



# BRICKFIELD Education Labs

Document Accessibility

# What problems face our personas with Documents?



Ilya, senior staff member who is blind

Uses screen reader and mobile phone to access the web.



Preety, middle school student with attention deficit hyperactivity disorder and dyslexia.

Uses text-to-speech software

# What problems face Ilya with Documents?



Ilya, senior staff member who is blind

Uses screen reader and mobile phone to access the web.

- Documents not properly coded, so they are not readable.
- No alt text descriptions on images.
- Unstructured layout, it's difficult to navigate the content.
- Content only in images.
- Color used to convey meaning.

# What problems face Preety with Documents?



Preety, middle school student with attention deficit hyperactivity disorder and dyslexia.

Uses text-to-speech software

- Difficulty to focus on the sections and content to read.
- Difficulty to focus on content.
- Difficulties with spelling.
- Difficulties for understanding content.
- Overwhelmed with too much information

# Remember: Main items to work in accessibility (I)

- **Structure:** use headings and styles to structure your document.
- **Colour and contrast:** Consider the colours you use and the contrast between text and background.
- **Use of images (and Media):** Use alternative (alt) text on your images. Provide captions, subtitles and transcripts of multimedia elements.

# Remember: Main items to work in accessibility (II)

- **Links (hyperlinks):** Describe your link, never use click here.
- **Plain English:** use clear uncomplicated language with no jargon.
- **Table structure:** use simple tables without merged or split cells.

## The basic six things to consider when creating accessible information

### Structure (heading styles)



### Colour & contrast



### Use of images +Media



### Links (hyperlinks)



### Plain English



### Table structure



# S

# C

# U

# L

# P

# T

Use headings and styles to structure your document

Consider the colours you use and the contrast between text and background

Use alternative (alt) text on your images

Describe your link, never use click here

Use clear uncomplicated language with no jargon

Use simple tables without merged or split cells

[www.worcestershire.gov.uk/sculpt](http://www.worcestershire.gov.uk/sculpt)

## Zoom Question 1

What tools do you usually work with?

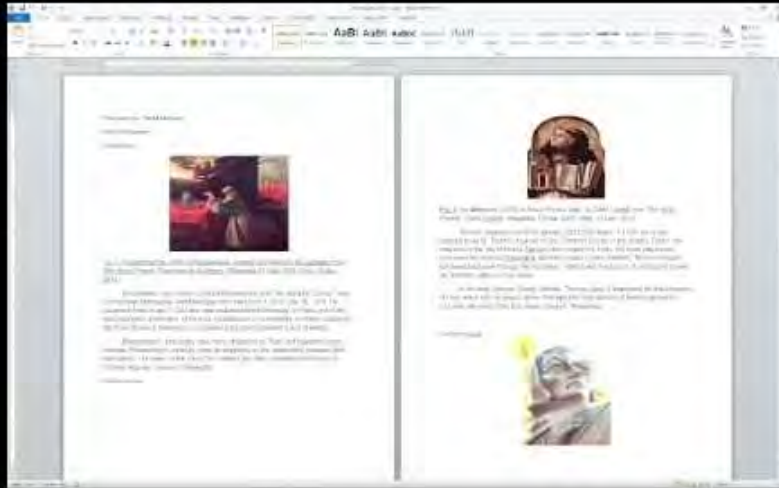


# What happens when a pdf document is not accessible?

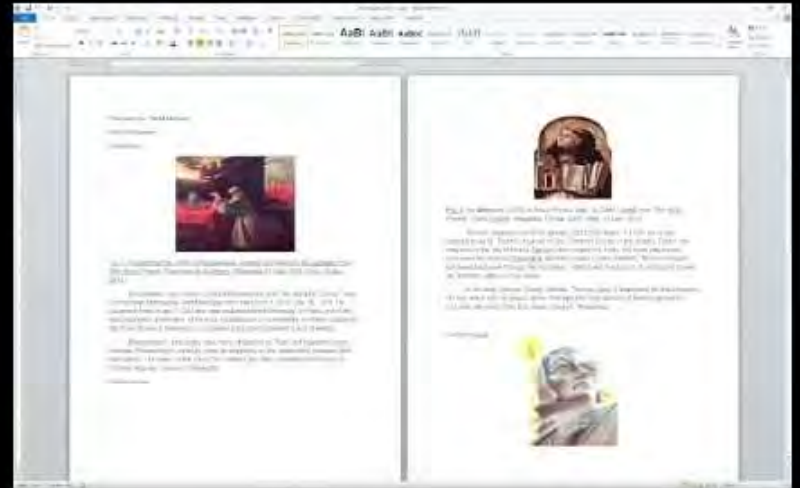


[Watch Video](#)

# Non accessible vs accessible Word document



Non accessible structure



Accessible structure

# General items to check

- Use descriptive title and file name
- Structure & headings
- Lists
- Descriptive and meaningful Links
- Alternative text for images
- Tables for Data only not layout
- Colour & contrast
- Plain language

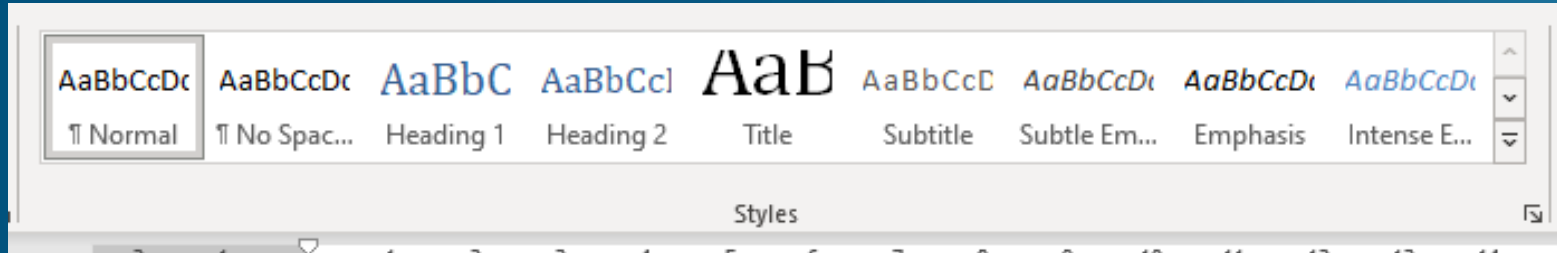
# Structure & Headings



# Benefits - Headings

- View Navigation to see headings / structure.
- Visually go through document quickly.
- Easier for screen readers to get around.
- Consistent Styles for each heading.
- Consistent layout.
- Table of contents.

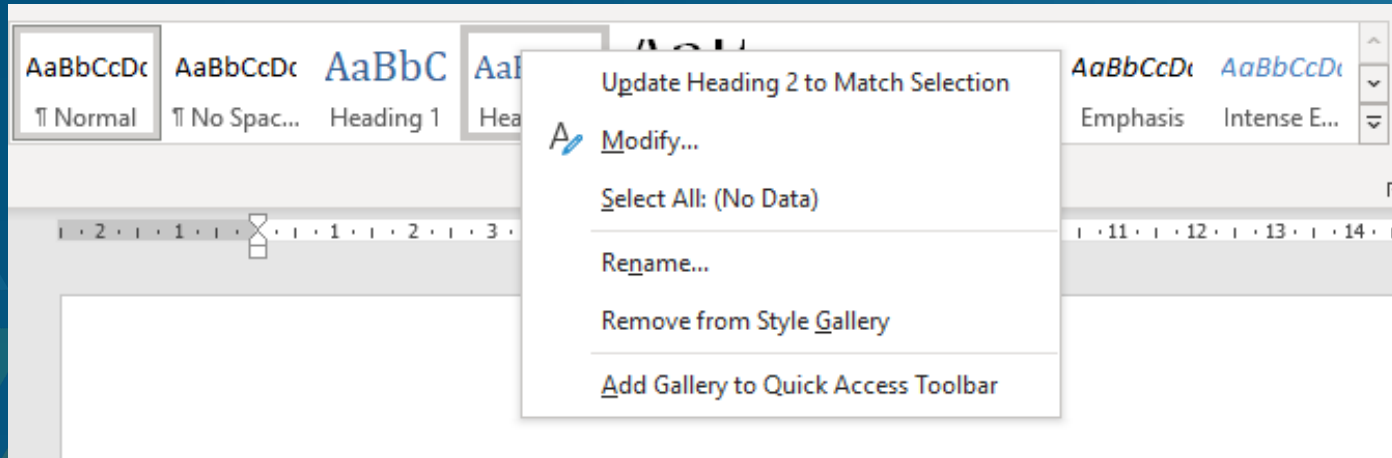
# Headings and Style Bar



Example

# Style your Headings

- Update a heading to current style



Example

# Over to you

- Open one of your Word documents.
- View navigation – have you got headings.
- Check the text that look like headings.
- Are they using heading style?
- Look at the Styles Bar for the headings.



# Office Documents

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M I C R O S O F T

# Accessibility inside Office



A STORY PROJECT PRODUCTION



### Vision

Need a larger screen? A brighter screen? A narrator to read text? Find out about accessibility tools and features for people who are blind, color blind, or have low vision.

[Learn about vision-related tools >](#)



### Hearing

For those who are hard of hearing, have hearing loss, or have deafness, our specialized features can provide solutions including closed captioning, mono sound, and live call transcription.

[Explore hearing-assistive tools >](#)



### Neurodiversity

Innovative tools such as dictation and Windows Hello sign-in can make the digital world more accessible for those who live with dyslexia, seizures, autism, or other cognitive differences.

[Discover tools for neurodiversity >](#)



### Learning

Our applications for people living with learning disabilities can help increase focus, concentration, and understanding—and include tools to improve reading and writing skills.

[Read about tools for learning >](#)



### Mobility

Our suite of products helps people living with arthritis, quadriplegia, spinal cord injuries, and other mobility issues to navigate the digital world in non-traditional ways.

[Find mobility-assistive technologies >](#)



### Mental health

Learn more about assistive technologies for people living with issues such as bipolar disorder, anxiety, PTSD, depression, or ADHD. Our products can help with distraction, reading, and concentration.

[View mental health assistive tools >](#)

# Get started with accessibility features in Office

For general Office help, see the [Office help home page](#).



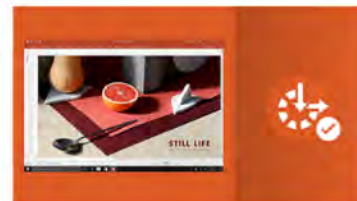
**Vision:** Use a screen reader and keyboard shortcuts with Office.

[Get accessibility help](#)



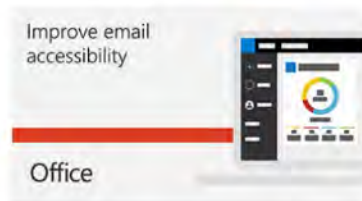
**Focus:** Learning Tools can improve comprehension.

[Learning Tools](#)



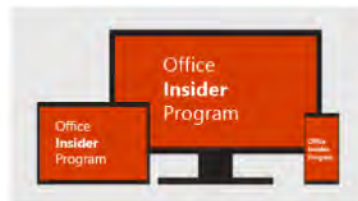
**Accessible content:** Unlock your content for everyone.

[Make your content accessible to everyone with the Accessibility Checker](#)



**Training:** Create accessible documents and use Office.

[Get training](#)



**Be the first:** Office Insiders get accessibility improvements first.

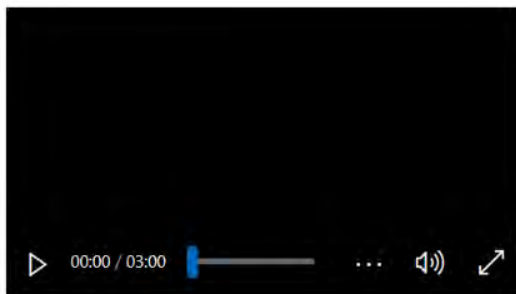
[Be an Office Insider](#)



**Templates:** Get templates designed for accessibility.

[See templates](#)

# Accessibility video training



Learn about key improvements in Office that make it more accessible for all.

## Making your content accessible



Create more accessible email messages in Outlook

3 Lessons



Create more accessible documents in Word

7 Lessons



Create more accessible workbooks in Excel

3 Lessons



Create more accessible slides in PowerPoint

5 Lessons

Documents

15 Accessibility inside Office

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19 Toolkit Demo

20 Contact Details

# Accessibility inside Office



# Accessibility inside Office

Microsoft

Future Ready Learning

### Accessibility

Inspection Results

- Picture 2 (Slide 12)
- Picture 1 (Slide 17)
- Google Shape;230;p34 (...)
- Google Shape;233;p34 (...)

Missing slide title

- Slide 1
- Slide 3
- Slide 15
- Slide 16
- Slide 17
- Slide 18
- Slide 20

Warnings

- Check reading order
  - Slide 1
  - Slide 4
  - Slide 11

Keep accessibility checker running while I work

Additional Information

[Read more about making documents accessible](#)

Click to add notes

Delete
 Previous
 Next
 Show Comments
 Compare
 Accept
 Reject
 Previous
 New
 End Review
 Hide Ink

Comments      Compare      Ink

# Get started with accessibility features in office

## Get started with accessibility features in Office

For general Office help, see the [Office help home page](#).



**Vision:** Use a screen reader and keyboard shortcuts with Office.

[Get accessibility help](#)



**Focus:** Learning Tools can improve comprehension.

[Learning Tools](#)



**Accessible content:** Unlock your content for everyone.

[Make your content accessible to everyone with the Accessibility Checker](#)



**Training:** Create accessible documents and use Office.



**Be the first:** Office Insiders get accessibility improvements first.



**Templates:** Get templates designed for accessibility.

### Accessibility

**Inspection Results**

- Picture 2 (Slide 15)
- Picture 1 (Slide 17)
- Picture 2 (Slide 19)
- Google Shape;230;p34 (...)
- Google Shape;233;p34 (...)

**Missing slide title**

- Slide 1
- Slide 15
- Slide 16
- Slide 17
- Slide 18
- Slide 19
- Slide 21

**Warnings**

- Check reading order**
  - Slide 1
  - Slide 4

**Keep accessibility checker running while I work**

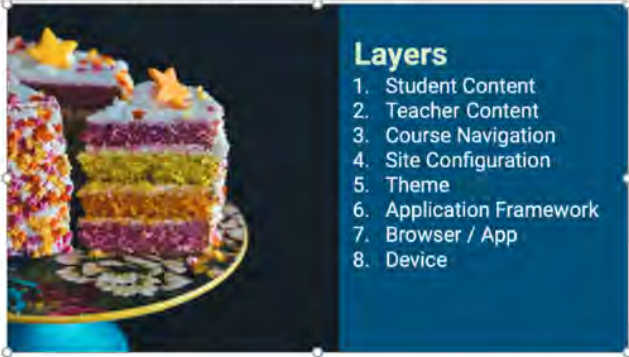
**Additional Information**

**Why Fix?**

Slide titles are used for navigation and selection by those who are not able to view the slide.

**Steps To Fix:**

Choose the Add Slide Title command from the dropdown in Accessibility Checker and type a unique description for the slide.



Complementing the slide above, which showed the various technology layers around accessibility of a course within a learning management system, Mark added "I think that's a really effective image and I think there's a mistaken perception out there that good accessibility means poor design. If I am going to have a really accessible course, it is going to be ugly. People don't realise that having a good-looking course and accessibility are not mutually exclusive things. There's also a cost, and maybe - not so much when using Moodle - but looking to develop content. They have an expected experience if they want to get elearners content accessible, is it going to cost a lot more, which is not really the case. If your accessibility agenda is there from the get-go, kind of like building a house, you build accessibility. It doesn't cost that much more compared to if you have to retrofit the house!"

### Gavin Henrick

I think actually the key for me, is future proofing stuff as we go forward, and ensuring mistakes aren't being made as easily - is going to be where we really want to be. You may not be able to fix all of the past, however as you go forward, you don't want to make that hole bigger and the challenge bigger by actively excluding more and more

### Accessibility

#### Inspection Results

##### Errors

- Missing alternative text  
image1.png

Keep accessibility checker running while I work

#### Additional Information

##### Why Fix?

Alternative text for images and other objects is very important for people who can't see the screen. Screen readers read alternative text aloud, so it's the only information many have about the image. Good alternative text helps them understand the image.

##### Steps To Fix:

1. Right-click the object, then select Edit Alt Text.
2. If the object is meaningful, type a description of it in the text box on the Alt Text pane; otherwise, if the object is purely decorative, select the Decorative check box.

[Read more about making documents accessible](#)

### Alt Text

How would you describe this object and its context to someone who is blind?

(1-2 sentences recommended)

A layer cake of accessibility layers

Generate a description for me

Mark as decorative

Powered by Office Services



speaks to broad or is ones that we see more in the  
private sector than in the public sector



Complementing the slide above, which showed the  
variety of technology layers around accessibility  
of a course within a learning management system,  
Mark added "I think that's a really effective image  
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mutually exclusive things. There's also a cost and  
maybe not so much when using Moodle - but  
looking to develop content. They have an expected  
experience if they want to get clean content

File Home Insert Design Layout References Mailings Review View Help Acrobat Accessibility Immer



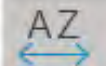
Column Width



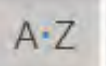
Page Color



Line Focus



Text Spacing



Syllables



Read Aloud

Immersive Reader



Close Immersive Reader

Close

speaks to broad er is  
private sector than



← → ↕ ↑ This PC > OSDisk (C:) Search New folder

Organise New folder

OneDrive

This PC

3D Objects

Desktop

Documents

Downloads

Music

Pictures

Videos

OSDisk (C:)

Recovery (D:)

File name: GAAD Webinar Panel D

Save as type: PDF (\*.pdf)

Authors: Gavin Henrick

Optimize for:  Standard (publish  
online and print)

Minimum size  
(publishing online)

Options

Page range

All

Current page

Selection

Page(s) From: 1 To: 1

Publish what

Document

Document showing markup

Include non-printing information

Create bookmarks using:

- Headings
- Word bookmarks

Document properties

Document structure tags for accessibility

PDF options

PDF/A compliant

Optimize for image quality

Bitmap text when fonts may not be embedded

Encrypt the document with a password

OK Cancel

Date modified

Type

Your search.

Title: Add a title

Hide Folders

Tools

Save

Cancel

Open up a recent Word document or  
Powerpoint on your machine

Run the accessibility checker

# G Suite Documents

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# Accessibility for Docs editors

The Google Docs editors are designed to work with screen readers, braille devices, screen magnification, and more.

[Computer](#)[Android](#)[iPhone & iPad](#)

## Use a screen reader

If you already use screen reader software on your computer, such as ChromeVox, NVDA, JAWS, or VoiceOver, follow these steps to get started with the Docs editors.

### Step 1: Turn on Docs screen reader support

The first time you use the Docs editors with a screen reader, you need to turn on Docs screen reader support:

1. Go to [Google Docs](#) and open a document.
2. In the Tools menu, select **Accessibility settings**.
3. Select **Turn on screen reader support**.

Optional: In your Google Account, visit [Accessibility settings](#), then turn on **Screen reader**.

### Step 2: Check your screen reader settings

For some screen readers, you might need to adjust your settings when you use the Docs editors. Check your screen reader instructions below.

## Help

- [Accessibility for Docs editors](#)
- [Use a screen reader on your computer](#)
- [Use a braille display with Docs editors](#)
- [Present slides with captions](#)
- [Type with your voice](#)
- [Make your document or presentation more accessible](#)

[Visit the Learning Center](#)

Using Google products, like Google Docs, at work or school? Try powerful tips, tutorials, and templates. Learn to work on Office files without installing Office, create dynamic project plans and team calendars, auto-organize your inbox, and more.

# Make your document or presentation more accessible

When you create a document or presentation, follow the tips below to make it more readable by everyone, including people with disabilities.

## Include alt text

Include alternative text for images, drawings, and other graphics. Otherwise, screen reader users just hear "image." Some images automatically include alt text, so it's a good idea to verify that this automatic alt text is what you want.

## Add or edit alt text







1. Select an image, drawing, or graphic.
2. Right click > **Alt text**.
3. Enter a title and description.
4. Click Ok.

## Use tables for data

Use tables for presenting data, not for changing the visual layout of the page. In the table, include a heading row (rather than starting with data in the first row) because screen readers automatically read the first row as a heading row.

## Use comments and suggestions

### Help

-  [Accessibility for Docs editors](#)
-  [Use a screen reader on your computer](#)
-  [Use a braille display with Docs editors](#)
-  [Present slides with captions](#)
-  [Type with your voice](#)
-  [Make your document or presentation more accessible](#)



[Visit the Learning Center](#)

Using Google products, like Google Docs, at work or school? Try powerful tips, tutorials, and templates. Learn to work on Office files without installing Office, create dynamic project plans and team calendars, auto-organize your inbox, and more.

## ← Accessibility settings

Apply accessibility settings to some Google products here. Many other [Google products](#) come with accessibility features built in. [Learn more](#)

### Screen reader

Applies to [Google Docs](#) (web only)



### High-contrast colors

Applies to [Google Voice](#) (web only), [Google Developers](#), and other developer documentation sites





# PDF Documents



# Common PDF issues

- They do not change size to fit browser
- They are not designed for reading on screens
- You cannot track views (in LMS or Webpage you can)
- They can cause difficulties for navigation & orientation
- Technical accessibility takes extra time and effort
- Less likely to be kept up to date vs a webpage
- Harder to reuse

# Task 1. Run Adobe Accessibility Checker

1. Open your PDF in Adobe Acrobat Pro
2. Go to Tools - > Protect & Standardise - > Accessibility and Open
3. Select Accessibility Check – and select Start Checking
4. Review the results panel

# Task 1a. Checker Breakdown

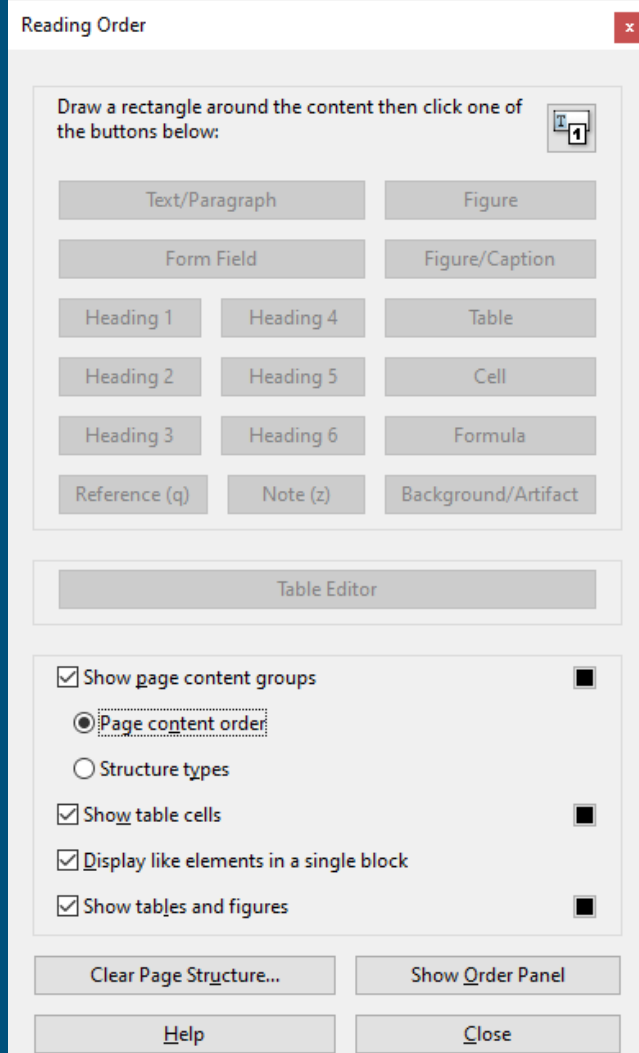
1. Document
2. Page Content
3. Forms
4. Alternate Text
5. Tables
6. Lists
7. Headings

The screenshot shows the Accessibility Checker interface. At the top, it says "Accessibility Checker" with a close button (X). Below that is a menu icon (three horizontal lines) with a dropdown arrow. The main content area is a list of checks:

- Document (4 issues)
  - Accessibility permission flag - Passed
  - Image-only PDF - Passed
  - Tagged PDF - Passed
  - Logical Reading Order - Needs manual check (indicated by a blue question mark icon)
  - Primary language - Failed (indicated by a red X icon)
  - Title - Failed (indicated by a red X icon)
  - Bookmarks - Passed
- Color contrast - Needs manual check (indicated by a blue question mark icon)
- Page Content (indicated by a right-pointing chevron)
- Forms (indicated by a right-pointing chevron)
- Alternate Text (indicated by a right-pointing chevron)
- Tables (indicated by a right-pointing chevron)
- Lists (indicated by a right-pointing chevron)
- Headings (indicated by a downward-pointing chevron)

# Task 2. Reading Order

1. Open your PDF in Adobe Acrobat Pro
2. Go to Tools - > Protect & Standardise  
- > Accessibility and Open
3. Select Accessibility Check
4. Select Start Checking
5. Select **Reading Order**



# Task 3. PDF Read out Loud

Lets see if your PDF is read in the right order.

1. Open your PDF in Adobe Acrobat Pro
2. To activate Read out loud
3. Use Shift-Ctrl-Y or Select View > Read out loud > Activate read out loud
4. Use Shift-Ctrl-V or Select "Read this page only"
5. Use Shift-Ctrl-B or Select "Read to end of Document"

## Task 4. Use PAVE to make accessible PDFs

1. Go to PAVE's website at [pave-pdf.org](https://pave-pdf.org)
2. Upload your PDF
3. Make the remaining corrections.
4. Download the “more” accessible final PDF.

What changes will you apply right today when creating documents?