

Creating an interactive scatterplot

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LAB

You have been asked to create a mechanism to highlight a specific area of a chart you find most interesting.

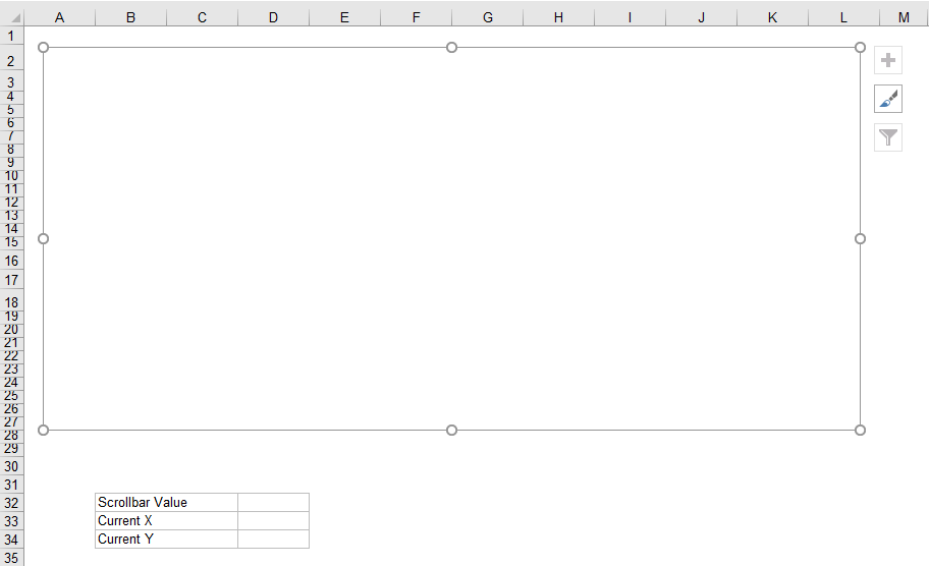
MODULE REQUIREMENTS

- ▶ Link chart to data.
- ▶ Insert form control checkbox.
- ▶ Create selector mechanism.

HINTS

For form control properties, right + click > Format Control....

STEP-BY-STEP INSTRUCTIONS

Click Steps	Screen Shots
<div>1. Open Module 11 – Module Tornado Lab1. Go to the example tab.</div> <div>2. There is a scatterplot chart already placed on the spreadsheet. However, because there is no data in it, it will appear as invisible.</div> <div>3. Right click into the area shown in the image and go to Select Data.</div>	

Click Steps

- The Select Data Source popup appears. Click the Add button to add a new series.

Screen Shots

Select Data Source

Chart data range:

Switch Row/Column

Legend Entries (Series)

Add Edit Remove

Horizontal (Category) Axis Labels

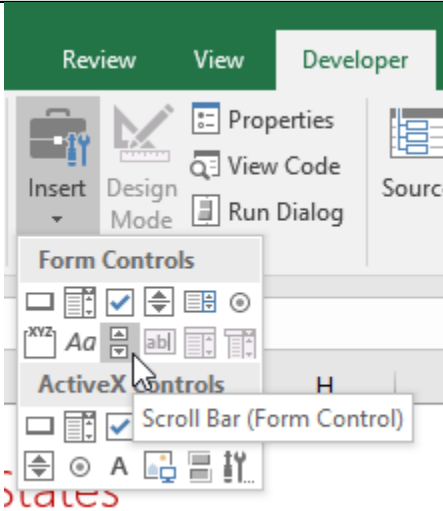
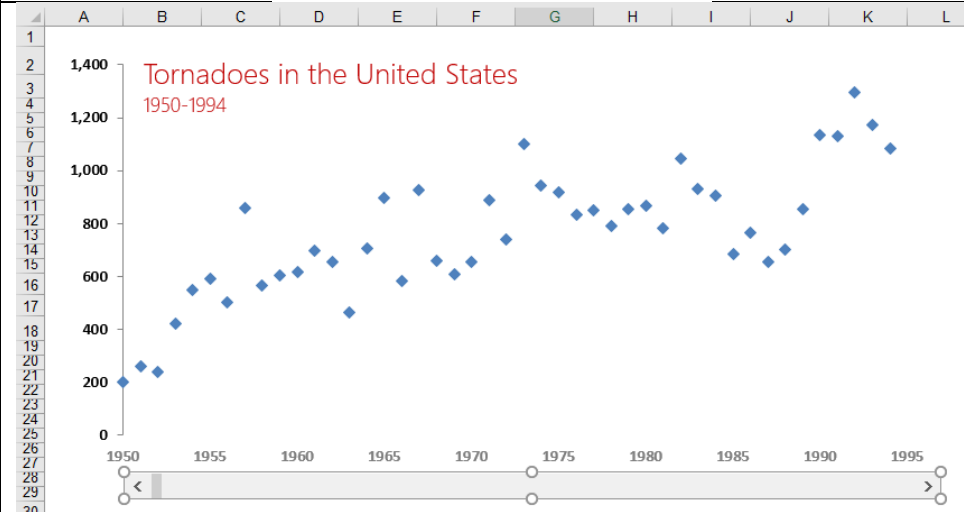
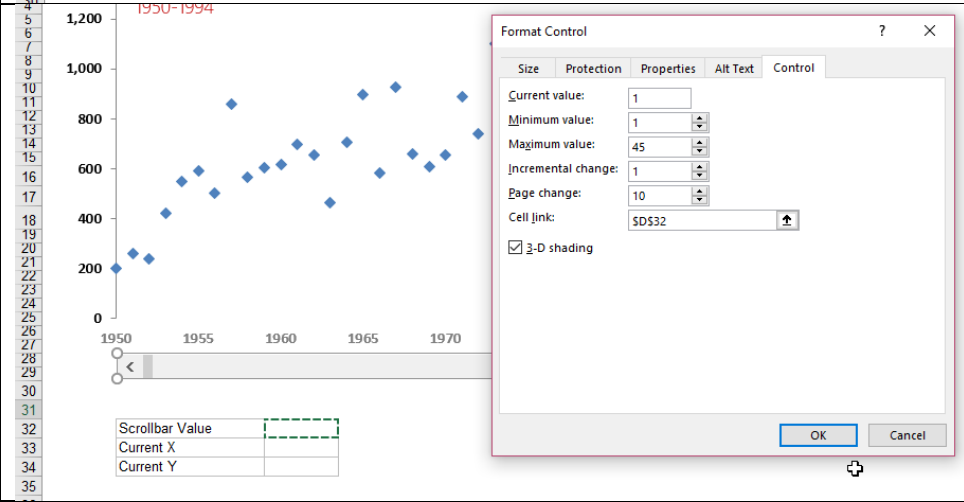
Edit

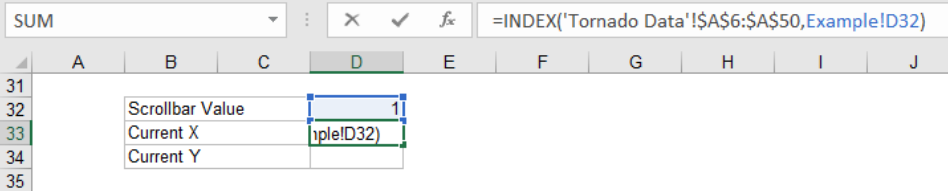
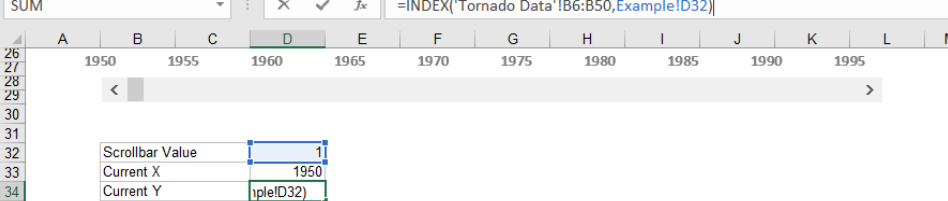
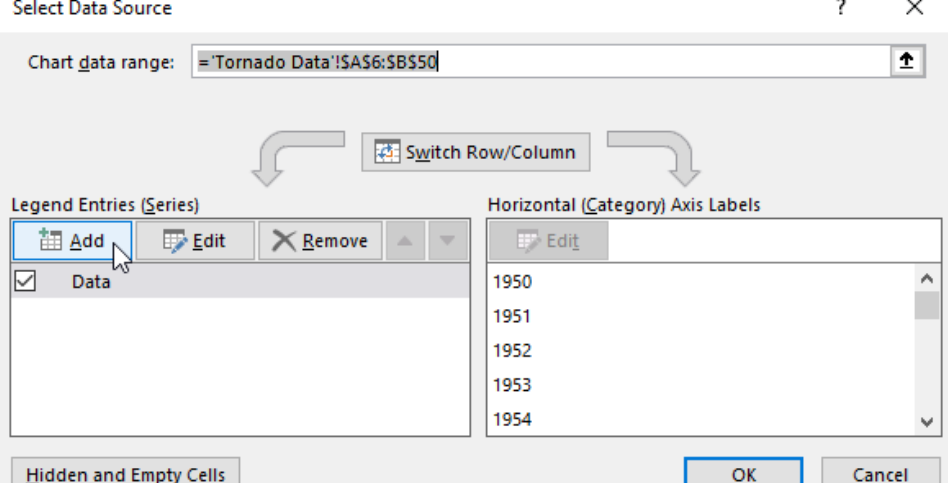
Hidden and Empty Cells

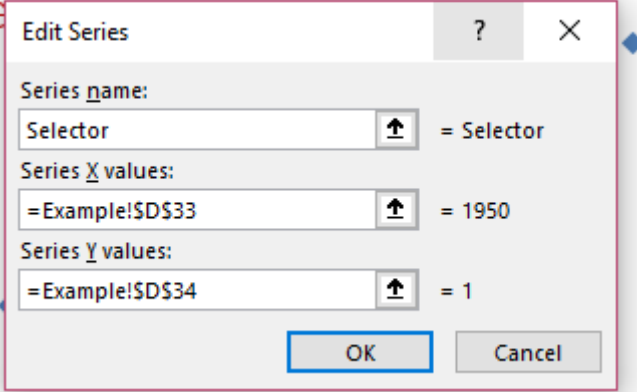
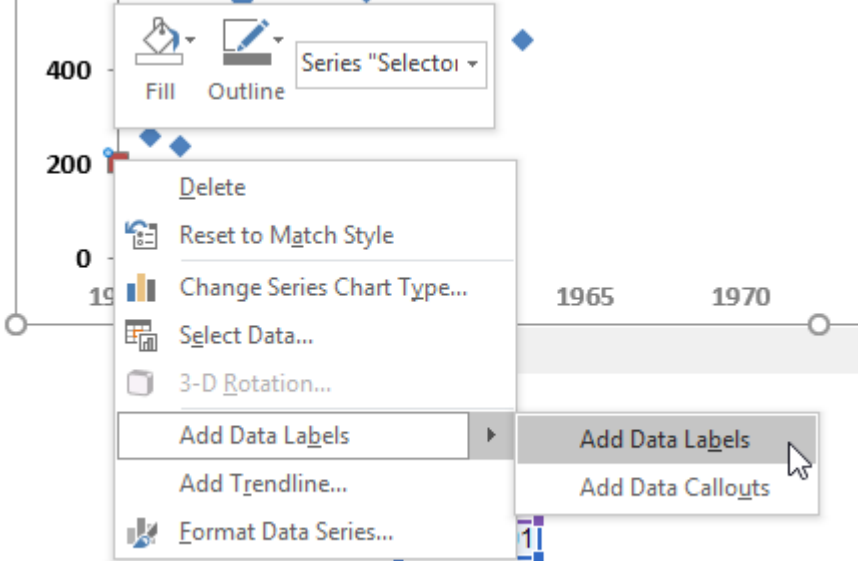
OK Cancel

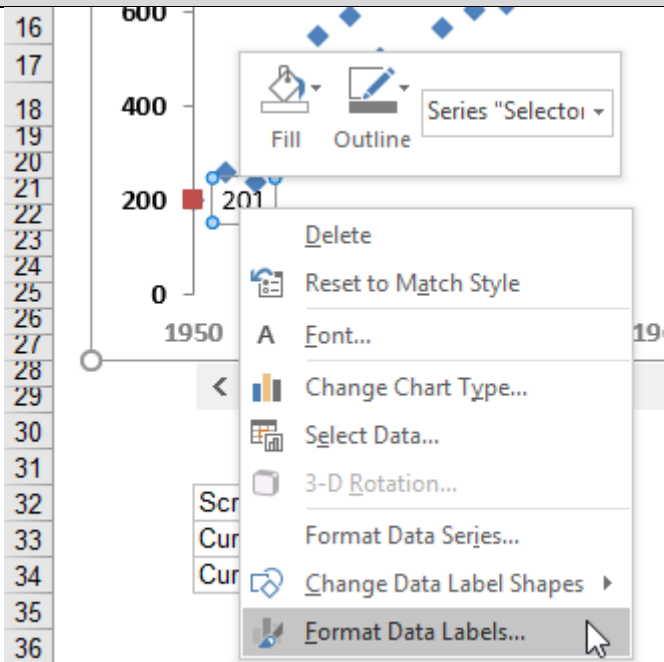
- In the Edit Series dialog box, type "Data" in the Series name. Next, click the Tornado Data worksheet tab.
- For the Series X values, select the entire Year column of data, A6:A50.
- For the Series Y values, select the entire Total Tornado column of data, B6:B50.
- Ensure everything is correct by comparing what you have to the associated picture. Press OK to go back to the Select Data Source dialog box. Press OK again to return to the spreadsheet.

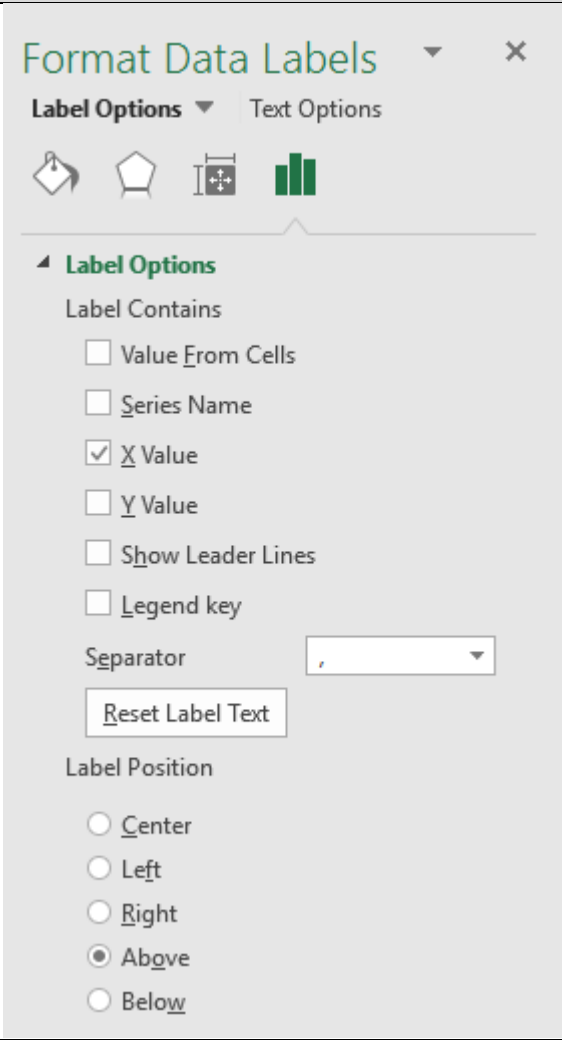
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
3														
4	Year	Total Tornado	Tornadoes by Month											
5			Jan	Feb										
6	1950	201	7	20							Sept	Oct	Nov	Dec
7	1951	260	2	10							3	2	4	4
8	1952	240	12	27							9	2	12	10
9	1953	422	14	16							1	0	6	3
10	1954	550	2	17							5	6	12	21
11	1955	593	3	4							21	14	2	17
12	1956	504	2	47							15	23	20	3
13	1957	858	17	5							16	29	7	9
14	1958	564	11	20							17	18	59	38
15	1959	604	16	20							24	9	45	1

Click Steps	Screen Shots
9. From on the Example worksheet tab, insert a new Form Control Scroll Bar.	
10. Place the Scroll Bar horizontally under the chart.	
11. Right click the Scroll Bar and select Format Control. Set the following: Current Value = 1 Minimum Value = 1 Maximum Value = 45. Cell Link = D32. Leave the other	

Click Steps	Screen Shots						
<p>values as they are. Press ENTER.</p>							
<p>12. In cell D33, use the formula =INDEX('Tornado Data'!A6:A50,Example!D32)</p>	 <p>The screenshot shows the Excel formula bar with the formula =INDEX('Tornado Data'!\$A\$6:\$A\$50,Example!D32). Below the formula bar, a small table is visible with the following data:</p> <table border="1"> <tr> <td>Scrollbar Value</td> <td>1</td> </tr> <tr> <td>Current X</td> <td>Example!D32</td> </tr> <tr> <td>Current Y</td> <td></td> </tr> </table>	Scrollbar Value	1	Current X	Example!D32	Current Y	
Scrollbar Value	1						
Current X	Example!D32						
Current Y							
<p>13. In cell D24, use the formula =INDEX('Tornado Data'!B6:B50,Example!D32)</p>	 <p>The screenshot shows the Excel formula bar with the formula =INDEX('Tornado Data'!B6:B50,Example!D32). Below the formula bar, a small table is visible with the following data:</p> <table border="1"> <tr> <td>Scrollbar Value</td> <td>1</td> </tr> <tr> <td>Current X</td> <td>1950</td> </tr> <tr> <td>Current Y</td> <td>Example!D32</td> </tr> </table>	Scrollbar Value	1	Current X	1950	Current Y	Example!D32
Scrollbar Value	1						
Current X	1950						
Current Y	Example!D32						
<p>14. Right+Click into the chart and go to Select Data.... Click Add.</p>	 <p>The screenshot shows the 'Select Data Source' dialog box. The 'Chart data range' is set to ='Tornado Data'!\$A\$6:\$B\$50. The 'Legend Entries (Series)' section has an 'Add' button highlighted. The 'Horizontal (Category) Axis Labels' section shows a list of years: 1950, 1951, 1952, 1953, and 1954. The 'OK' button is highlighted.</p>						
<p>15. In the Edit Series popup box, type Selector for the name of the series. Next, link Series X values and Series Y values to cells D33 and D34 respectively.</p> <p>16. Press OK to go back</p>							

Click Steps	Screen Shots
to the Select Data source popup dialog box. Press OK again to go back to the spreadsheet.	
17. . A new point will appear on the chart. Right click on the point and select Add Data Labels > Add Data Labels (kinda weird, right?)	

Click Steps	Screen Shots
18. A new label will be added. Right click the label and go to Format Data Labels...	

Click Steps	Screen Shots
<p>19. Under the Format Data Labels box, ensure only X Value is selected under Label Options.</p> <p>20. Select Above under Label Position to ensure the label will always appear above the selector.</p>	 <p>The screenshot shows the 'Format Data Labels' task pane. The 'Label Options' tab is active. In the 'Label Contains' section, the 'X Value' checkbox is checked, while 'Value From Cells', 'Series Name', 'Y Value', 'Show Leader Lines', and 'Legend key' are unchecked. The 'Separator' is set to a comma (,). The 'Reset Label Text' button is visible. In the 'Label Position' section, the 'Above' radio button is selected, with 'Center', 'Left', 'Right', and 'Below' being unselected.</p>