MS Word and PDF Accessibility Checklists

What is an accessible document?

An accessible document is one in which users living with a disability can understand the content of the document, or have the content read back to them via a text reader.

Types of disability**:**
- Visual impairment
- Mobility issues
- Cognitive issues

Word Checklist:

Check	Description
✔	Run the **Accessibility Checker** on Word documents: (File -> Check for issues -> Check Accessibility)
✔	Provide alternative text for images (point #1 below)
✔	Provide document headings and structure (point #2 below)

Check	Description
✔	Create a table of contents (point #3 below)
✔	Ensure text and fonts are accessible (point #4 below)
✔	Delete repeated 'blank' characters (point #5 below)
✔	Ensure correct use of tables (point #6 below)
✔	Provide descriptive hyperlinks (point #7 below)
✔	Use simple bulleted lists (point #8 below)

Things to consider when fixing or creating an accessible Word document:

1. Alternative (or Alt) text

Provide alternative text for images
Alt text helps people who use screen readers to understand the content of images and tables in your document. For many readers, this is the only information they have about the images and objects in your document.

Recommendations:

- All images (and even tables!) should have an Alt Text description
- Make the Alt Text clear and concise: "Students using computers in a classroom" tells the reader more about the image than just "Students"

2. Document structure (using headings)

Provide document headings and structure

Headings allow users of assistive technologies, such as screen readers, to navigate through the page easily. When you use headings in a document, try to keep them short and on one line.

Recommendations:

- Headings should provide a well ordered structure to the document
- Headings **should be created using the 'Styles' formatting** at the top of the page
- Headings should not be created by simply changing the font type, the font size, or **making it bold**, etc.
- Follow a logical heading order, e.g. 'Heading 1' followed by 'Heading 2' then 'Heading 3'. **Do not skip the logical order** by going from a 'Heading 1' to a 'Heading 3'.

3. A Table of Contents (for longer documents)

Creating a table of contents

A Table of contents provides an overview of what is in the document and helps all readers quickly and easily find a particular section within the document. To insert a Table of Contents, click on the 'REFERENCES' tab, then 'Table of Contents'.

Recommendations:
- A Table of contents should be provided when creating a large Word document
- By using well-structured headings, MS Word can use these headings to create a Table of contents within the document

4. Accessible text and fonts

- Text should not be made as graphics. Avoid using "Word Art" to create text
- Text should be basic, simple and easy to read, using plain language
- Avoid small font sizes
- Use good colour contrast between the text and background
- Avoid use of colour to convey important information
- Provide sufficient spacing between lines
- There should be at least a one-line space between paragraphs
- Best fonts for low vision users: Arial or Verdana. Font size: 11 or 12 pt
- Avoid 'justified text'. The spacing between words becomes inconsistent in length and can be distracting to some people

5. Deleting repeated 'blank' characters

Extra spaces and empty paragraphs may be perceived as blanks by people using screen readers.

After hearing a screen reader say "blank" several times, those users may think that they have reached the end of the document.

Instead of blank characters and spaces, use paragraph formatting and tabs to create whitespace.

6. Correct use of tables

Tables should be used for tabular data.

Provide table headers
Adding headers to tables provides context and helps users of assistive technologies navigate the table.

Recommendations:

- The data table header cells must be clearly defined to distinguish the heading text from the data area of the table
- Repeat the header cells (useful if the table spans more than one page)
- Avoid using complex headers
- Tables should be used to present columns and rows of data. Blank table cells can mislead a person using a text reader into thinking there's no more content. Delete unnecessary blank cells.

7. Descriptive hyperlinks

Hyperlinks should provide a clear and precise description that explains the purpose and destination of the link, e.g. **For more information visit the [George Brown College website]**.

Unclear link examples that should not be used:

- [Click here] / [here]
- [More] / [Read more]
- Link to [[some long URL]]

A list of all hyperlinks can be pulled from a document and read back to a person using a screen reader. For this reason, avoid using URLs as hyperlinks, as the text reader will read out loud a whole list of URLs that don't have much meaning for a user of such assistive technology.

8. Bulleted lists

Try to avoid the use of images or arrows when created bulleted lists. Stick with the standard 'bullet' wherever possible.

Example (see bullet points on the right):

- List item #1
- List item #2
- List item #3

Note: The above bulleted style is also in keeping with the GBC Writing Style Guide available on the Self-Publishing System website (http://sps.georgebrown.ca/) under '**GUIDELINES | Writing Style**'

PDF Checklist:

| Check	Description
✔	Ensure the document 'Properties' (or metadata) have been inputted correctly (Title, Author, Subject, Keywords) (point #9 below)
✔	Ensure images contain alternate (Alt) text, or are 'backgrounded' (point #10 below)
✔	Tag content for screen readers (point #11 below)
✔	Check that a logical reading order has been established (point #12 below)
✔	Make sure tables are tagged to represent the table structure (point #13 below)
✔	Ensure form fields and other interactive features are tagged (point #14 below)
✔	Create 'Bookmarks' for longer documents (point #15 below)
✔	Check document structure (or headings) (point #16 below)

Things to consider when fixing or creating PDFs:

9. Document 'Properties' (or metadata) have been set

There are four document properties that need to be set in a PDF: **Title, Subject, Author** and **Keywords**. They can be added or modified manually by going to **File** > **Properties** and then filling in the four fields under the **Description** tab.

Note

Keywords should be separated by semi-colons.

Also, make sure **Document Title** is selected in the drop-down menu to the right of **Show**, under the **Initial View** tab.
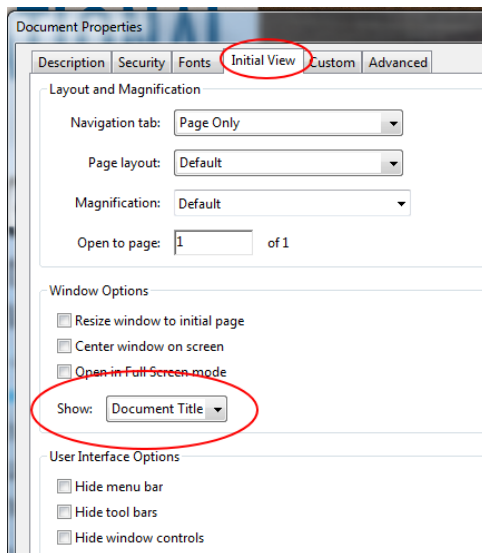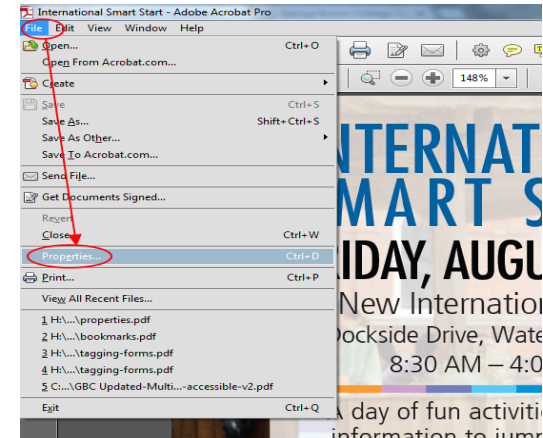
10. Images contain alternate (Alt) text, or are 'backgrounded'

When an image is tagged as a figure, the alternative text will appear in a black box in the upper left hand corner of the image. If it has no alternative text, the caption will read "Figure - No alternate text exists."
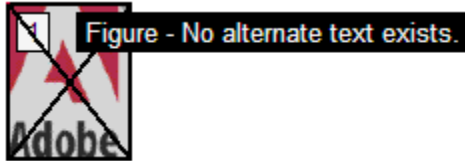
To add or edit alternative text, **right click** on the image and select **Edit Alternate Text**. Enter the appropriate alternative text in the dialog box.

Backgrounding, or Artifacts, are elements that are ignored by a screen reader, much like an image with empty alternative text in HTML. Important text should never be labeled as an artifact. The easiest way to change an element to or from an artifact is with the Touch Up Reading Order tool (TURO). Select the element and press the **Background** button to make it an artifact.

To search for artifacts, go to the **Tags** pane and select **Options > Find**. A window will appear with several search options. Artifact is the default search, so click **Find**. If there are any artifacts, the search will identify them and allow you to change them to other elements.

To change a tag to an artifact in the Tags pane, **right click** on the item and select **Change Tag to Artifact**.

11. Tags have been created and validated for all content

When people talk about "accessible" PDF files, they usually are referring to "tagged" PDF files, even though there is more to an accessible PDF than tags. PDF tags provide a hidden structured, textual representation of the PDF content that is presented to screen readers. They exist for accessibility purposes only and have no visible effect on the PDF file.

12. A logical reading order has been established

The TouchUp Reading Order (or TURO) tool allows a user to add and edit many common PDF tags, and to view the content order of elements on the page. Although it can speed up the tagging process, it does not take the place of the other tools mentioned previously. Certain tags, such as lists, are only available in the **Tags** pane.

To use the TURO tool, select **Tools** from the right-hand menu, then select **Accessibility > TouchUp Reading Order**. If the Accessibility menu is not visible (it is hidden in version XI by default), make sure it is checked in the option menu (▤▾) in the upper-right corner of the Tools sidebar. When the TURO tool is selected, the view on the screen changes. All of the content is enclosed in numbered boxes. Each of these numbered boxes corresponds with the content order of the PDF, as reflected in the order pane.**Content Order**
There are actually three different types of 'reading order' within a PDF: the visual order that most people see when viewing a PDF, the tags order that is accessed by screen readers and other assistive technologies, and the lesser-known *content* order that is used by Adobe when a user selects **Reflow** or **Read Out Loud** options.

While the goal is to get these three views to match, this is not always easy to accomplish. For example, if a PDF is created from a MS Word DOCX file, text boxes and images usually appear in the correct place in the tags order, but they typically appear at the end of the page in content order.

Important
The TURO tool displays the *content* order of the PDF, **NOT** the tags order. Reading order can appear correct in this view but the PDF may still be read incorrectly by a screen reader (or vice versa). Only the **Tags Pane** provides a true indication order that content will be read by a screen reader.
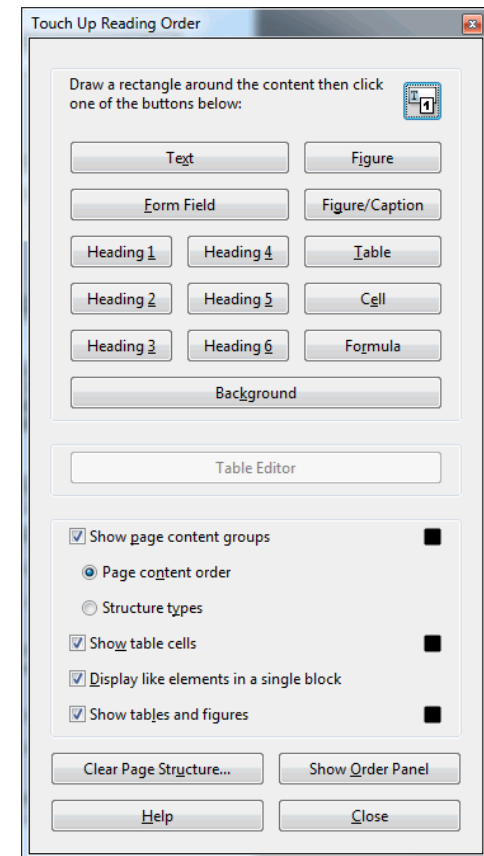
The **TouchUp Reading Order** window includes several options to change tags within a page.

You will notice a group of buttons with the names of several common tags. You can use these buttons to assign tags to a selected block of text or an object.

Note
If you have the TURO tool open and don't see any boxes, your PDF document is most likely untagged.

Adding/Changing tags

There are two ways to select an area of text, image, table, or other element using TURO:

1. Drag a box around an element using the crosshairs ⌖ that have replaced the default pointer. It is sometimes difficult to select exactly the right area, but it is a little easier if you try drawing a box that is slightly larger than the element. Once you have selected a new element, you can assign some of the most common tags to that element by clicking on one of the several buttons.

2. You can also select everything within a box by clicking on the number in the top-left corner.

Now that you have selected the text, you can assign a tag by clicking on the corresponding button. Once you select a button, Acrobat will place the selected content in the appropriate tag. If you have the **Tags** pane open, you can view these changes instantly.

While in TURO, you can also assign alternate text to images by **right-clicking** on the image and choosing **Edit Alternate Text**.

13. Tables are correctly tagged to represent the table structure

The **Table Inspector** allows you to easily identify and assign scope to table headers.

With the **Touch Up Reading Order** tool (TURO) tool open, select a table and then select **Table Inspector**. You can now select table cells that should be headers. **Right click** on a selected cell or cells and choose **Table Cell Properties**. A dialog box will appear.

If the selected cell(s) needs to be tagged as a header (<TH>), select the **Header Cell** option and assign a scope of either **Row** or **Column**. After selecting **OK**, you will notice that the table header cells will be highlighted in red and the data cells will be highlighted in gray.

Header		Header		Header
Data		Data		Data
Data		Data		Data
Data		Data		Data
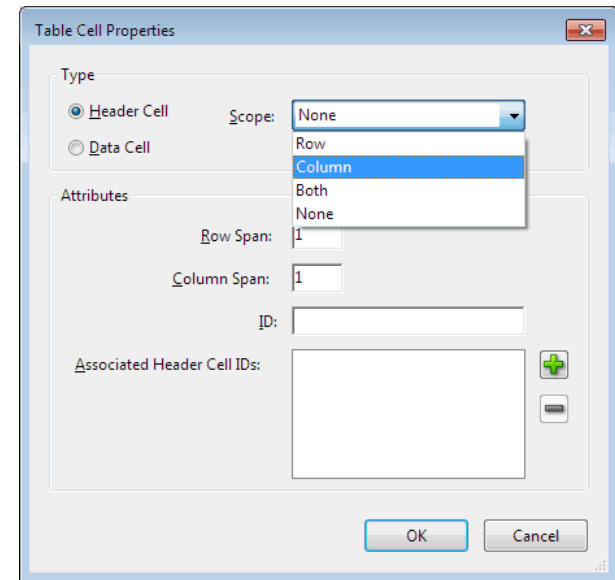
14. Form fields and other interactive features are tagged to ensure their maximum usability

Just as "tags" are essential to the accessibility of a PDF file, true form fields and buttons are essential to the accessibility of a PDF form. This allows the form to be filled out and submitted within Adobe Reader.

Note

You can easily check to see if a PDF form has the necessary fields by opening the file in Acrobat or Adobe Reader. If the **Highlight Existing Field** option is visible in a purple bar at the top of the page, this means the PDF already has form fields.

15. Bookmarks for longer documents are in place

Bookmarks help all users to navigate through your document and are especially useful for longer documents. To create bookmarks, Click on the Bookmarks icon in the left hand column (see below), then select the text you'd like to bookmark and then click the New Bookmark icon in the Bookmarks panel. Hit Enter to then create the new bookmark.
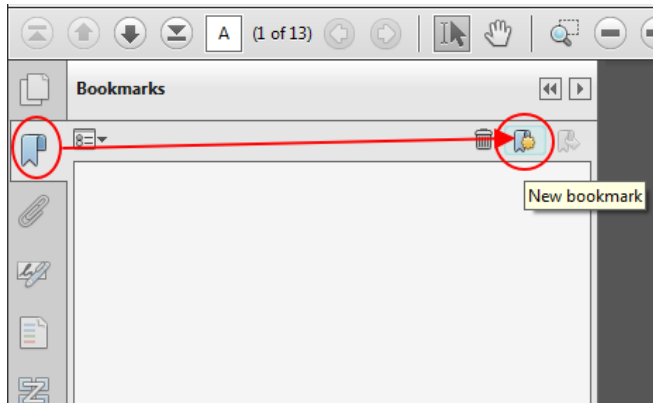
16. Document structure (or headings)

Make sure all headings within the PDF follow a logical, structured order, i.e. H1 is followed by H2, which in turn is followed by H3, etc. Do not skip a heading level by going from an H1 to an H3, for example.