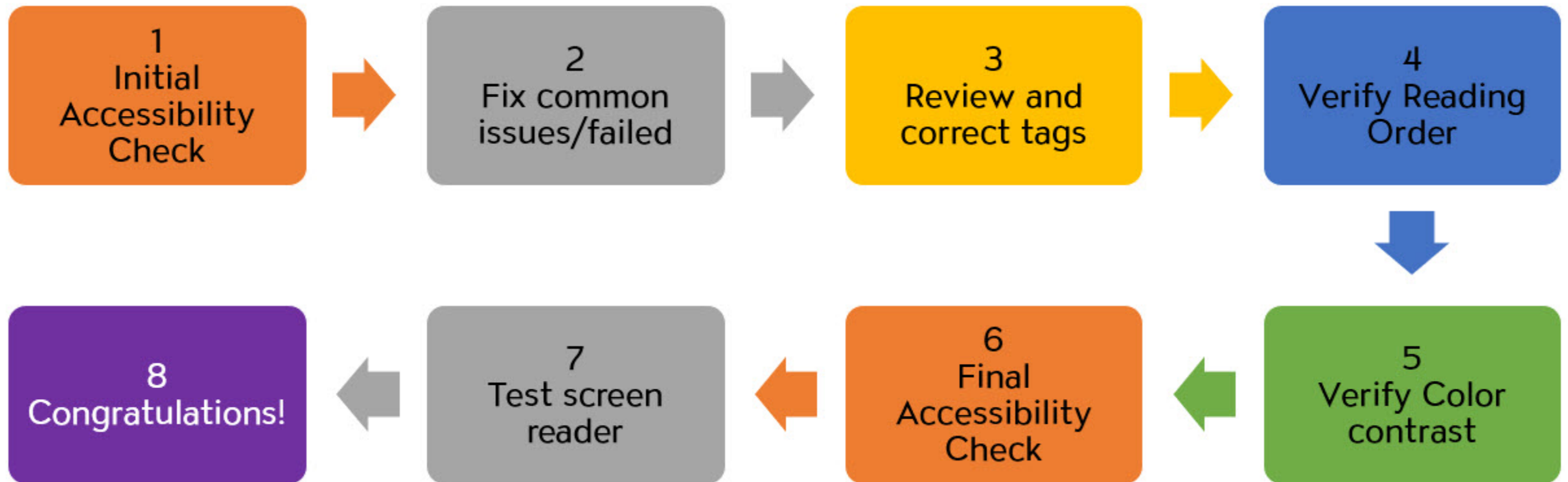


Accessibility Tips

- Always save your PDF as you add accessibility markup
- When modifying extensive content in reading order, drag content down not up
- Remove empty tags i.e. `<p>`
- Header, footer, and page numbers, decorative lines or shapes tag as “Background/artifact”



PDF Accessibility Iterative Process



How can we help you make a **difference**?



*Universal Design means design for **everyone***



Universal Design Center Offers

- Online, self-paced training
- In-person training each semester
- Consultations
- Tools and Services

