CREATING ACCESSIBLE DOCUMENTS

Microsoft Word 2003

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TUTORIAI DESCRIPTION

OVERVIEW

Structural formatting is an essential element of accessible digital content. Structural formatting describes the purpose of the text, allows readers to scan through and identify content, and supports better understanding of the author's message. Structured Word documents are also more likely to be accessible to other types of technology (like search engines) and are more likely to be accessible when converted to other file types, like HTML or PDF. Accessibility can be added to a Microsoft Word document either during its creation or after all content has been finalized.

These guidelines were written for the 2003 version of Word for Microsoft Windows. Topics covered in this tutorial include creating accessible documents through the use of styles, hyperlinks, alternative text and tables. Additionally, information about converting a Word document into an accessible PDF document is included. A list of resources related to accessible documents is contained at the end of this tutorial.

Prerequisites

Individuals using this tutorial should have basic computer skills and the ability to work in the Windows operating system.

OBJECTIVES

After completing this training you should be able to:

- Structure a document using the Styles feature of Word.
- Add alternative text to describe a graphic contained in a Word document.
- Insert an accessible hyperlink.
- Format a simple table to be more accessible.
- Repeat heading row when the table breaks across two or more pages.
- Convert an accessible Word document into a PDF document with tags.

CREATING ACCESSIBLE WORD DOCUMENTS

INTRODUCTION

Accessibility in terms of electronic documents (in particular, documents provided for a general audience on the Web) generally refers to facilitating the use of technology for people with disabilities. Providing equivalent access to electronic documents for all faculty, staff and students across the CSU system is required by SB302. This California Senate Bill extends the requirements of Section 508 of the Federal Rehabilitation Act to the California State University. To learn more about accessibility requirements for the CSU, refer to the following Web site: About the Accessible Technology Initiative.

The focus of this tutorial is to create documents that are accessible to individuals with a visual impairment and that require the use of an assistive technology, like a screen reader, to navigate and read documents. Students with physical disabilities, learning disabilities and English language learners may also benefit from the formatting features of an accessible document.

WHAT MAKES A WORD DOCUMENT ACCESSIBLE?

Accessible Word documents, above all, can be read intelligently by screen reader software (software used by the visually impaired to read material on the screen out loud) more easily.

Accessible Word documents:

- Activate Document Map to view the structure of the document.
- Contain styles that define the document structure.
- Include alternative text defined for all graphics (Alternative text is used to describe an image so that the information portrayed by the image can be under stood in an equally effective way by the visually impaired)
- Provide URL's for hyperlinked website references.
- Define header rows in tables.
- Continue header rows when the table flows to subsequent pages.

STRUCTURE THE DOCUMENT USING STYLES

Structural formatting is an essential element of accessible digital content. The formatting allows readers to scan through and identify content and to better understand the author's message. In addition, an individual using a screen reader can navigate the document by heading levels, thus getting an overall sense of the structure of the document without having to read the entire document. Structured Word documents are also more likely to be accessible by other types of technology (like search engines) and are more likely to be accessible when converted to other file types, like HTML or PDF.

Tip: Some users cannot perceive certain colors, green and red, for example. Use a style such as underline or bold to emphasize text in a document rather than rely upon color.

All text can be formatted using the Styles and Formatting features within Word. The Styles formatting feature allows the user to specify and even customize the way the document looks and behaves. It is best to get in the habit of using the Styles and Formatting features in all your documents. For instance, instead of changing the font size of certain text and making it bold, it is a better practice to use one of the heading options.

Once you build a complete style set for your documents, you will save time and effort by relying more on the built-in formatting instead of recreating it for each new document. Users discover that using Styles has additional benefits. A document's font, size, bold and/or other characteristics of the document's body text and headings can be changed quickly by modifying the style.

DISPLAYING THE DOCUMENT MAP

Please refer to Diagrams 1 and 2.

- STEP 1. Launch Word 2003 from your desktop.
- STEP 2. Left click the View menu at top, scroll down and left click Document Map. You may also choose the Document Map Icon from the standard toolbar.

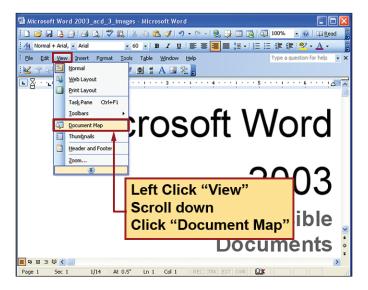


Diagram 1. Accessing the Document Map.

STEP 3. The Document Map window will open to the left of the document. The heading structure of the document will appear in this window. The Document Map can also be used to determine if an existing document has a heading structure.

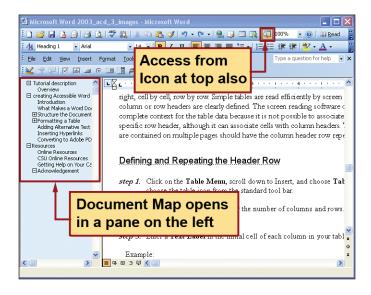


Diagram 2. Displaying the Document Map.

Applying Styles

Documents should be structured in a hierarchical manner organized by headers. Heading 1 is the top-level header and usually the page title; Heading 2 is the second level header and usually organizes the major section headings of the document; Heading 3 organizes the sub-sections of Heading 2, and so on. Lower level headings should be contained within headings of the next highest degree. By default, when you input text, it will appear in Normal Style, the lowest in the heading structure. The Styles option allows you to apply headings, prioritize the elements as well as enable formatting and visual presentation of material quickly. Please refer to Diagram 3.

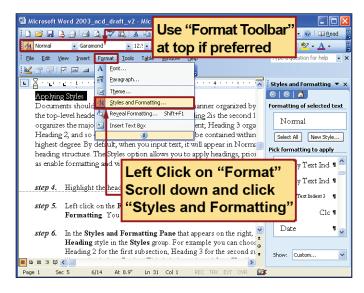


Diagram 3. Applying Styles.

Highlight the header you would like to modify in your document.

- STEP 4. Left click on the Format menu, scroll down and left click on Styles and Formatting. You can also use the Formatting Toolbar at the top.
- STEP 5. In the Styles and Formatting Pane that appears on the right, Select your preferred Heading style in the Styles group. For example you can choose Heading 1 for the title, Heading 2 for the first subsection, Heading 3 for the second subsection, etc. In the illustration below, Project Title is being selected for a Heading 1 Style.

Tip: Use the Styles features of Word to create ordered and unordered lists. Avoid manually creating lists by using dashes or asterisks to represent separate bullet points.

MODIFYING STYLES

Please refer to Diagrams 4 and 5.

Word has a number of default settings for Styles that can be modified to change appearance of the document.

- STEP 1. To modify the visual effects and formatting of your Styles, left click the pull-down arrow to the right of a style in the Styles and Formatting Pane and select Modify. The Modify Style menu will appear, which contains the selections for Formatting and Properties.
- STEP 2. Change the font, size, alignment, and other characteristics of the heading in the Formatting section, the second option in the Modify Style window.

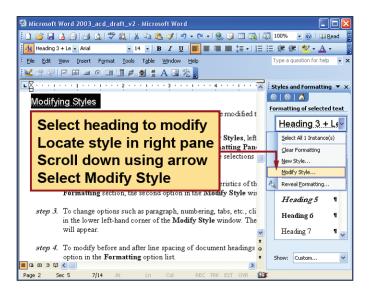


Diagram 4. Modifying Styles.

- STEP 3. To change options such as paragraph, numbering, tabs, etc., click on the Format button in the lower left-hand corner of the Modify Style window. The formatting option list will appear.
- STEP 4. To modify before and after line spacing of document headings select the Paragraph option in the Formatting option list.
- STEP 5. In the Spacing group of the Paragraph window, modify the increments of space before or after your Style by clicking on the up and down arrows.

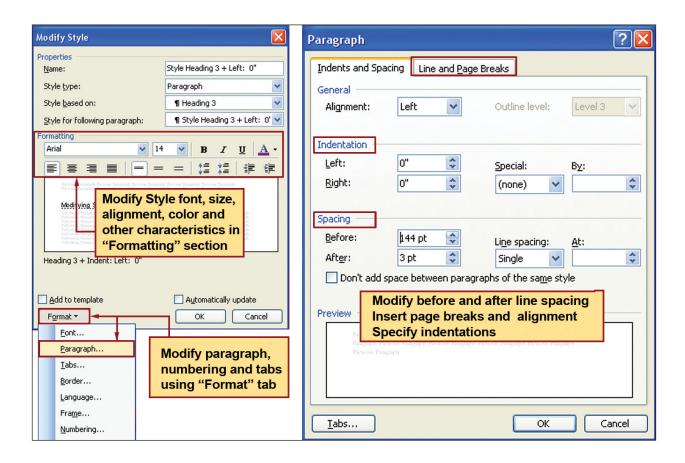


Diagram 5. Details on Modifying Styles

- STEP 6. Click OK to preview document and exit the Paragraph window.
- STEP 7. Click OK again to confirm modification and exit the Modify Style window.

FORMATTING A TABLE

Tables are useful for displaying a large amount of data in an organized manner. Relationships and changes between data can easily be shown in two table format. Someone who can read a table visually can refer back to the column and row headings of the table to make sense of the data. In order to make a table accessible for the visually impaired a description of the table contents must be provided so the screen reader can describe the contents to the user.

The text-to-speech software by default will read the information in a table horizontally left to right, cell by cell, row by row. Simple tables are read efficiently by screen readers when the column or row headers are clearly defined. The screen reading software

cannot give the complete context for the table data because it is not possible to associate an individual cell with a specific row header, although it can associate cells with column headers. Therefore, tables that are contained on multiple pages should have the column header row repeated on each page.

Tip: It is very important that tabs or spaces not be used to create tables or columns. The visual appearance may look like a table or column; however, tabbed text and data do not have the structure and will not be recognized as either a table or a column. The information will not be accessible or readable by assistive technologies.

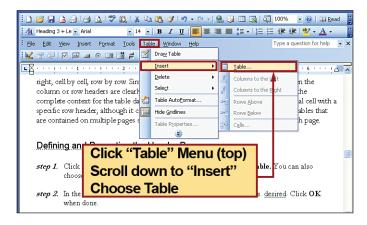


Diagram 6. Inserting a Table.

- STEP 1. Click on the Table Menu, scroll down to Insert, and choose Table. You can also choose the table icon from the standard tool bar.
- STEP 2. In the Table Dialog Box, enter the number of columns and rows desired. Click OK when done.

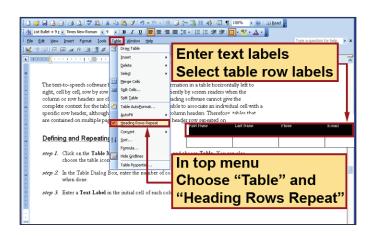


Diagram 7. Repeating Header Rows in a Table.

- STEP 3. Select the table row that contains the column labels (the selection must include the first row of the table).
- STEP 4. With the row selected, choose Table > Heading Rows Repeat.

The Table Rows Repeat feature was designed primarily to assist in printing long tables that span multiple pages. Once applied, the selected rows appear as headings on each printed page. They can also be viewed on-screen in Print Layout View.

Table headings created using Table Rows Repeat will also transfer to other document formats, such as HTML and PDF. Once converted, table heading rows will be tagged for accessibility.

ADDING ALTERNATIVE TEXT TO GRAPHICS

Graphics (photographs, clip art, figures, charts, etc.) convey information and provide an attractive appearance to documents. Screen reading software will detect the image or object in a Word document and will read the alternative text description, if it has been provided. The text description should convey the same information to the user that the graphic provides. Strive to describe the graphic concisely while conveying equivalent information.

- STEP 1. Right click on the image (in this example it is the CSU logo).
- STEP 2. Scroll down and right click to select Format Picture.

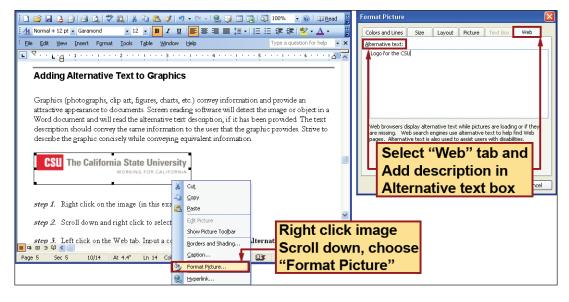


Diagram 8. Adding Alternate Text to Graphics

- STEP 3. Left click on the Web tab. Input a concise description in the Alternative (Alt) Text area. The Alt Text will be embedded in the image and will not be visible in the Word document.
- STEP 4. Click OK when you are done.

Tip: It is not necessary to include the words, "Image of..." in your text description. The assistive technology software will convey that information to the user, and it would be redundant to have that information in the text description as well.

INSERTING HYPERLINKS

Hyperlinks are elements within electronic documents that link to another section in the document, to another document, or more commonly, to an Internet resource. When inserting a hyperlink, provide a title for the URL or document, such as "California State University Web Site," within the document to identify the link resource.

Text-to-speech software, like some other software, is able to pull all the hyperlinks into an index table. It will enhance readability if the list of hyperlinks in this table is informative rather than a list of long URLs or non-descriptive words such as "Click here".

- STEP 1. Input the name of the destination, i.e. name of your web site, "California State University Web Site."
- STEP 2. Highlight the text that will be hyperlinked.
- STEP 3. Click on the Insert Tab.
- STEP 4. Click on Hyperlink. The Insert Hyperlink window will appear as below.

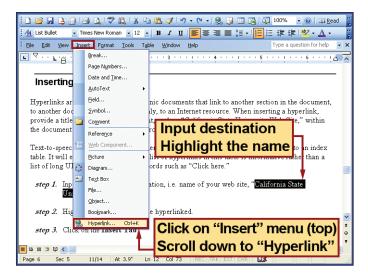


Diagram 9. Accessing the Insert Hyperlink Window.

- The highlighted text is displayed within the Text to display text box. By STEP 5. default the hyperlink function for Existing File or Web Page button is selected in the left column.
- STEP 6. Select the location of the electronic document to be linked: Existing File or Web Page, Place in This Document, Create New Document, or E-mail Address.
- STEP 7. If the link refers to an Internet resource, type the URL in the Address text box.
- STEP 8. Click on the Screen tip box to add a screen tip (visible when hovering over link) to describe the hyperlink.

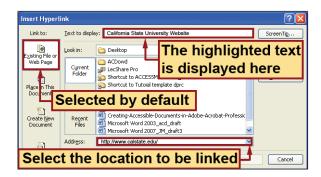


Diagram 10. Inserting a Hyperlink.

Note: The text that is hyperlinked will be in blue and underlined, as is commonly found in documents with hyperlinks.

Resources

ONLINE RESOURCES

Accessibility Features of Microsoft Word – Web Accessibility for All

Accessible Web Publishing Wizard for Microsoft Office: Best Practices for Word

CATEA.org: GRADE Project Guidelines: Accessible Word Documents

<u>Creating Accessible PDF from MS Word – Web Accessibility Center The Ohio State</u> University

Data and Layout Tables - University of Wisconsin-Madison Web Accessibility 101

How Accessible are Microsoft Word Documents?

Microsoft Office (Microsoft Word)

NCDAE - Microsoft Word Fact sheet

<u>Using Markup for Word and Word Perfect – Web Accessibility for All</u>

WebAIM: Microsoft Word

CSU ONLINE RESOURCES

CSU Accessible Technology Initiative

Professional Development Accessible Technology

GETTING HELP ON YOUR CAMPUS

Visit the CSU Accessible Technology Initiative Resources web page for links to campus ATI websites where you can get more information on how to get help on your campus.

ACKNOWLEDGEMENT

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