

Fix Excel Macro that Excludes Matching Rows

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Deliverable(s)

- Send an .xlsm file with the macro(s)
- (1) The ExcludeFromFilter macro should have the desired function, with the bugs fixed
- If other macros/functions needed to assist, include them in this Workbook
- (2) Send a separate text file clearly detailing the changes made to the code

Existing Function (Very Useful)

- You have a table
- You have selected a cell in the table (in Column_3 (say))
- You want to **now filter out (hide) (all)** the **rows** for which the Column_3 **cell value** is the same as the **selected cell value**
- By depending on another macro which enables the Filter DropDown buttons, this macro doesn't require the table to have the Filter DropDown buttons enabled first
- A feature Excel doesn't natively provide - big time saver!

Demonstrating Existing Function

#	A	B	C	Hello World	Another test
1	1	2	3	4	10
2	P	Q	R	S	9
3	10	20	30	40	8
4	11	222	333	80	11
5	80%	Q	33	99	13
6	G	H	I	J	16
7	P	E	L	G	R



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- Notice that in Col B cell containing Q is selected
- Notice that filter dropdown buttons are not visible
- Then, in the AFTER case, see that the rows containing Q in Column B are hidden
- To restore the table, simple run the clear_filter macro

Problem Statement

- Two issues (one is an enhancement)
- 1 : If you operated on Column A, you will see that the row containing the “80%” also gets hidden - incorrectly
 - “Rows contain percentages are in the column being used to filter are being filtered out incorrectly by the ExcludeFromFilter routing”
- 2 : Once an exclude filter is in place and we now update a cell in a column (Why? think of an Action-Item table and a Status column. You have hidden the Done items and now you change a new item to Done and want to hide it by running the macro on this new cell) to a value that matches an excluded list - we want to run the macro with this cell selected and have this row hidden. Doesn't work 😞 Need it to work 😊

Inventory

- test_exclude.xlsm - Excel Macro Enabled Workbook, containing :
 - clear_filter : will restore table to unfiltered state (CTRL-SHIFT-U)
 - ExcludeFromFilter : the Macro to be fixed, described earlier (CTRL-SHIFT-E)
 - Tbl_Fil_DD_OFF : If Table displays the dropdown buttons, turn them OFF
 - Tbl_Fil_DD_ON : Turn ON the display of the filter dropdown buttons
 - QuickSort : A sorting routine used by the ExcludeFromFilter macro
 - RemoveDuplicates : A Sub that may be used by ExcludeFromFilter (which was developed by someone else who knows the code better than me 😊)

Recommended WorkFlow

- Download test_exclude.xlsm and do the development using it to test
- Go through the checklist to ensure that all cases are handled correctly
- When done, (if necessary) download test_exclude to test_exclude_check.xlsm and replace/add macros as necessary and run the test-cases to confirm features added/fixed
- Download test_exclude.xlsm to test_exclude_final.xlsm and add/replace macros and send it to me

Test Cases

- With the workbook in original form, select the cell with 222 on the Start sheet and run the Exclude macro, now only rows 1,2,3,5,6,7 in the # column should be visible. The filter dropdown buttons should be visible and the one for column Header B should show that a filter is applied (Funnel icon)
- Run the clear_filter macro to restore (also achieved by going to Table Design and then unchecking and checking the box for “Header Row”)
- Now select the cell with 11 in Column with Header A and run the Exclude macro. You will see that the row with#=5 is also hidden - incorrectly

Checklist

1. Verified function?
2. Downloaded test_exclude.xlsm without any changes to sheets?
3. Added/updated macros?
4. Separate text doc detailing all changes to code?

Lessons

- Did not have a good corner case - wasn't aware of - since the existing macro worked okay
- The delivered macro would also hide rows with the filter column entry blank - **lesson - always have corner cases in your test-cases**

Final Working Solution



rcalma_ExcludeM
acro.bas

- Thank you Ronald Calma
- The Excel Magician
- Thanks to Jordan Goldmeier for original implementation
- Find the file in the files sub-directory on GitHub