Accessible Excel Guide
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Overview

The purpose of this guide is to provide instructions on how to create and edit Excel®
spreadsheets to ensure compliance with Section 508. This guide will provide details on how to
make Excel spreadsheets accessible for individuals using assistive technology.

How to Use This Guide

This guide features headings that provide information regarding various components on Excel
accessibility. Quickly find the component you want to learn about by navigating to the
corresponding heading.

Note that the information in this guide may not be applicable to Excel spreadsheets containing
macros and programmed formatting saved in the .xlsm format.

Additional Training Resources
- How to Create Accessible Spreadsheets in Microsoft Excel Training Videos

Content Organization and Logical Reading Order

The logical reading order in a spreadsheet goes from left to right and top to bottom. The reading
order begins at cell A1, the cell at the top left of the spreadsheet.
- Ensure that all spreadsheet tabs within a workbook have unique descriptive names.
  - The name of the spreadsheet tab should provide information on each spreadsheet.
- The Cell Style Tool allows users to add heading levels, also known as section levels.
  - Heading levels range from level 1 to level 9.
  - You can modify the style of a heading level by right clicking on the heading level and
    selecting Modify.
- Be sure to make all tables using the Format as Data Table tool.
  - Select the template that best fits your needs and modify it by right clicking and selecting
    Modify.
- Use the Format Tool for data cells that require special formatting.

Best practices for creating a spreadsheet include the following.
- Always start at cell A1.
- Do not span content over multiple rows and columns.
- Ensure each spreadsheet has a logical reading order going from left to right and top to
  bottom.
- Ensure the spreadsheet can be navigated by the left, right, up, and down arrow keys while
  still following the logical reading order.
- Use the Format as Table tool to improve accessibility and logical reading order.

Color, Contrast, and Visual Characteristics
- Select a color palette with high contrast to improve readability between the background and foreground.
- Ensure your spreadsheet has high color contrast between the foreground and background.
- Ensure that if color and other visual characteristics—including size, shape, and location—convey meaning, you include text that describes the function and meaning of those visual characteristics (e.g., red means stop).
- Ensure that there is high contrast between the text and the background.

Making Background Information Accessible

Assistive technology may not access content placed in the header, footer, or watermark.
- Duplicate vital information in the header, footer, and watermark in Cell A1
  - Watermarks in Excel are floating objects that cannot be accessible, so you must duplicate information contained within this element in accessible format.
- Do not use headers, footers, or watermarks unless you reproduce all vital information in accessible format.

Creating Data Tables

All data tables must be created using the built-in Tables features to ensure assistive technology reads the information in the proper manner. Inaccessible examples of data tables are below.
- Images of tables are inaccessible, as all data is not available to the user.
- Tables with merged cells are inaccessible, as assistive technology may not read information in the proper reading order, creating confusion for the user.
- Data tables should not be contained within another table.

Create an accessible data table by following the steps below.
- Navigate to the Table option in the Insert tab of the Ribbon.
- Choose the range of cells for the table in the Create Table pane.
- Ensure the "My table has headers" checkbox has a checkmark.
- Name your table by selecting Table Tools then selecting Design. Select Table Name and enter the name of the table.
  - You can also add table names by right clicking on a data cell and selecting Define Name.
- Update column and row headings with descriptive names.

Alt Text for Images and Objects

Alt text must be added as descriptive text for the following reasons.
- Images and objects such as shapes, charts, and non-text elements cannot be anchored or embedded into a cell.
- Screen reader users will not be able to access floating objects.
- The alt text of floating objects also is not accessible to screen reader users.

Adding Alt Text in Excel

Descriptive text must be added for images and objects near the element. Consider making a descriptive text cell near images to provide screen reader users with information regarding the image or object.

Alternatively, you can make a list of non-textual elements providing descriptive text for each item.

Do not use images and objects in spreadsheets unless it is truly necessary.

Links

Ensure that every link added into an Excel spreadsheet has a descriptive name. The name of the link must describe its purpose.

Using "click here" or URLs are not descriptive indicators of the link's destination, which may cause confusion for assistive technology.

Insert a link into an Excel spreadsheet by following the steps below.
- Copy the link.
- Type descriptive text in a cell where the link belongs.
- Press Control + K to open the hyperlinks dialogue box.
- Paste the link.
- Press OK.
Repeat the above steps for each hyperlink you add to the spreadsheet.

Embedded Media

Accurate descriptions are necessary for embedded audio, video, and multimedia content. Provide the following information based on the type of content embedded into the Excel spreadsheet.
- Audio Only: Accurate and complete text transcript
- Video Only: Accurate and detailed text description
- Multimedia: Accurate synchronized captions and detailed audio descriptions

Flashing Objects

Flashing objects should not ever be used as they can cause seizures.
- Create content without flashing objects.
- Remove all flashing objects to ensure accessibility.

File Name and File Format
- Ensure that you use a descriptive and unique file name to identify the Excel file.
- Save the Excel file in the .xlsx format to ensure accessibility.

Accessibility Checker

Use the built-in Accessibility Checker to find inaccessible content. Make the necessary changes if it detects inaccessible content. Note that the Accessibility Checker may not always detect all inaccessible content.