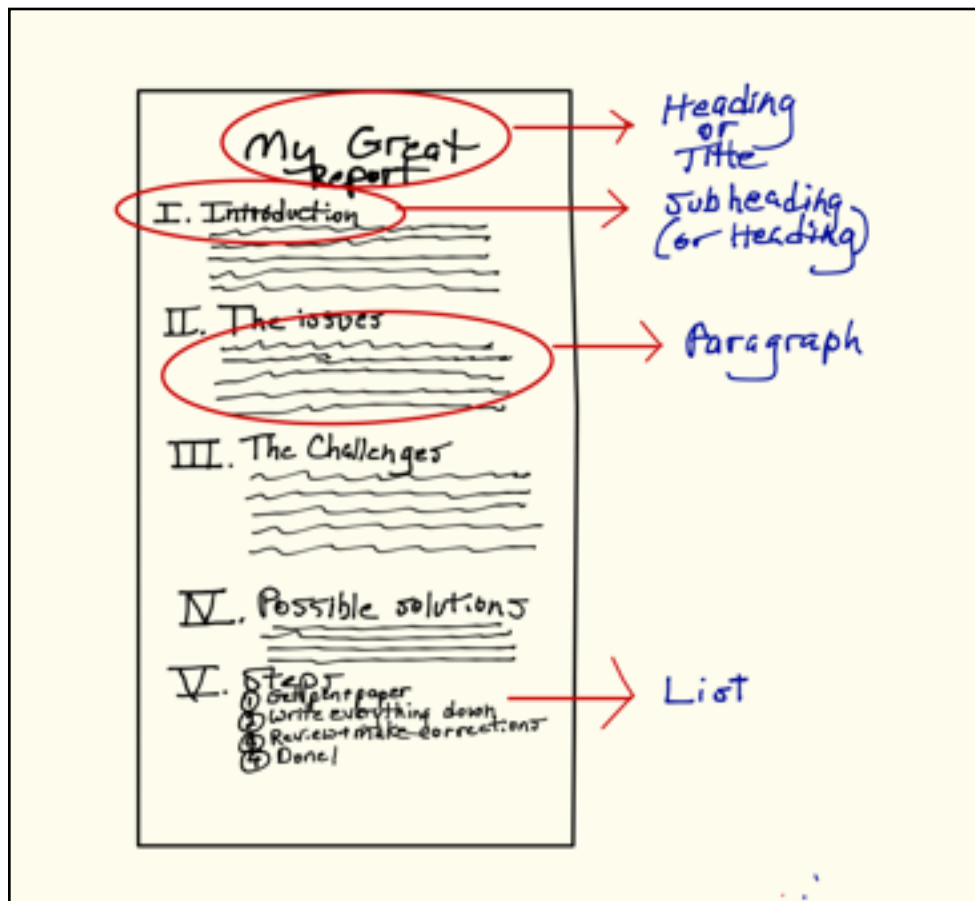


Creating Accessible Documents

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Creating Accessible Documents

The creation of an accessible document takes a few steps above and beyond creating an ordinary document. When done properly, they can be understood and read by people with visual impairments, blindness, mobility and other physical issues, using specialized assistive technologies. In addition, with a growing aging population, accessible documents can prove invaluable by providing the reader greater control over the look and readability of a document, saving valuable time while ensuring user independence.

Important Features of Documents

Most documents possess common styles and features that can carry over to multiple types of documents, such as HTML (Web) documents, Word (or word-processing) documents, and PDF documents.

Common document styles include the following:

- **Headings**
 - **Heading1** usually refers to the title or main heading

- **Heading2, Heading3**, etc., represent sub-headings from the second level downward
- *Paragraph*, also referred to as *body*
- *Lists*
- *Images*

There are more style types, but are some of the most used styles. This matters whether you choose to use them to create Web pages, a standalone Word document or a PDF file.

Methods

There are three general types of documents. They will first be described, and then the creation process for each will be illustrated.

Web Pages

The easiest and most accessible method is creating documents on the Web, for the following reasons:

- It's the most accessible document type
- It's standards-compliant (readable on the widest variety of technologies)

When using a CMS (content management system) such as Etomite or Drupal, the advantage is that most of the structural look-and-feel of the site has already been done for you. All you need to do is to ensure that you help identify styles such as headings and body using the editor's toolbar so that the information is not only displayed correctly, but so that technologies can translate the words and meaning correctly.

Word (or similar) Documents

Microsoft Word is, by far, the most popular word processing format. Many word-processing applications other than Word support its file format.

Unlike creating an accessible document using the Web, which assures that it should be readable with most assistive technologies, Microsoft's accessibility tools only work with Windows, so the tools cannot check for document accessibility with Macs or the Web in general. For the Mac, the conversion process can be done with ease using LibreOffice, an open-source office productivity alternative to Microsoft Office.

Just as with Web pages, you will use styles to create your accessible document.

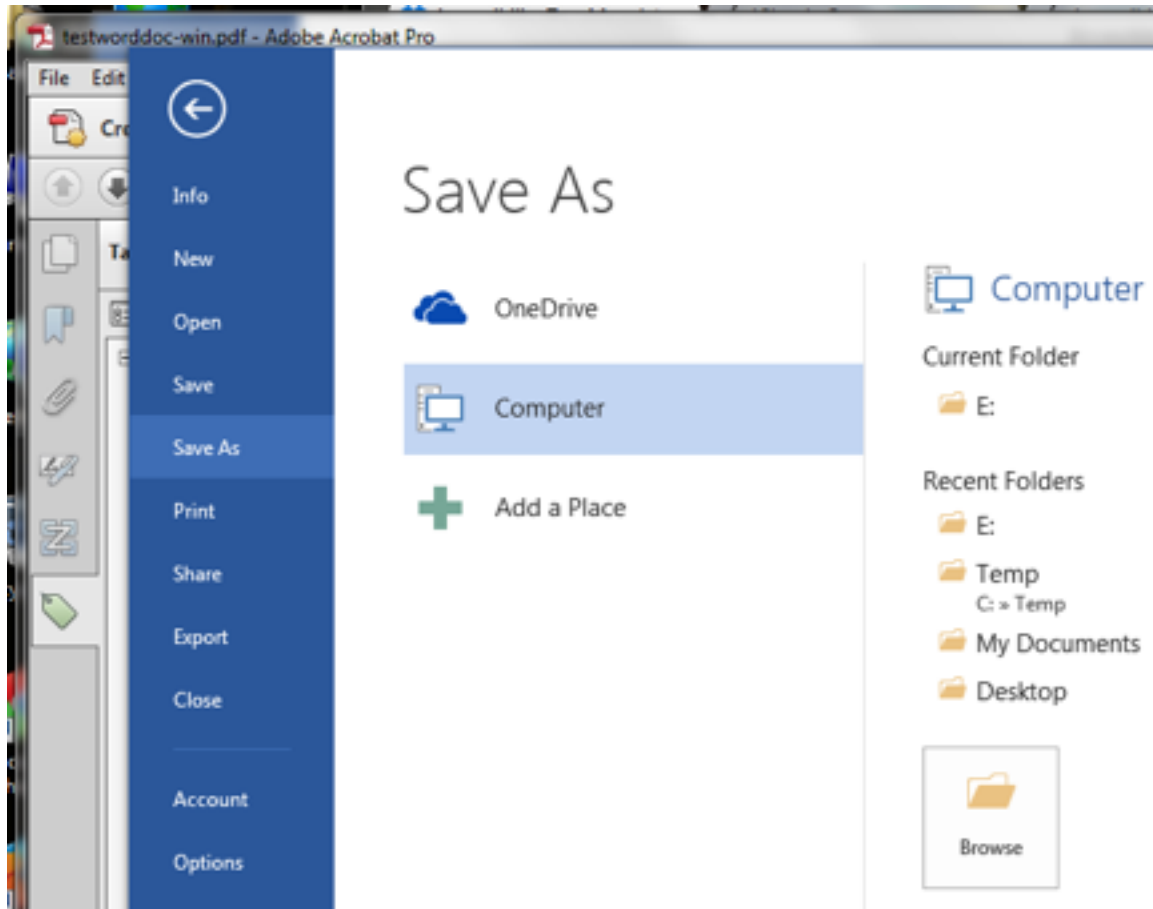
Creating an Accessible Web Page

1. Log in to your CMS account (either CLA's Etomite or Cal Poly's Drupal).
2. Create new, or open existing, page.
3. Add text content. Make note of *headings*, *paragraphs*, *lists*, etc., and add styles using the word processing application's styles attributes (usually located on the top toolbar).
4. Add other content such as images and links.
5. Check your finished work; make adjustments to ensure document accessibility, as appropriate.
6. Notify accessibility coordinator for verification check of document, if needed.

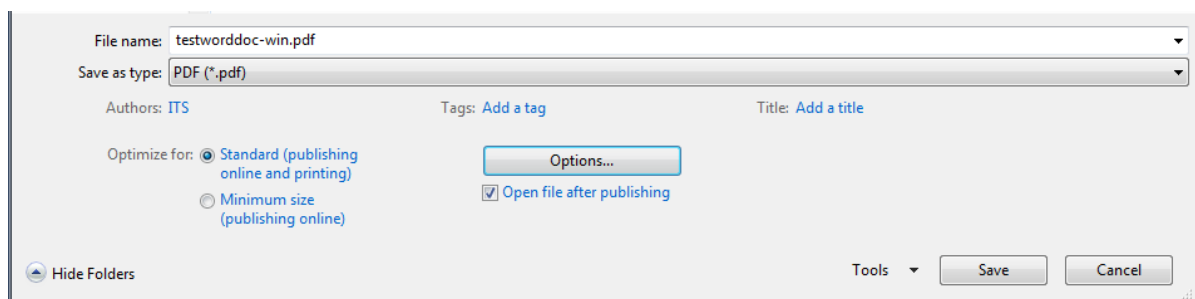
Creating an Accessible Document in Windows Using Word

Word 2013 (NOTE: There is no Acrobat tab in the Ribbon for Word 2013)

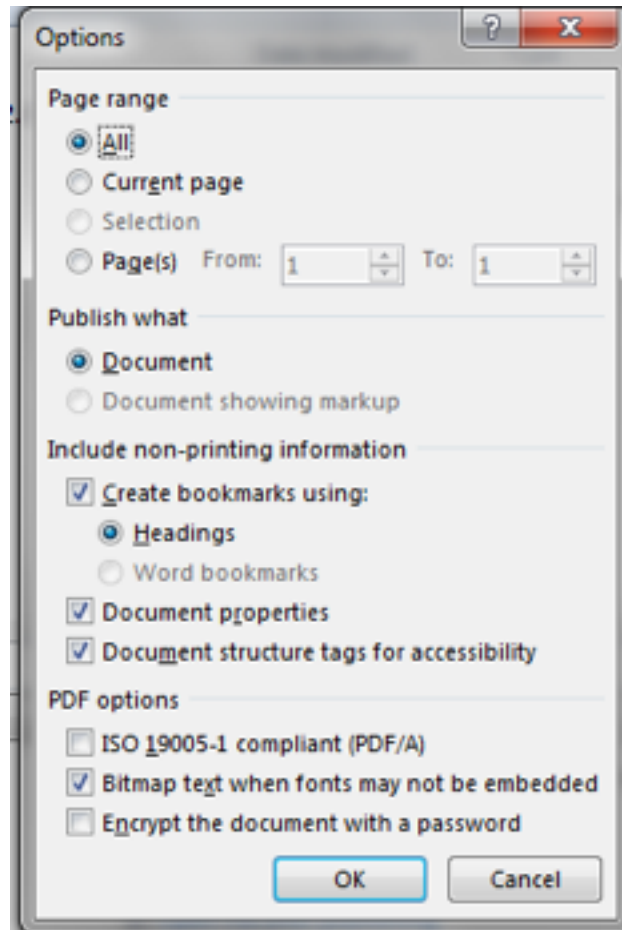
1. Create document with Word, adding recommended styles throughout process.



2. From the File menu, choose the “Save As” option.
3. Click on the “Browse” button to open a new dialog box, then select location of where you’d like your file to be saved.



4. Choose in the "File Type" drop-down field "PDF," then click on the "Options" button.
5. In Options, make sure that "Create bookmarks" and "Document structure tags" are both checked.



6. Click "OK," then click "Save."
7. If a new PDF launched with Adobe Reader, close it; otherwise, if launched with Acrobat Pro, leave it open.

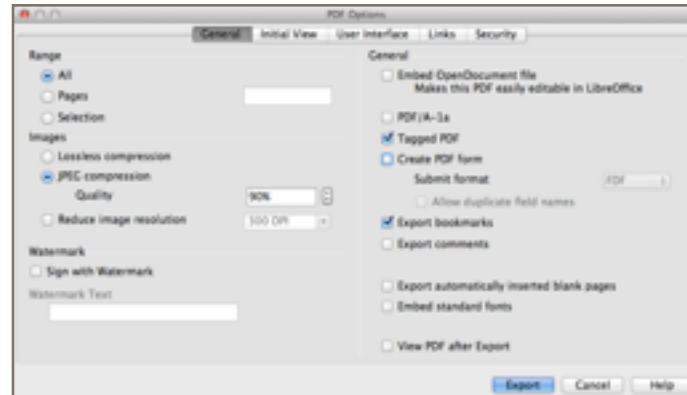
Word 2010 (via the Acrobat tab in The Ribbon)

1. Create document with recommended styles throughout.
2. Click on the Acrobat tab on the Ribbon.
3. Click on "Create PDF."
4. You may get the following error message: "Acrobat PDFMaker needs to save the file before continuing. Do you want PDFMaker to save the file and continue?" This will only appear if the document has not been saved, so it's safe to click "Yes."

5. In the "Save As" dialog box, type in the name of the file and choose the location where you would like the saved file to be found. Afterwards, click on the "Options" button.
6. In the Acrobat PDFMaker options, make sure that "Enable Accessibility and Reflow with tagged Adobe PDF," "Create Bookmarks" (and the sub-box underneath, "Convert Word Headings to Bookmarks") are checked. Then click "OK."
7. Click on the "Save" button.
8. Acrobat Pro should open with the newly created PDF document. If the PDF document opens in Acrobat Reader instead, you will need to close Acrobat Reader and open the PDF document in Acrobat Pro.

Creating an Accessible Document in **Mac OS X** Using Libre Office

1. Create a new document, or open existing Word document, in LibreOffice; add styles.
2. Choose "Properties" option in the File menu. Click on the "Description" tag and fill in the "Title" field (usually the document title), the "Subject" field (can be the same as the Title) and at least three keywords that relating to the content of the document. When done, click "OK."
3. Choose "Export as PDF" option in the File menu. Make sure that "Tagged PDF" is checked and that English in the language in "Preferences." Save exported PDF file.



4. Proceed to Step 1 of the next section, "Creating an Accessible PDF."

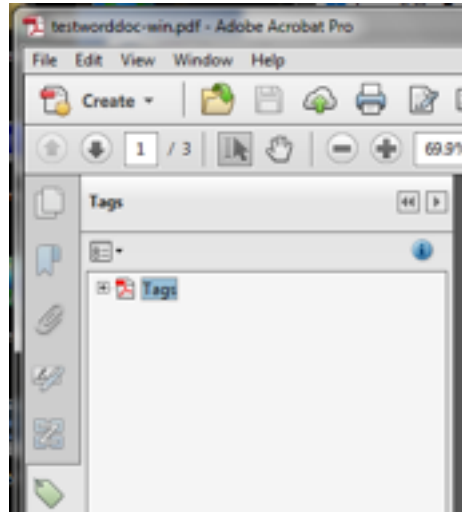
Accessible PDFs

The creation of accessible PDF documents will take the most work of the three methods, and requires more advanced planning.

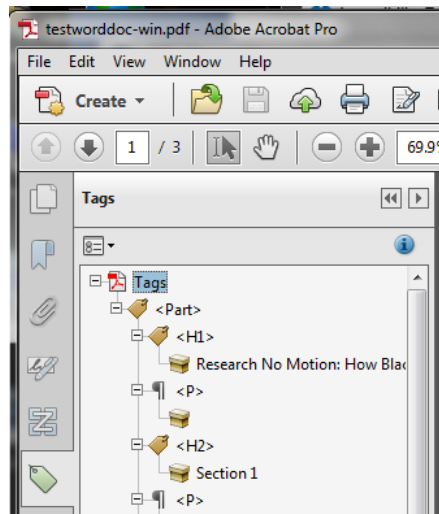
The preferred method is to first create your document in Word (for Windows) or LibreOffice (for Mac) using the built-in styles on the appropriate application's toolbar, then export your document as a PDF. You will then import that PDF document into Adobe's Acrobat Pro, where the work toward completion of an accessible PDF will continue until it's done.

When done properly, the initial exported PDF file from Word or LibreOffice will include invisible information that will be picked up by Acrobat Pro, which can speed up the overall document completion process.

Creating an Accessible PDF in **Mac OS X**



1. Open Acrobat Pro, then open the newly-created PDF file.
2. Verify HTML tags using the “Tags Panel.”
 - A. With document open in Acrobat Pro, click on the price tag icon on the left to open the Tags Panel (unless it is already opened).
 - B. When opened, you should see the word “Tag” with a disclosure triangle to the left of it. If you see anything else, this means that the PDF is not accessible. Please read the “Creating an Accessible Document” section to rectify, or contact your accessibility coordinator.



3. Click on the disclosure triangle to expand the Tags view, and you will see the order that the document has been tagged. There should be a logical, structural order, each section ending with a <standard> tag.

For example, <H1> represents the main header, or title of the document. Then <H2>, the first-level subheading, starts the next section, followed by the text body, and then a section-ending <standards> tag, and so on. Also notice that when a tag is highlighted, the item that corresponds to that tag is selected in the document on the right, represented by outlined boxes around the selected area.



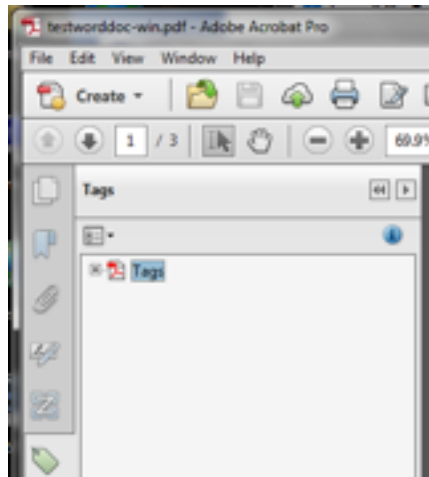
4. Verify document structure with the Orders Panel.
 - A. Click on the “Z” icon on the left to open the “Orders Panel” (unless it is already opened).
 - B. When opened, you should see the title of the document you are attempting to open with a disclosure triangle to the left of it.

The purpose of the Orders Panel is to ensure that visually, the reading order of the document is logical so that technologies can read back the content correctly. Just as highlighting a tag in the Tags Panel displays a visual block in the main document itself, highlighting a text block in the Orders Panel will display a shaded rectangle around the selected document, followed by what’s known as the order number toward the upper left of the shaded block.

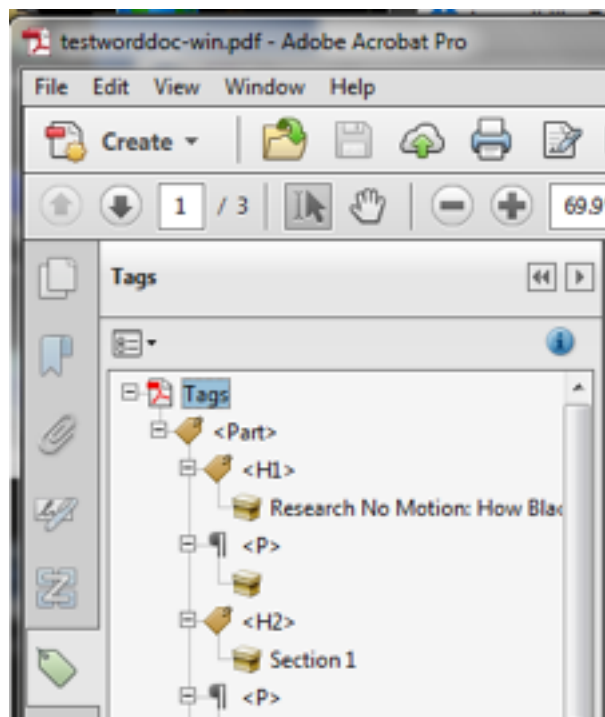
As you compare the Orders Panel with the document, you may find items that are logically out of order, and may need adjusting. This is usually rectified by dragging and dropping the affected text block to another location in order to have it logically correct.

5. To adjust order of document structure in Orders Panel
 1. Click on the block in the Orders Panel where you’d like to relocate its order.
6. Check your work for completion.
7. Deliver to accessibility coordinator for verification.

Creating an Accessible PDF in **Windows**



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 - A. With document open in Acrobat Pro, click on the price tag icon on the left to open the Tags Panel (unless it is already opened).
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Assistance

Before your document is made public, we encourage you to contact Erik Salholm, esalholm@calpoly.edu, or Velanche Stewart, vstewart@calpoly.edu, to help verify your work. You can also contact them for assistance or questions.