Microsoft Excel Accessibility for AccessU 2023

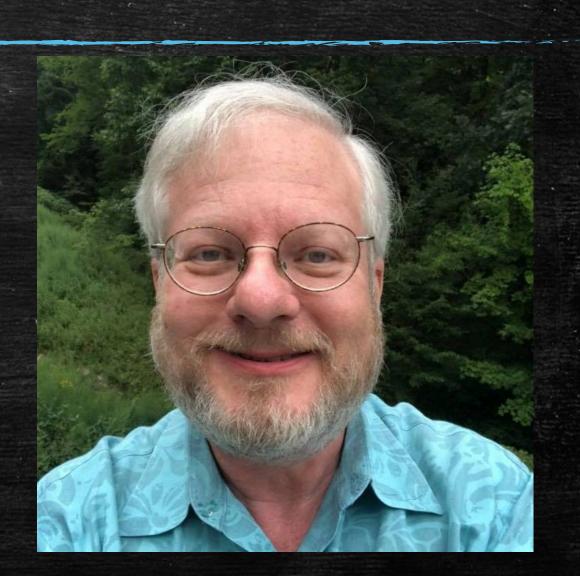
How to Create Excel Files that Can Be Read by All People

About Me

Richard U Steinberg

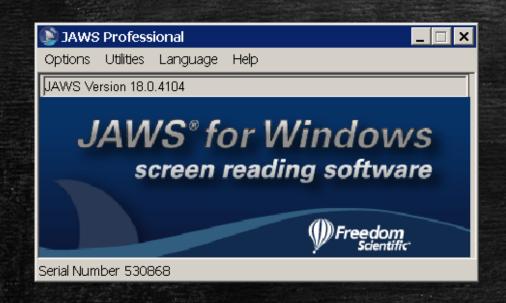
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Overview

Introduction to Accessibility

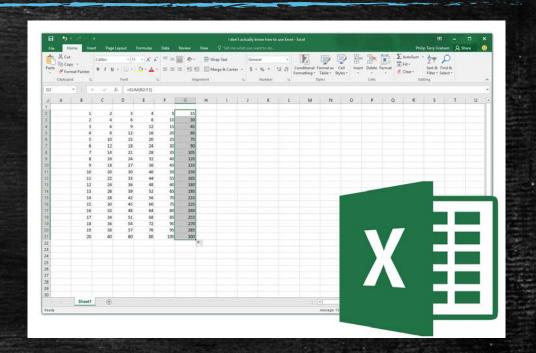




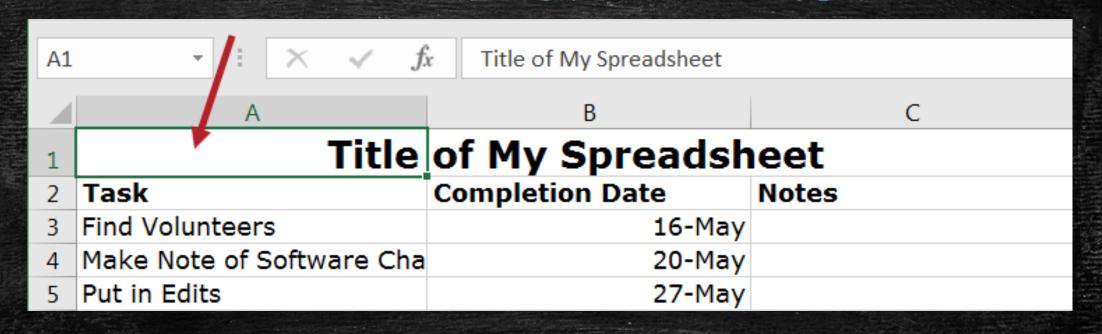


9 Basic Requirements for Excel

- 1. Start in A1
- 2. Stay in the Grid
- 3. No Blank Rows, Columns, Data Cells, and Hide Unused
- 4. No Merged or Split Cells in Data Portion
- Worksheet Names and Table Titles; No Blank Worksheets
- 6. Row and Column Headers
- 7. Alternative Text
- 8. End of Worksheet, Workbook
- 9. Before Saving

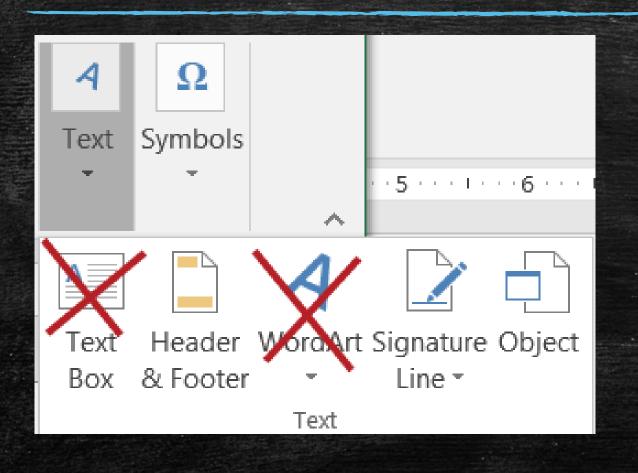


1. Start in A1

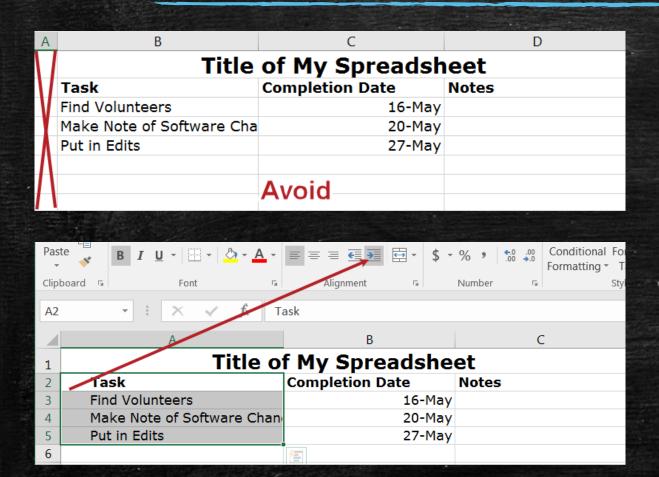


		The second secon			The second second	Styles	20113
A1 - (-)	f Press TAB to r	move to input areas. Press	UP or DOWN	N ARROW in co	olumn A to re	ead through the doc	cument.
A	В		0		- D	E	F

2. Stay in the Grid



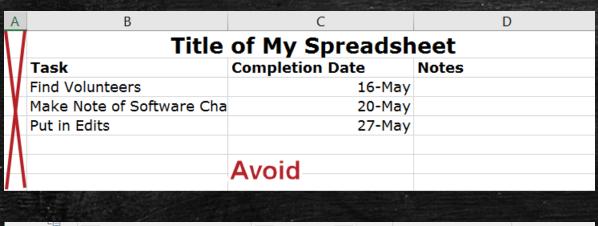
3. No Blank Rows, Columns, Data Cells

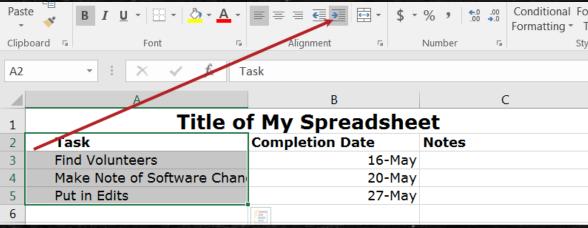


A		В	C		
1	Office 2013/2016 Accessibility Training Module Timeline - Summer 2016				
2	Task	Completion Date	Notes		
3	Find Volunteers	16-Ma	No data		
4	Look at old Scripts	20-Ma	No data		
5	Make note of Software changes	27-Ma	No data		
6	Put in Edits	1-Jur	No data		

Indent text instead of inserting an empty column

Hide Unused Rows and Columns





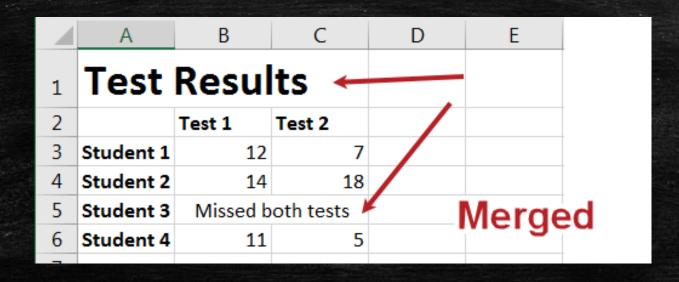
nnal Foi ng * T Styl



Indent text instead of inserting an empty column

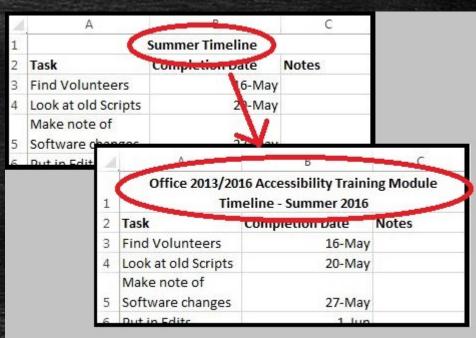
4. No Merged or Split Cells in Data Portion

\square	А	В	С			
1	Title of My Spreadsheet					
2	Task	Completion Date	Notes			
3	Find Volunteers	16-May				
4	Make Note of Software Changes	20-May				
5	Put in Edits	27-May				

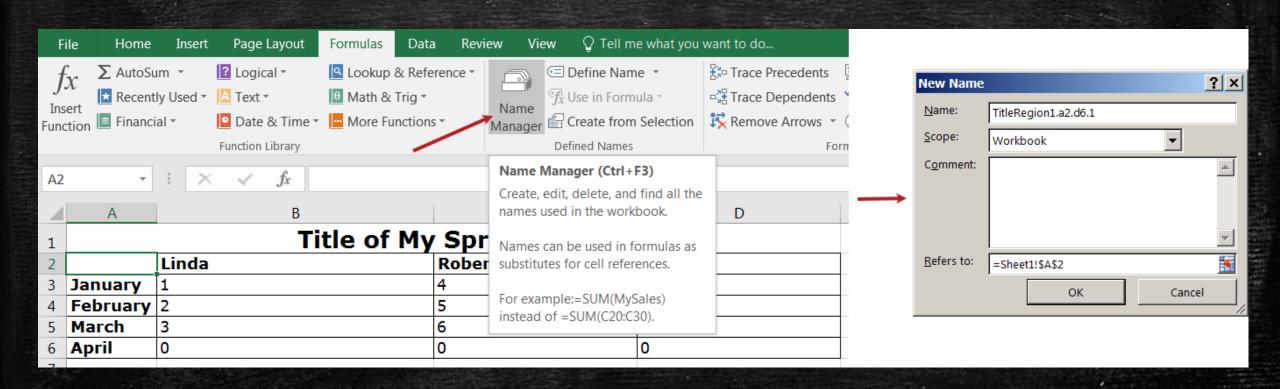


5. Worksheet Names, Table Titles, Blank Worksheets





6. Row and Column Headers



Using Excel's Built-In Table Header – Slide 1 of 4

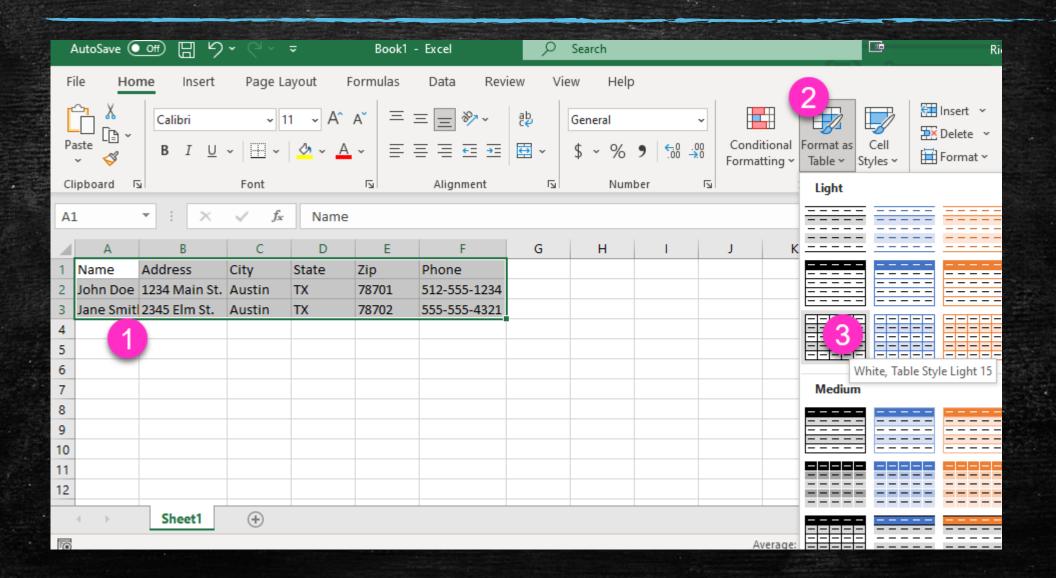
Only works with column headers

Works with JAWS 2019-2022 and Excel 2016-365

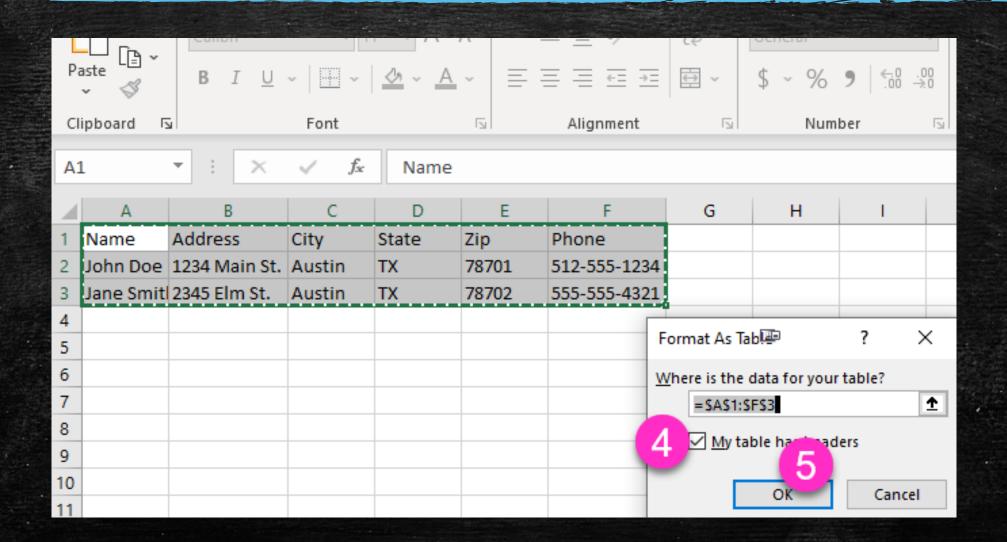
Doesn't work with NVDA or VoiceOver

See video

Using Excel's Built-In Table Header – Slide 2 of 4

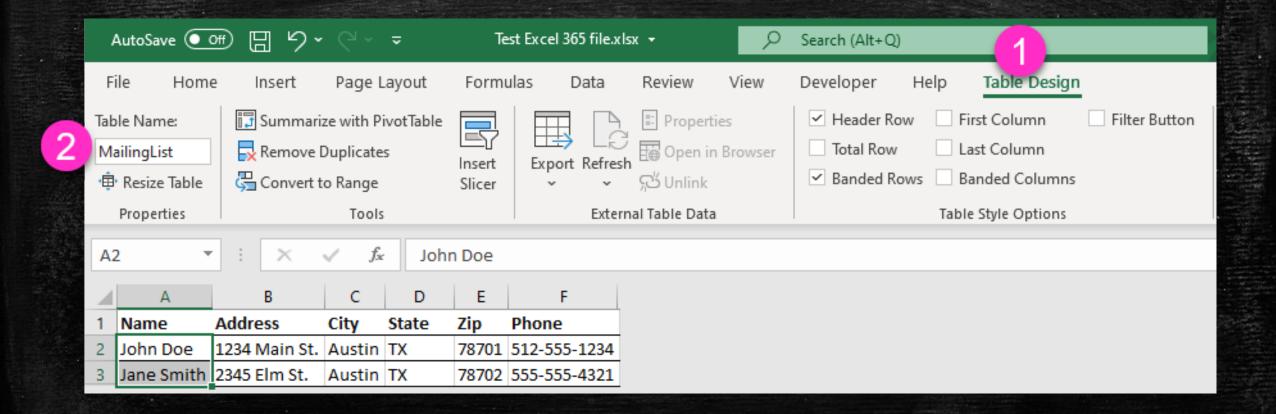


Using Excel's Built-In Table Header – Slide 3 of 4

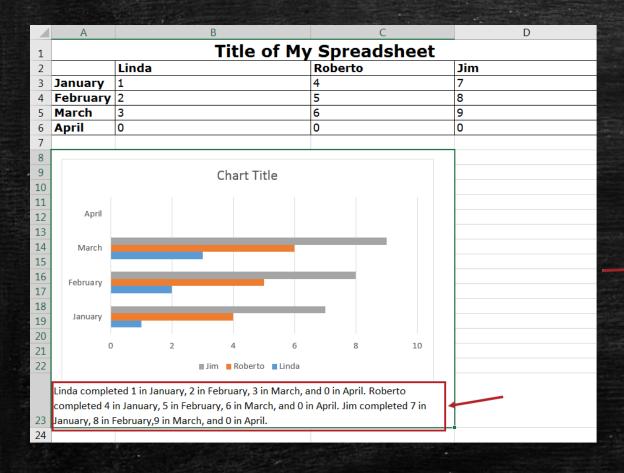


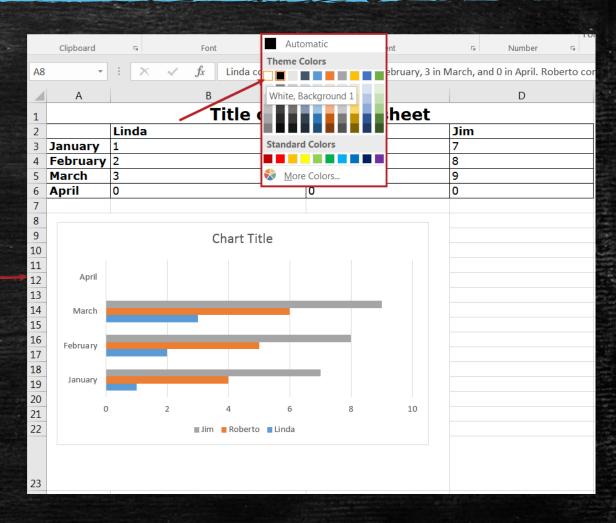
Using Excel's Built-In Table Header – Slide 4 of 4

• If you choose this method, give tables unique names



7. Alternative Text





8. End of Worksheet, Workbook

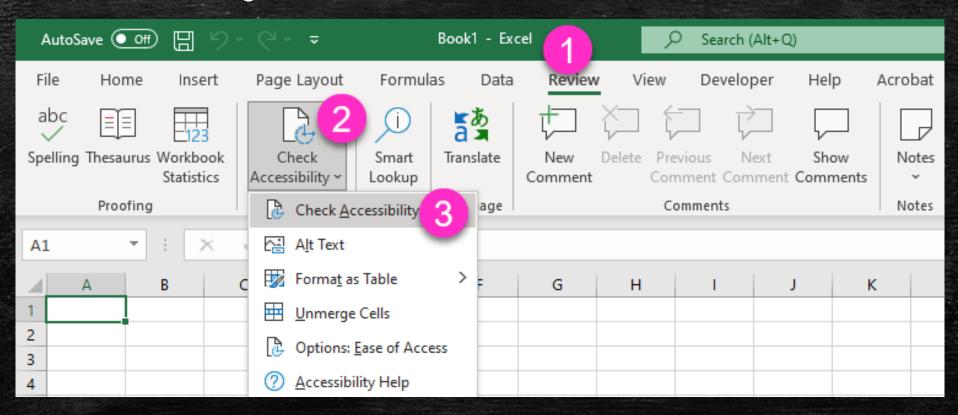
1	A	В	С				
1	Title of My Spreadsheet						
2	Task	Completion Date	Notes				
3	Find Volunteers	16-May	George will help				
4	Make Note of Software Changes	20-May	Emailed IT department				
5	Put in Edits	27-May	Schedule meeting				
6	END OF WORKSHEET						
7							

9. Before Saving

- 1. Select A1 cell on first sheet of workbook and save file unless you want users to start at a different part of the workbook when they open file
- 2. Check spelling
- 3. Set Print Area
- 4. Remove Comments
- 5. Run Accessibility Checker

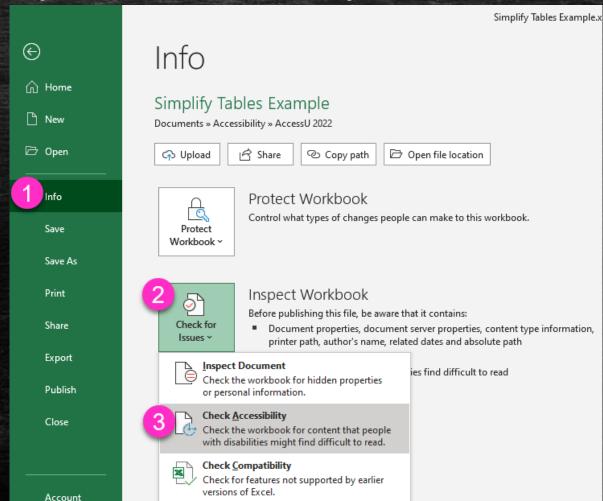
More on Accessibility Checker, Slide 1

Accessed through the Review tab



More on Accessibility Checker - Slide 2

Alternate way to reach accessibility checker

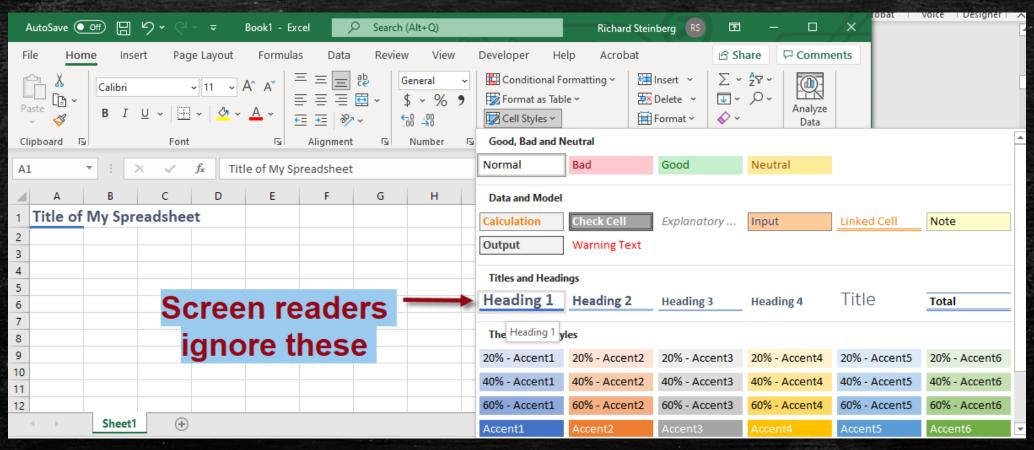


More on Accessibility Checker, Slide 3

- Will not flag lack of content in A1
- Will not flag tables that are not defined, missing row/column headers
- Will flag default sheet names, but doesn't flag undescriptive sheet names
- Will flag missing alt text for images, but cannot evaluate quality of alt text
- Will flag cell text with low contrast, but does not test charts, graphs and images

Excel Deficiencies - Slide 1

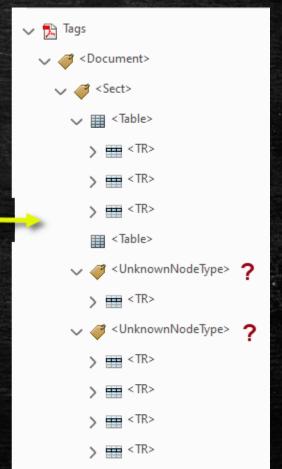
Formatting text using heading styles ignored by screen readers



Excel Deficiencies - Slide 2

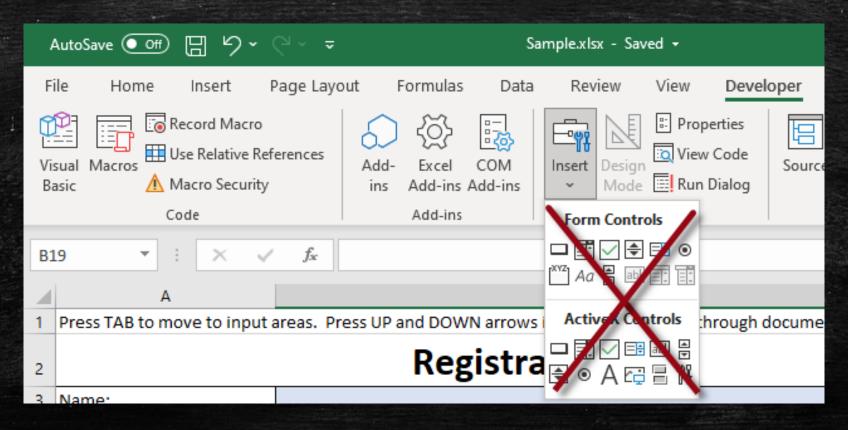
Converting Excel to accessible PDF is near impossible

4	A		В		С		D			
1	Department of Human Services									
2	FY 2020 Monthly Financial Report: Capital Budget									
3	Data through March 2020									
4	Capital Projects in Capital Rider	Appropriated		Op. Bgt.		Projected				
5	53001 BUILDING MAINTENANCE	\$	345,000	\$	345,000	\$	345,000			
6	53002 SEAT MANAGEMENT SERVICES	\$	2,000,000	\$2	2,000,000	\$2	2,000,000			
7	53003 COMPLIANCE WITH FERDERAL HIPAA	\$	35,690	\$	35,690	\$	35,690			
8	53004 FOOD SERVICE FACILITIES	\$	200,000	\$	200,000	\$	200,000			
9	53011 REHABWORKS	\$	-	\$	542,317	\$	542,317			
10	53150 DATA CENTER CONSOLIDATION	\$	4,444,272	\$2	2,949,136	\$2	2,949,136			
11	GRAND TOTAL, <i>DHS</i>	\$	7,024,962	\$6	5,072,143	\$ (6,072,143			



Excel Forms, Step 1

Form fields cannot be used because they lay on top of the surface of the spreadsheet and can't be reached by screen reader



Excel Forms, Basic Design

Designing Forms

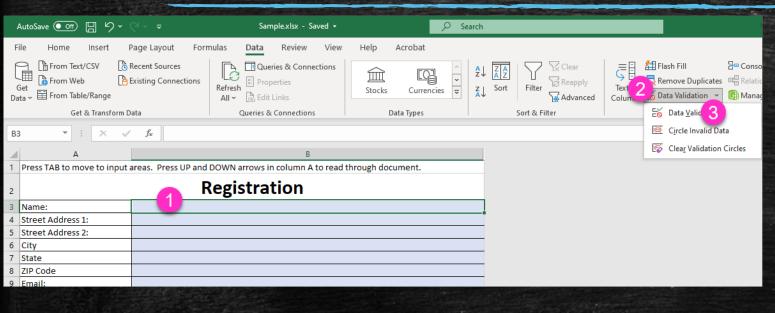
	Α	В					
1	Press TAB to move to input areas. Press UP and DOWN arrows in column A to read through document.						
2	Registration						
3	First Name:						
4	Last Name:						
5	Street Address 1:						
6	Street Address 2:						
7	City						
8	State						
9	ZIP Code						
10	Email:						

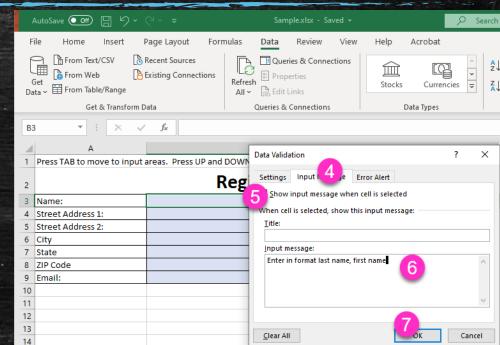
Excel Forms, Design Enhancements

Shade Input Cells and Add Border Lines for Visual Effect

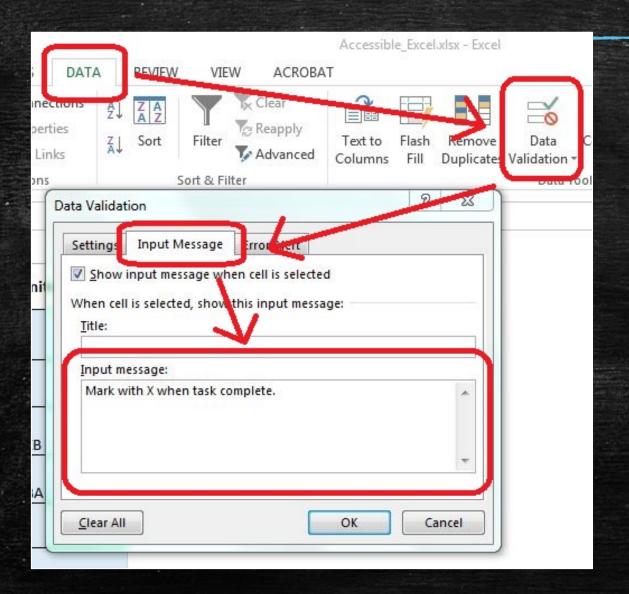
1	А	В				
1	ress TAB to move to input areas. Press UP and DOWN arrows in column A to read through document.					
2	Registration					
3	First Name:					
4	Last Name:					
5	Street Address 1:					
6	Street Address 2:					
7	City					
8	State					
9	ZIP Code					
10	Email:					

Excel Forms, Data Validation

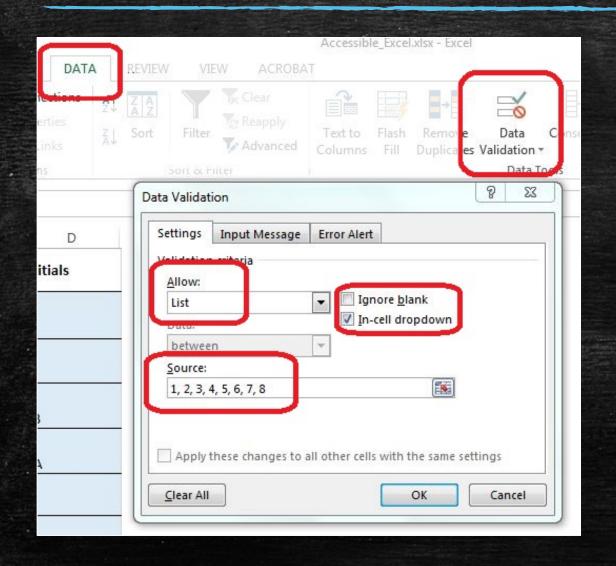




Excel Forms, Data Validation Example 2

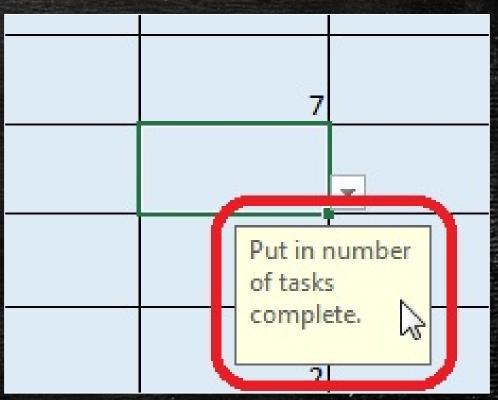


Excel Forms, Creating Drop Down Lists, Part 1



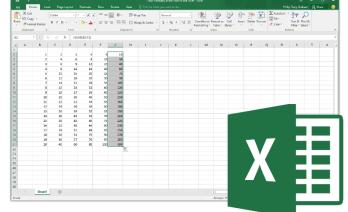
Excel Forms, Creating Drop Down Lists, Part 2

Record Audio		7		
Edit Audio		ſ		
Draw out story boards	X	1 2 3	ber	
Create Videos		4 5 6		
Edit Videos		8		
Upload				U



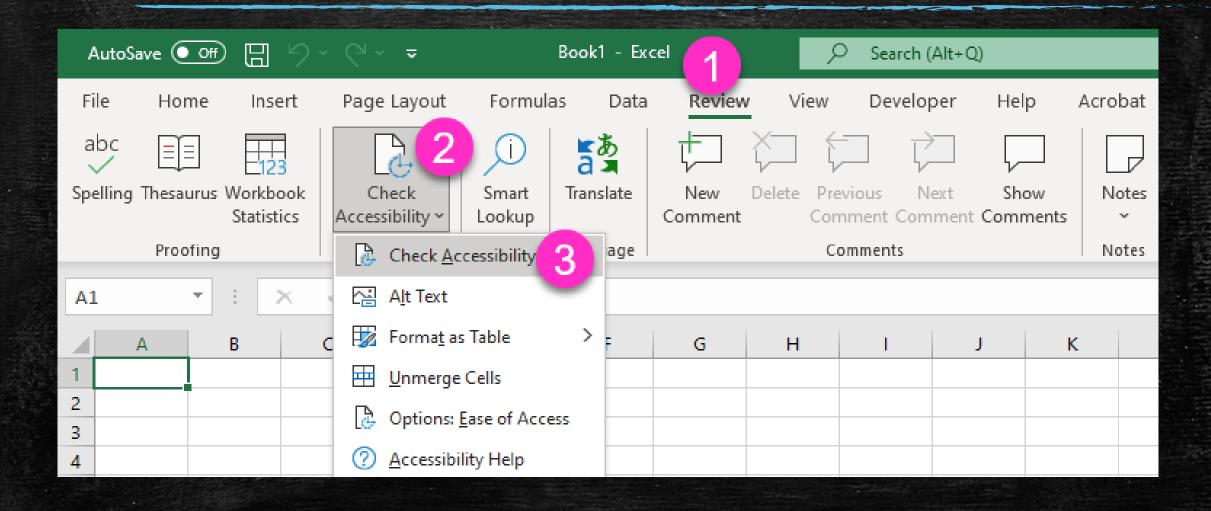
Tips for All MS Office



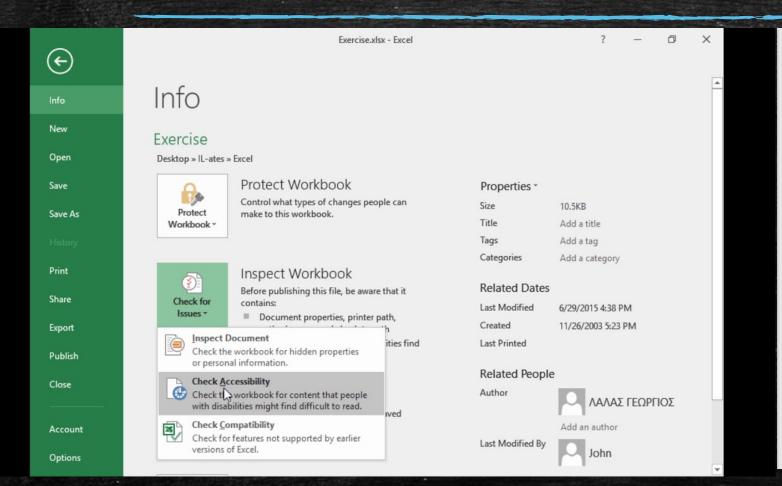




Using MS Office 365 Accessibility Checker



Using MS Office 2016 Accessibility Checker



Accessibility Checker ▼ ×



Inspection Results

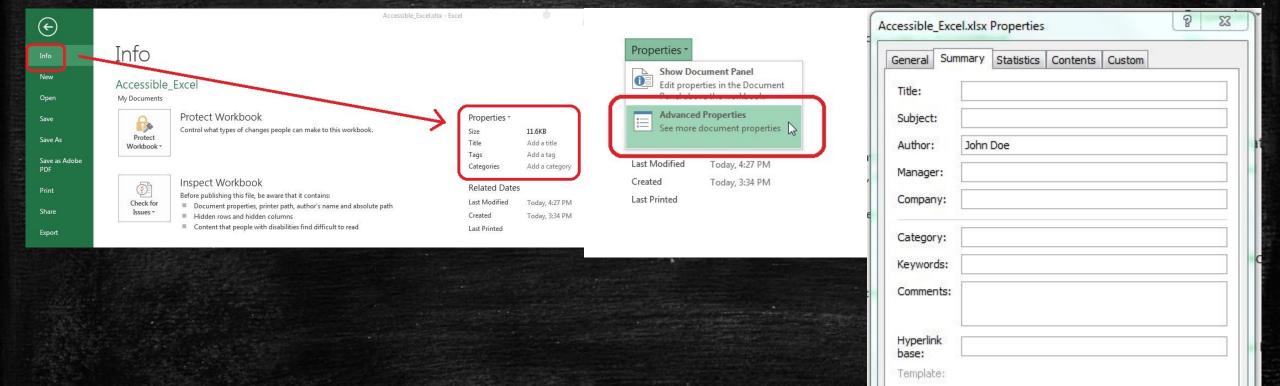
Frrors

- Missing Alt Text Picture 1
- No Header Row Specified Table

Warnings

- Merged or Split Cells Table Cell
- Repeated Blank Characters 9 Characters

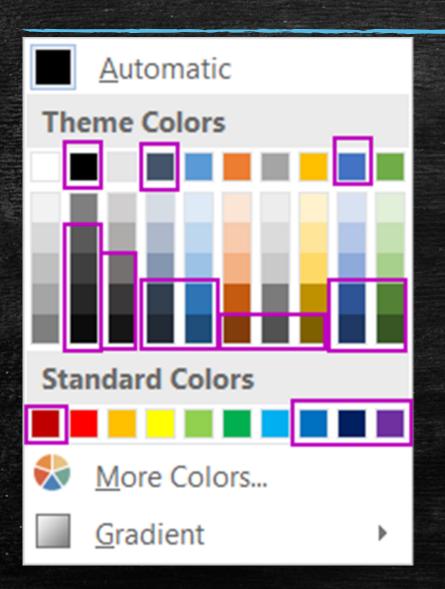
Document Properties



Save Thumbnails for All Excel Documents

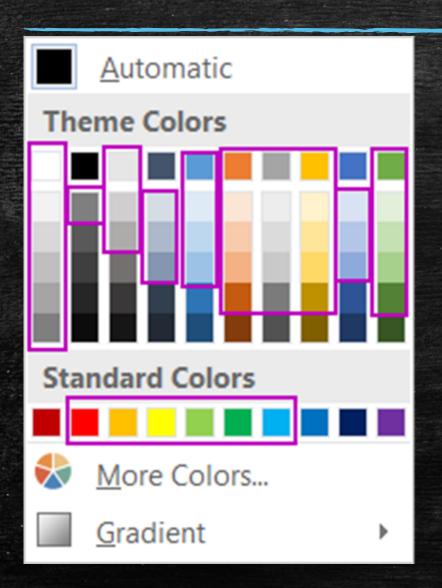
Cancel

Colors that work on white



The colors that are boxed work on a white background

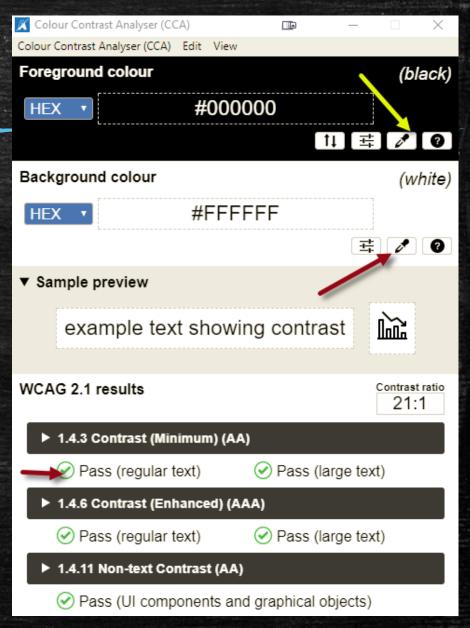
Colors that work on black



The colors that are boxed work on a black background

Colour Contrast Analyser

https://www.tpgi.com/color-contrast-checker/



Questions?

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Thank you