CSCI-1102: Introduction to Computing

Microsoft Excel 2: Filtering Data

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Filtering Introduction

- If your worksheet contains a lot of content, it can be difficult to find information quickly.
- ► Filters can be used to narrow down the data in your worksheet, allowing you to view only the information you need.

- ▶ In our example, we'll apply a filter to an equipment log worksheet to display only the laptops and projectors that are available for checkout.
 - In order for filtering to work correctly, your worksheet should include a header row, which is used to identify the name of each column. In our example, our worksheet is organized into different columns identified by the header cells in row 1: ID#, Type, Equipment Detail, and so on.

4	Α	В	С	D	Е	F
1	ID#	Туре	Equipment Detail	Checked Out	Checked In	Checked Out By
2	3000	Camera	Saris Lumina Digital Camera	12-May-13	15-May-13	Shannon Nguyen
3	3005	Camera	Saris Zoom Z-60 Digital Camera	27-Jul-13	06-Aug-13	Sela Shepard
4	3070	Camera	Omega PixL Digital Camcorder	06-Oct-13		Min Seung
5	1021	Laptop	15" EDI SmartPad L200-3	15-Sep-13	01-Oct-13	Sofie Ragnar
6	1022	Laptop	15" EDI SmartPad L200-3	14-Aug-13	16-Aug-13	Hank Sorenson
7	1023	Laptop	15" EDI SmartPad L200-3	08-Aug-13	15-Aug-13	Jennifer Weiss
8	1025	Laptop	15" EDI SmartPad L200-4X	26-Sep-13	04-Oct-13	Min Seung
9	1031	Laptop	17" Saris X-10 Laptop	04-Oct-13		Nick Ortiz
10	1032	Laptop	17" Saris X-10 Laptop	19-Sep-13		Stanley Geyer
11	1033	Laptop	17" Saris X-10 Laptop	24-Sep-13	26-Sep-13	George D'Agosta

Select the Data tab, then click the Filter command.



3 A drop-down arrow

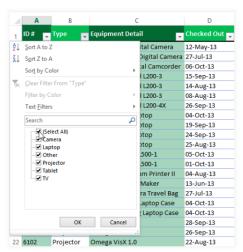
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will appear in the header cell for each column.

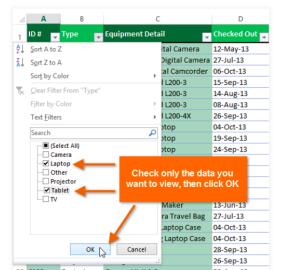
Click the drop-down arrow for the column you want to filter. In our example, we will filter column B to view only certain types of equipment.

4	Α	В	С	D	Е	F
1	ID#	Туре	Equipment Detail	Checked Out	Checked In	Checked Out By
2	3000	Camera 🕺	karis Lumina Digital Camera	12-May-13	15-May-13	Shannon Nguyen
3	3005		pe: howing All) n Z-60 Digital Camera	27-Jul-13	06-Aug-13	Sela Shepard
4	3070	Camera	Omega PixL Digital Camcorder	06-Oct-13		Min Seung
5	1021	Laptop	15" EDI SmartPad L200-3	15-Sep-13	01-Oct-13	Sofie Ragnar
6	1022	Laptop	15" EDI SmartPad L200-3	14-Aug-13	16-Aug-13	Hank Sorenson
7	1023	Laptop	15" EDI SmartPad L200-3	08-Aug-13	15-Aug-13	Jennifer Weiss
8	1025	Laptop	15" EDI SmartPad L200-4X	26-Sep-13	04-Oct-13	Min Seung
9	1031	Laptop	17" Saris X-10 Laptop	04-Oct-13		Nick Ortiz
10	1032	Laptop	17" Saris X-10 Laptop	19-Sep-13		Stanley Geyer
11	1033	Laptop	17" Saris X-10 Laptop	24-Sep-13	26-Sep-13	George D'Agosta

- 5 The Filter menu will appear.
- 6 Uncheck the box next to Select All to quickly deselect all data.



Check the boxes next to the data you want to filter, then click OK. In this example, we will check Laptop and Tablet to view only those types of equipment.





8 The data will be **filtered**, temporarily hiding any content that doesn't match the criteria. In our example, only laptops and tablets are visible.

4	Α	В	С	D	E	F
1	ID#	Туре	Equipment Detail	Checked Out	Checked In	Checked Out By
5	1021	Laptop	15" EDI SmartPad L200-3	15-Sep-13	01-Oct-13	Sofie Ragnar
6	1022	Laptop	15" EDI SmartPad L200-3	14-Aug-13	16-Aug-13	Hank Sorenson
7	1023	Laptop	15" EDI SmartPad L200-3	08-Aug-13	15-Aug-13	Jennifer Weiss
8	1025	Laptop	15" EDI SmartPad L200-4X	26-Sep-13	04-Oct-13	Min Seung
9	1031	Laptop	17" Saris X-10 Laptop	04-Oct-13		Nick Ortiz
10	1032	Laptop	17" Saris X-10 Laptop	19-Sep-13		Stanley Geyer
11	1033	Laptop	17" Saris X-10 Laptop	24-Sep-13	26-Sep-13	George D'Agosta
12	1034	Laptop	17" Saris X-10 Laptop	25-Aug-13	27-Aug-13	Jay Peralta
26	1011	Tablet	Saris SlimTab Pro	04-Aug-13		Jay Peralta
27	1012	Tablet	Saris SlimTab Pro	29-Sep-13		August Zorn
31						
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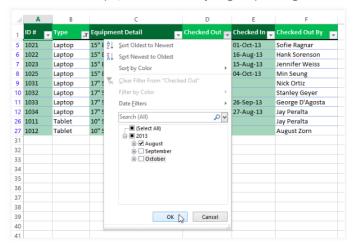
To apply multiple filters

- ► Filters are cumulative, which means you can apply multiple filters to help narrow down your results.
- In this example, we've already filtered our worksheet to show laptops and projectors, and we'd like to narrow it down further to only show laptops and projectors that were checked out in August.
 - 1 Click the drop-down arrow for the column you want to filter. In this example, we will add a filter to column D to view information by date.

4	Α	В	С	D	E	F
1	ID#	Type 🦼	Equipment Detail			Checked Out By
5	1021	Laptop	15" EDI SmartPad L200-3	15-Sep-13	n1 Oct 12 lecked Out:	Sofie Ragnar
6	1022	Laptop	15" EDI SmartPad L200-3	14 Aug 12	howing All)	Hank Sorenson
7	1023	Laptop	15" EDI SmartPad L200-3		15-Aug-13	Jennifer Weiss
8	1025	Laptop	15" EDI SmartPad L200-4X	26-Sep-13	04-Oct-13	Min Seung
9	1031	Laptop	17" Saris X-10 Laptop	04-Oct-13		Nick Ortiz
10	1032	Laptop	17" Saris X-10 Laptop	19-Sep-13		Stanley Geyer
11	1033	Laptop	17" Saris X-10 Laptop	24-Sep-13	26-Sep-13	George D'Agosta
12	1034	Laptop	17" Saris X-10 Laptop	25-Aug-13	27-Aug-13	Jay Peralta
26	1011	Tablet	Saris SlimTab Pro	04-Aug-13		Jay Peralta
27	1012	Tablet	Saris SlimTab Pro	29-Sep-13		August Zorn
31						
32						

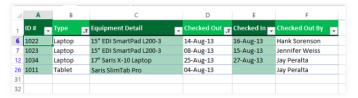
To apply multiple filters

- 2 The Filter menu will appear.
- 3 Check or uncheck the boxes depending on the data you want to filter, then click OK. In our example, we'll uncheck everything except for August.



To apply multiple filters

4 The new filter will be applied. In our example, the worksheet is now filtered to show only laptops and tablets that were checked out in August.



To clear a filter

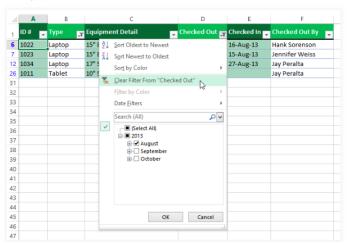
- After applying a filter, you may want to remove or clear it from your worksheet so you'll be able to filter content in different ways.
 - 1 Click the **drop-down arrow** for the filter you want to clear. In our example, we'll clear the filter in column **D**.

4	Α		В		С		D		E	F	
1	ID#	¥	Туре	Ţ,	Equipment Detail	¥	Checked Out	-ñ	Checked In	Checked Out By	¥
6	1022		Laptop		15" EDI SmartPad L200-3	Ξ	14-Aug-13	7	ecked Out:	⊔ank Sorenson	Π
7	1023		Laptop		15" EDI SmartPad L200-3		08-Aug-13	Ea	uals "August 201	3" ennifer Weiss	
12	1034		Laptop		17" Saris X-10 Laptop		25-Aug-13	-	2/-Aug-13	Jay Peralta	
26	1011		Tablet		Saris SlimTab Pro		04-Aug-13			Jay Peralta	
31											
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The Filter menu will appear.

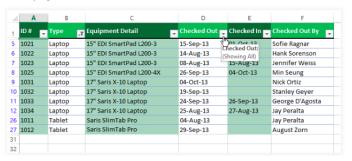
To clear a filter

Choose Clear Filter From [COLUMN NAME] from the Filter menu. In our example, we'll select Clear Filter From "Checked Out".



To clear a filter

4 The filter will be cleared from the column. The previously hidden data will be displayed.



To remove all filters



To remove all filters from your worksheet, click the **Filter** command on the **Data** tab.



Advanced filtering

- If you need to filter for something specific, basic filtering may not give you enough options.
- Fortunately, Excel includes many advanced filtering tools, including search which can narrow your results to help find exactly what you need.

To filter with search

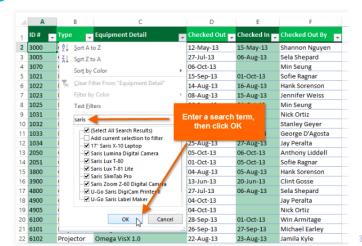
- Excel allows you to search for data that contains an exact phrase, number, date, and more. In our example, we'll use this feature to show only Saris brand products in our equipment log.
 - Select the **Data** tab, then click the **Filter** command. A **drop-down arrow** will appear in the header cell for each column. Note: If you've already added filters to your worksheet, you can skip this step.
 - Click the drop-down arrow for the column you want to filter. In our example, we'll filter column C.

4	Α	В	С	D	E	F
1	ID#	Туре	Equipment Detail		Checked In	Checked Out By
2	3000	Camera	Saris Lumina Digital Camera	12-May-13	15-May-13	Shannon Nguyen
3	3005	Camera	Saris Zoom 7-60 Digital Camer	quipment Detail: Showing All)	06-Aug-13	Sela Shepard
4	3070	Camera	Omega PixL Digital Camcorder	00-UCL-13		Min Seung
5	1021	Laptop	15" EDI SmartPad L200-3	15-Sep-13	01-Oct-13	Sofie Ragnar
6	1022	Laptop	15" EDI SmartPad L200-3	14-Aug-13	16-Aug-13	Hank Sorenson
7	1023	Laptop	15" EDI SmartPad L200-3	08-Aug-13	15-Aug-13	Jennifer Weiss
8	1025	Laptop	15" EDI SmartPad L200-4X	26-Sep-13	04-Oct-13	Min Seung
9	1031	Laptop	17" Saris X-10 Laptop	04-Oct-13		Nick Ortiz
10	1032	Laptop	17" Saris X-10 Laptop	19-Sep-13		Stanley Geyer

To filter with search

- The **Filter menu** will appear. Enter a **search term** into the **search box**.

 Search results will appear automatically below the **Text Filters** field as you type. In our example, we'll type **saris** to find all Saris brand equipment.
- 4 When you're done, click **OK**.





To filter with search

The worksheet will be **filtered** according to your search term. In our example, the worksheet is now filtered to show only Saris brand equipment.

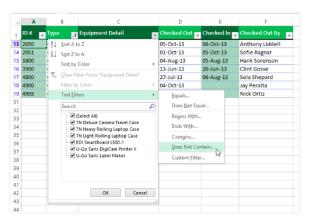
4	Α	В	С	D	E	F
1	ID#	Туре	Equipment Detail	Checked Out	Checked In	Checked Out By
2	3000	Camera	Saris Lumina Digital Camera	12-May-13	15-May-13	Shannon Nguyen
3	3005	Camera	Saris Zoom Z-60 Digital Camera	27-Jul-13	06-Aug-13	Sela Shepard
9	1031	Laptop	17" Saris X-10 Laptop	04-Oct-13		Nick Ortiz
10	1032	Laptop	17" Saris X-10 Laptop	19-Sep-13		Stanley Geyer
11	1033	Laptop	17" Saris X-10 Laptop	24-Sep-13	26-Sep-13	George D'Agosta
12	1034	Laptop	17" Saris X-10 Laptop	25-Aug-13	27-Aug-13	Jay Peralta
15	3800	Other	U-Go Saris DigiCam Printer II	04-Aug-13	05-Aug-13	Hank Sorenson
16	3900	Other	U-Go Saris Label Maker	13-Jun-13	20-Jun-13	Clint Gosse
23	6200	Projector	Saris Lux T-80	01-Sep-13	04-Sep-13	Jolie Chaturvedi
24	6301	Projector	Saris Lux T-81 Lite	10-Sep-13		Marques Herndon
25	6302	Projector	Saris Lux T-81 Lite	08-Sep-13	15-Sep-13	Dean Sorenson
26	1011	Tablet	Saris SlimTab Pro	04-Aug-13		Jay Peralta
27	1012	Tablet	Saris SlimTab Pro	29-Sep-13		August Zorn
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- Advanced text filters can be used to display more specific information, such as cells that contain a certain number of characters, or data that excludes a specific word or number.
- ▶ In our example, we've already filtered our worksheet to only show items with Other in the Type column, but we'd like to exclude any item containing the word case.

- Select the **Data** tab, then click the **Filter** command. A **drop-down arrow** will appear in the header cell for each column. Note: If you've already added filters to your worksheet, you can skip this step.
- 2 Click the drop-down arrow for the column you want to filter. In our example, we'll filter column C.

4	Α	В	С	D	Е	F
1	ID#	Туре	Equipment Detail	Checked Out	Checked In	Checked Out By
13	2050	Other	EDI SmartBoard L500-1	05-Oct-13	06-Oct-13	Anthony Liddell
14	2051	Other	EDI SmartBoard L500-1	uipment Detail: howing All)	05-Oct-13	Sofie Ragnar
15	3800	Other	U-Go Saris DigiCam Printer II		05-Aug-13	Hank Sorenson
16	3900	Other	U-Go Saris Label Maker	13-Jun-13	20-Jun-13	Clint Gosse
17	4800	Other	7N Deluxe Camera Travel Case	27-Jul-13	06-Aug-13	Sela Shepard
18	4900	Other	7N Light Rolling Laptop Case	04-Oct-13		Jay Peralta
19	4905	Other	7N Heavy Rolling Laptop Case	04-Oct-13		Nick Ortiz
31						

3 The Filter menu will appear. Hover the mouse over Text Filters, then select the desired text filter from the drop-down menu. In our example, we'll choose Does Not Contain... to view data that does not contain specific text.



The Custom AutoFilter dialog box will appear. Enter the desired text to the right of the filter, then click OK. In our example, we'll type case to exclude any items containing this word.



5 The data will be filtered by the selected text filter. In our example, our worksheet now displays items in the **Other** category that do not contain the word case.

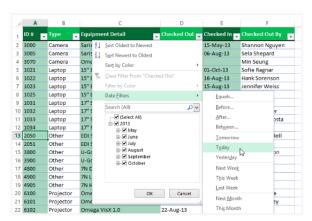
4	Α	В	С	D	E	F
1	ID#	Туре	Equipment Detail	Checked Out	Checked In	Checked Out By
13	2050	Other	EDI SmartBoard L500-1	05-Oct-13	06-Oct-13	Anthony Liddell
14	2051	Other	EDI SmartBoard L500-1	01-Oct-13	05-Oct-13	Sofie Ragnar
15	3800	Other	U-Go Saris DigiCam Printer II	04-Aug-13	05-Aug-13	Hank Sorenson
16	3900	Other	U-Go Saris Label Maker	13-Jun-13	20-Jun-13	Clint Gosse
31						

- Advanced date filters can be used to view information from a certain time period, such as last year, next quarter, or between two dates.
- ▶ In this example, we will use advanced date filters to view only equipment that has been checked out today.

- 1 Select the **Data** tab, then click the **Filter** command. A **drop-down arrow** will appear in the header cell for each column. Note: If you've already added filters to your worksheet, you can skip this step.
- 2 Click the drop-down arrow for the column you want to filter. In our example, we will filter column D to view only a certain range of dates.

4	Α	В	С	D	E	F
1	ID#	Туре	Equipment Detail	Checked Out	Checked In	Checked Out By
2	3000	Camera	Saris Lumina Digital Camera	12-May-1	hecked Out:	Shannon Nguyen
3	3005	Camera	Saris Zoom Z-60 Digital Camera	27-Jul-1 _{(S}	howing All)	Sela Shepard
4	1021	Laptop	15" EDI SmartPad L200-3	15-Sep-13	01-Oct-13	Sofie Ragnar
5	1022	Laptop	15" EDI SmartPad L200-3	14-Aug-13	16-Aug-13	Hank Sorenson
6	1023	Laptop	15" EDI SmartPad L200-3	08-Aug-13	15-Aug-13	Jennifer Weiss
7	3070	Camera	Omega PixL Digital Camcorder	06-Oct-13		Min Seung
8	1025	Laptop	15" EDI SmartPad L200-4X	26-Sep-13	04-Oct-13	Min Seung
9	1031	Laptop	17" Saris X-10 Laptop	04-Oct-13		Nick Ortiz
10	1032	Laptop	17" Saris X-10 Laptop	19-Sep-13		Stanley Geyer
11	1033	Laptop	17" Saris X-10 Laptop	24-Sep-13	26-Sep-13	George D'Agosta
12	1034	Laptop	17" Saris X-10 Laptop	25-Aug-13	27-Aug-13	Jay Peralta

3 The Filter menu will appear. Hover the mouse over Date Filters, then select the desired date filter from the drop-down menu. In our example, we'll select Today to view equipment that has been checked out on today's date.



The worksheet will be filtered by the selected date filter. In our example, we can now see which items have been checked out **today**.





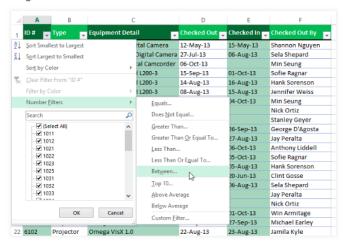
If you're working along with the example file, your results will be different from the images above. If you want, you can change some of the dates so the filter will give more results.

- Advanced number filters allow you to manipulate numbered data in different ways.
- In this example, we will display only certain types of equipment based on the range of ID numbers.

- Select the Data tab on the Ribbon, then click the Filter command. A drop-down arrow will appear in the header cell for each column. Note: If you've already added filters to your worksheet, you can skip this step.
- 2 Click the drop-down arrow for the column you want to filter. In our example, we'll filter column A to view only a certain range of ID numbers.

4	Α	В	С	D	E	F
1	ID#	Туре	Equipment Detail	Checked Out	Checked In	Checked Out By
2	3000	ID#:	Saris Lumina Digital Camera	12-May-13	15-May-13	Shannon Nguyen
3	3005	(Showing All)	Saris Zoom Z-60 Digital Camera	27-Jul-13	06-Aug-13	Sela Shepard
4	1021	Laptop	15" EDI SmartPad L200-3	15-Sep-13	01-Oct-13	Sofie Ragnar
5	1022	Laptop	15" EDI SmartPad L200-3	14-Aug-13	16-Aug-13	Hank Sorenson
6	1023	Laptop	15" EDI SmartPad L200-3	08-Aug-13	15-Aug-13	Jennifer Weiss
7	3070	Camera	Omega PixL Digital Camcorder	06-Oct-13		Min Seung
8	1025	Laptop	15" EDI SmartPad L200-4X	26-Sep-13	04-Oct-13	Min Seung
9	1031	Laptop	17" Saris X-10 Laptop	04-Oct-13		Nick Ortiz
10	1032	Laptop	17" Saris X-10 Laptop	19-Sep-13		Stanley Geyer
11	1033	Laptop	17" Saris X-10 Laptop	24-Sep-13	26-Sep-13	George D'Agosta
12	1034	Laptop	17" Saris X-10 Laptop	25-Aug-13	27-Aug-13	Jay Peralta

The **Filter menu** will appear. Hover the mouse over **Number Filters**, then select the desired number filter from the drop-down menu. In our example, we will choose **Between** to view ID numbers between a specific number range.



The Custom AutoFilter dialog box will appear. Enter the desired number(s) to the right of each filter, then click OK. In our example, we want to filter for ID numbers greater than or equal to 3000 but less than or equal to 4000, which will display ID numbers in the 3000-4000 range.



5 The data will be filtered by the selected number filter. In our example, only items with an ID number between 3000 and 4000 are visible.

À	Α	В	С	D	Е	F
1	ID#	Туре	Equipment Detail	Checked Out	Checked In	Checked Out By
2	3000	Camera	Saris Lumina Digital Camera	12-May-13	15-May-13	Shannon Nguyen
3	3005	Camera	Saris Zoom Z-60 Digital Camera	27-Jul-13	06-Aug-13	Sela Shepard
4	3070	Camera	Omega PixL Digital Camcorder	06-Oct-13		Min Seung
15	3800	Other	U-Go Saris DigiCam Printer II	04-Aug-13	05-Aug-13	Hank Sorenson
16	3900	Other	U-Go Saris Label Maker	13-Jun-13	20-Jun-13	Clint Gosse
31						

Reference

https://edu.gcfglobal.org/en/excel2013/