

OVERVIEW OF

# ACCESSIBLE DOCUMENTS

The University of North Dakota provides a wide variety of tools to students, faculty, staff for authoring electronic documents. When authoring documents, it's important to follow a few basic steps to assure your document is readable by individuals with disabilities.

The core principles are the same for all document types, but the individual steps vary depending on which tool you're using and what the final format of the document will be. The core principles are described below.



## USE HEADINGS

Headings and subheadings should be identified as such using the built-in heading features of the authoring tool. Headings should form an outline of the page content (Heading 1 for the main heading, Heading 2 for the first level of sub-headings, Heading 3 for the next level of sub-headings, etc.). This enables screen reader users to understand how the page is organized, and to quickly navigate to content of interest. Most screen readers have features that enable users to jump quickly between headings with a single key-stroke.

Virtually every document authoring format includes support for headings and subheadings.

## USE LISTS

Any content that is organized as a list should be created using the list controls that are provided in document authoring software. Most authoring tools provide one or more controls for adding unordered lists (with bullets) and ordered lists (with numbers). When lists are explicitly created as lists, this helps screen readers to understand how the content is organized. When screen reader users enter a list, their screen reader informs them that they're on a list and may also inform them of how many items are in the list, which can be very helpful information when deciding whether to continue reading.

## USE MEANINGFUL HYPERLINKS

Links presented in an electronic document should convey clear and accurate information about the destination. Most authoring tools allow the creator to assign a hyperlink to text.

For documents that will be circulated as print material, use a URL shortening service to create a customized and meaningful link name.

## ADD ALTERNATE TEXT FOR IMAGES

Users who are unable to see images depend on content authors to supplement their images with alternate text, which is often abbreviated "alt text". The purpose of alt text is to communicate the content of an image to people who can't see it. The alt text should be succinct, just enough text to communicate the idea without burdening the user with unnecessary detail. When screen readers encounter an image with alt text, they typically announce the image then read the alt text.

Most authoring tools provide a means of adding alternate text to images, usually in a dialog that appears when an image is added, or later within an image properties dialog.

If images are purely decorative and contain no informative content, they do not require a description. However, they may still require specific markup so screen readers know to skip them. The methods for hiding decorative images from screen reader is users is described in more detail in the format-specific pages within this section of the website.

Also, images that require a more lengthy description, such as charts and graphs, may require additional steps beyond adding alt text.

## IDENTIFY DOCUMENT LANGUAGE

Leading screen reader software is multilingual, and can read content in English, Spanish, French, and a wide variety of other languages. In order to ensure that screen readers will read a document using the appropriate language profile, the language of the document must be identified.

You should also identify the language of any content written in a language other than the document's default language. With this information, supporting screen readers will switch between language profiles as needed on the fly.

Most document authoring tools provide a means of identifying the document language as well the language of specific parts.

## USE TABLES WISELY

Tables in documents are useful for communicating relationships between data, especially where those relationships can be best expressed in a matrix of rows and columns. Tables should not be used to control layout. Authoring tools have other means of doing this, including organizing content into columns.

If your data is best presented in a table, try to keep the table simple. If the table is complex, consider whether you could divide it into multiple smaller tables with a heading above each.

A key to making data tables accessible to screen reader users is to clearly identify column and row headers. Also, if there are nested in columns or rows with multiple headers for each cell, screen readers need to be explicitly informed as to which

## WHEN EXPORTING TO PDF, UNDERSTAND HOW TO PRESERVE ACCESSIBILITY

In order for an Adobe PDF document to be accessible, it must be a “tagged” PDF, with an underlying tagged structure that includes all of the features already described on this page. There are right ways and wrong ways to export documents to PDF. Some authoring tools don’t support tagged PDF at all, while others provide multiple ways of exporting to PDF, some that produce tagged PDF and some that don’t.

Additional information about PDF accessibility is provided elsewhere.

## FONT STYLES

Screen readers do not identify font styles such as bold and color. If you want to give a strong visual cue, make sure to use an accessible alternative like an exclamation mark at the end of your sentence. Screen readers intonate exclamation and question marks which means it won't read "question mark" but will give a questioning tone to the question.

## FOR MORE COMPLEX ISSUES, SEEK HELP

Some content can be challenging to present in a way that's fully accessible. If you encounter challenges, contact the Teaching Transformation and Development Academy.