Designing for Accessibility in Powerpoint

To follow is a list of the main steps that should be taken in ensuring PowerPoint accessibility:

1. Ensure good navigability:
   - Use slide titles,
   - Ensure proper reading order,
   - Format your tables correctly,
   - Format your charts correctly,
   - Check your document outline

2. Ensure a positive and productive user experience:
   - Embed your images with alternative text,
   - Ensure decorative artifacts are treated correctly,
   - Ensure sufficient foreground / background contrast
   - Be colorblind aware,
   - Treat typefaces correctly - font-size, color relationships,

The best time to address these issues is at the beginning of the design stage. Start by choosing a template that works well to allow assessibility to begin with.

1. File → New→Blank Presentation → Design Tab.
2. Look at the various theme choices that appear below the main ribbon. Choose one that is not too busy and has a bigger range of color squares paired with it.

No. Too busy and not enough darks and lights in terms of color choices in the squares below the main panels.

Yes! Better contrast (lots of darks and lights) and bacgrounds are not too busy.

2 The second set of themes shown above is suitable and can be customized to match various branding guidelines or other themes.

3. Select the theme design by clicking on it. Note the first slide appears in the navigation pane to your left. Click on it to start editing it.

4. Select the View tab and then from the Masters View Group, choose, Slide Master
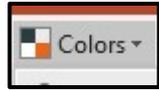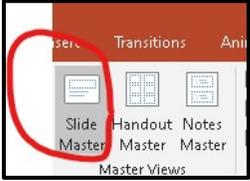
5. Click on the colors menu .
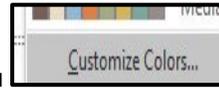
6. Click on Customize Colors option at the bottom of this menu , and start adjusting the colors in this pallete until you are satisfied. Keep your hyperlink color blue however. It is more easily recognized as a link for the vision impaired.
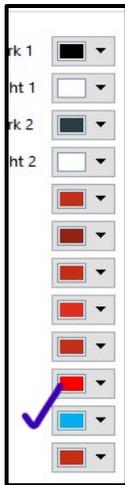
Avoid red and green as well as yellow and blue color schemes / combinations. Color blind individuals cannot distingquish between RG and YB combinations when they are next to each other spatially. Always use black or a very dark shade of grey for your fonts. Use birght reds sparingly and for decorative and peripheral or decorative elements only.

7. While you're still working in the Slide Master ribbon, let's change the fonts that will populate your slides. Click on the first slide in the navigation bar (The larger slide on top of the slide tree). In the main pane, highlight the font, "Click to edit…" Right click on it, and change the font to Arial Black and the font color to black. Change the subheadings below it to Arial Black as well and the color to black. Let's change the fields (dates, slide numbers, headers and footers) that will show up on your slides as well.
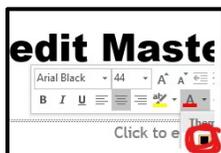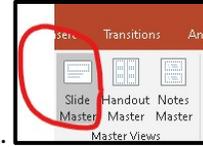
8. Back up in the Master Layout Goup. Click on the Slide Master tab again.

9. This window will pop up in your main pane. Untick Date, Slide Number, and Footer (unless you want those fields to show up on all the slides in your presentaiton).
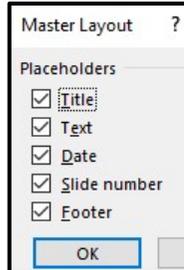
10. Now you're ready to start building your slides. Click Close Master View

.
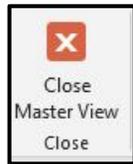
11. At this point, you can start picking and choosing among slide layouts to format your presention. On the home ribbon, from the Slides group, click on the the New Slide button and choose the "Blank" style slide from the drop down menu.
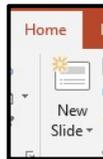
12. Click on the slide icon that appears in the navigation pane to highlight it. Now put your cusor inside the slide in the main pane, and insert a picture into the slide. Use the Insert tab to navigate to a folder with an image in it. Click and place the image on your slide. Drag to resize the photo. For this exercise, make it a large image.
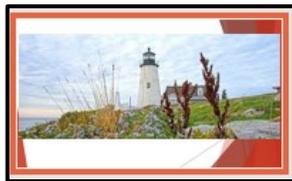

13. Now continue to build your presentation, using the New Slide button to choose the formatting layout for each new slide you make.

14. Once your presentaiton is built, there's steps you can take to ensure its accessibility. Step one is to run an Accessiblity Check. In the main ribbon, Click Review Tab → Check Accessibility.


15. In a sidebar to the right, the accessibility checker will offer Inspection Results. These reports contain two kinds of results – errors and warnings. The checker also gives easy instrucitons for fixing the error. Scroll down below the report to where the report says Steps to Fix. Take the suggested steps to fix the problem. As each error is fixed, it will disapear from the Errors List in the Inspection Results Report.
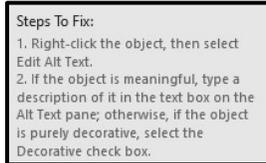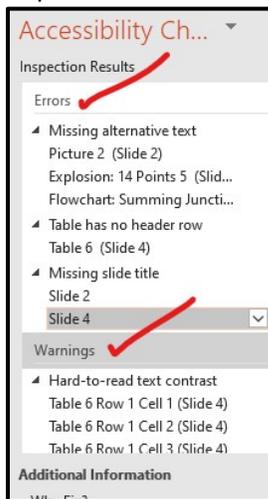
16. Note in Slide 2, the results are indicating that the image is missing alternative text. Alternative text provides screen readers with some description of the image or object which is then read aloud to its user. In terms of user experience, alternative text can help the visually impaired to better understand how the image relates to the broader context of the presentation over all.
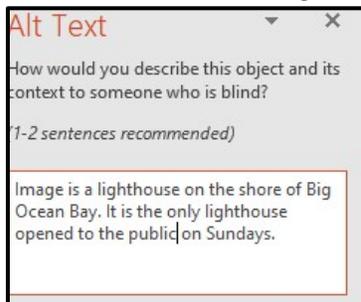
17. Here are some more problems and easy fixes: busy background, low contrast text in the foreground.

Figure 1. Poor contrast, font too small, busy distractive background.

18. [Check for contrast with a site like WebAim](#). Use the eyedropper tool and shoot to earn at least AA status with your color choices. When you click on the foreground color swatch as it is ticked below, a pop-up window with an eyedropper in the lower left corner will appear. Click on the eyedropper and then click on your slide's main font color. Next grab the eyedropper tool from the background color's pop-up. and use it to check your slide's background color. The slide pictured above earned a fail due to there being a low contrast ratio between the two.
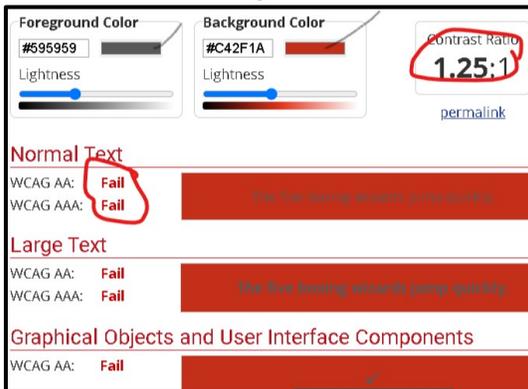

Shoot for a much higher contrast ratio!

19.
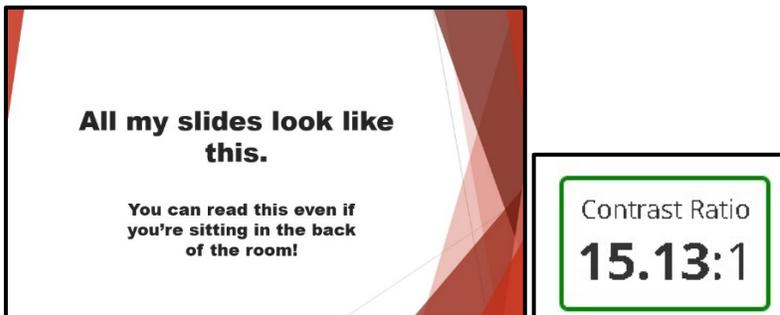
Figure 2 Slide with higher contrast colors and bigger font passes the accessibility checker!

20. The slide below presents many design problems that make it in less accessible for impaired audiences.

- The lines of text in the list do not have enough white space around them;
- The list items need to be numbered because they're providing sequentially ordered directions;
- The font is not dark enough and there's too much of it on one slide; and
- Its graphical elements are distracting and offer little to the slide's understanding overall – delete them!

21. Better design: Larger and darker text, less text on a single slide. Included more white space around the text, numbered list items, delete graphical elements that distract from the slide's information overall and offered nothing else, otherwise.

22. Below is another slide with a number of issues: the table has no header rows, its font is too small and not dark enough, and it contains both merged and blank cells. The lines of text next to the table do not have enough white space around them, and the link's URL is too long to be read by a screen reader. Additionally, the slide itself is not titled.

23. First, regarding tables, refrain from merging cells and or leaving cells or rows blank in a table. Enter the word Null if a cell is blank or delete the row in its entirety if it's empty. Use a preformatted table design to create contrast and readability of your table. On the Home ribbon → Table Tools Group and click on the Design Tab.

24. Make sure the table in your slide is still selected. In the Table Tools ribbon above, pick a Table Style that has a high-contrast look to it. Tick Table Headers and First Column as well. This will allow a screen reader to tab through the table in a sequential and logical order.
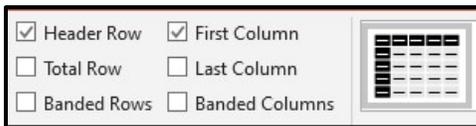
25. With respect to the slide's (links or URLs), you will need to employ two different URL treatments to make the slide more screen reader friendly. First, use meaningful text in place of non-specific text like "click here." Second, avoid the insertion of long URLs in any document by using a site like tiny url. For the first treatment, highlight the long URL, right click and copy it then delete (or just do a cut). Next, insert your cursor in its place and mouse up to the hyperlink insertion button.

Click it to prompt this pop-up window to open.
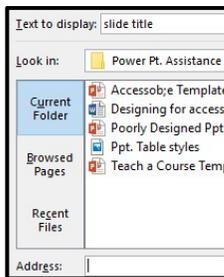
In the Text to display field, write specific and meaningful information ie "Go to specified article on Google Scholar." And below, in the address field, isnert the long URL like this:
https://www.sciencedirect.com/science/article/pii/S0169755298000877

If your document will be read from a print out (some students may print your document), you also need to include the text for the url so that it can be transcribed into a browser's search window. Use a site like tinyurl.com to generate a smaller URL, like this: https://tinyurl.com/3kuutvm6. You do not need to create an account, just copy and paste in the link's url, and the site will generate a short URL you can then insert into any document.


26. Title your slides so that users can easily navigate through an outline view to the section of your presentation that is important to them. Go to View tab → Outline View → click in the space right next to slide icons where no title is indicated next to them. Put your cursor next to those two

numbers, click to activate, and write in a slide title. If you want to hide the title of that slide, click Home Tab → Arrange → Selection Pane. Now in the Accessibility Inspection Report, click on the Error Slide to open a pop-up window next to it, click Title # and turn off the eye icon.

27. One of the last issues you need to check with your presentation is slide reading order. The error presents in the Inspection Report like this:
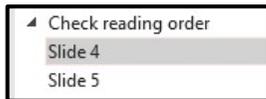
To check reading order click on the Slide # to prompt a pop-up window to open next to it. With PowerPoint slides, screen readers read from this list in order of bottom to top. So move you slide title down to the bottom of the list, then Content holder, and then the Table (or change the order of the text and graphic blocks on your slide so that a reading from the bottom up is logically sequential. Simply click drag the items up or down to rearrange in their stacking order. In this case, I want the title to read first, then the content, then the table, and then the title or header text.

28. Not all problems with a PowerPoint presentation can be detected with the Accessiblity Checker. Look through your presentation again. Does it have good contrast? Are all fonts big enough and the lines of text spaced appropriately? Are your lists numbered or bulleted correctly using the list feature in the Paragraph Panel? Are all of your slides titled? Finally, be patient and generous in respoinding to accessibility requests from students. Once you practice these design accommodations, they are fast and easy to implement every time.