

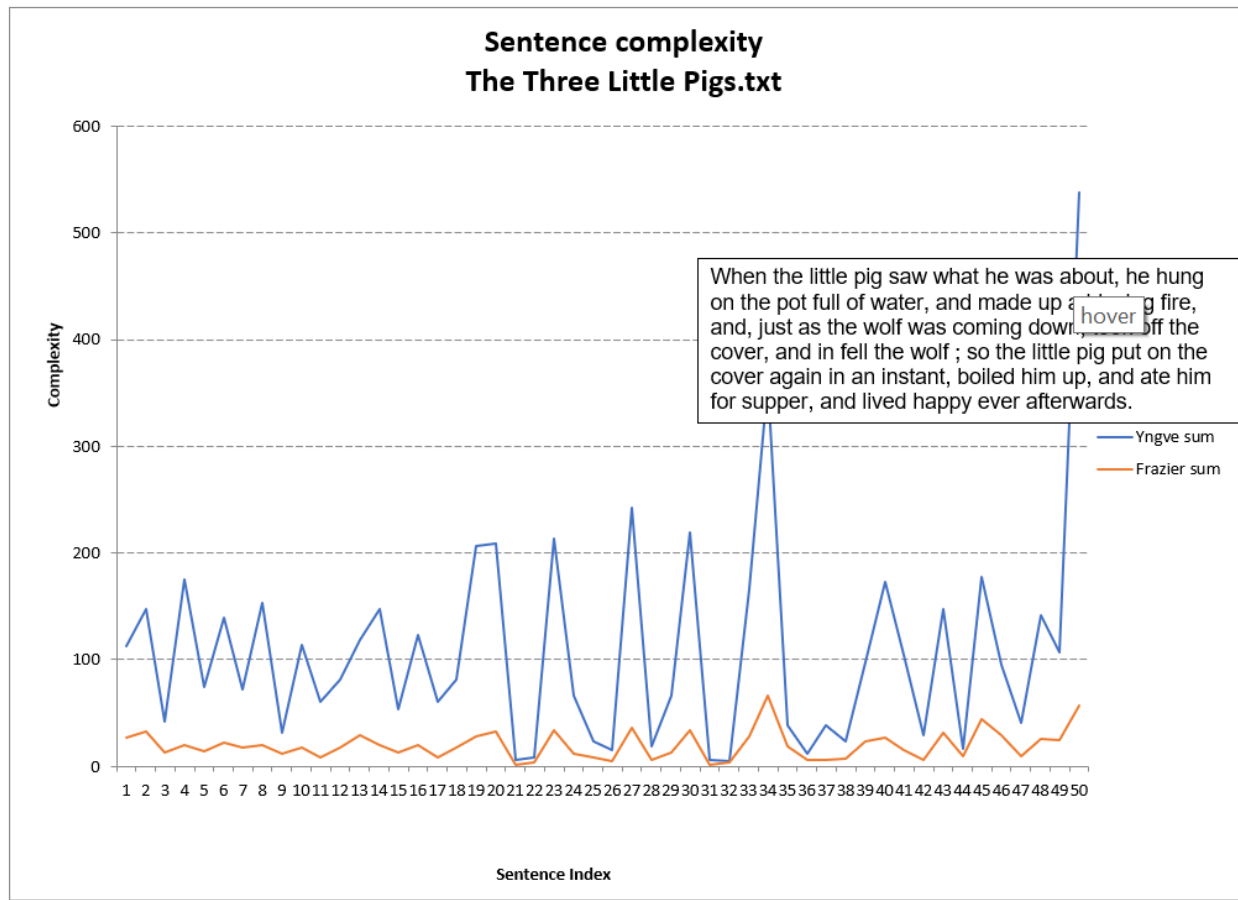
Enabling Excel Macros for Point-by-Point Series Labels in a Text Box

Table of contents

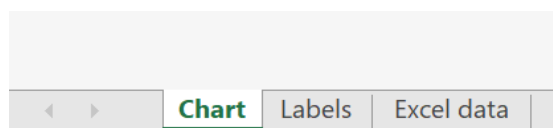
Excel chart hover-over effect: What is it?	1
Excel macro: What is it?	2
Enabling Excel macros. How do you do that?	3
Windows OS	3
Step 1: Enabling macros	3
Step 2: Copy the VBA code for chart macro	5
Mac OS: Enabling Excel macros	7
Step 1: Enabling macros	7
Step 2: Copy the VBA code for chart macro	10
VBA code for chart macro	10
FAQ	12
My Excel chart is empty: Why?	12
My Excel chart has no title: Why?	13

Excel chart hover-over effect: What is it?

The following Excel chart, when hovering over a data point with the mouse, will display the sentence at that point. It is called the **hover over effect**. Of course, the chart could display other information the script passes to it, but in this case, it is the sentence.



What Excel will display is found at the bottom left-hand side in the sheet **Labels**.



And here is what the Labels sheet contains:

	A	B	C	D	E	F	G	H	I	J	K	L
1	Sentence	Sentence										
2	THERE was an old sow with three lit	THERE was an old sow with three little pigs, and as she had not enough to keep them, she sent them out to seek their fortune.										
3	The first that went off met a man wi	The first that went off met a man with a bundle of straw, and said to him : " Please, man, give me that straw to build me a house.										
4	Which the man did, and the little pig	Which the man did, and the little pig built a house with it.										
5	Presently came along a wolf, and kn	Presently came along a wolf, and knocked at the door, and said : " Little pig, little pig, let me come in. "										
6	To which the pig answered : " No, n	To which the pig answered : " No, no, by the hair of my chiny chin chin. "										
7	The wolf then answered to that : " T	The wolf then answered to that : " Then I 'll huff, and I 'll puff, and I 'll blow your house in. "										

One Sentence for each line on the chart. The sentence is repeated since you may want to display different things for each line (e.g., the sentence for the Yngve sum and another piece of information for Frazier).

Excel macro: What is it?

If you have tasks in Microsoft Excel that you do repeatedly, you can record a macro to automate those tasks. A macro is something you run repeatedly. When you create a macro, you are automating a set of mouse clicks and keystrokes. **But... you need to enable macros or... your chart area will be blank.**



Enabling Excel macros. How do you do that?

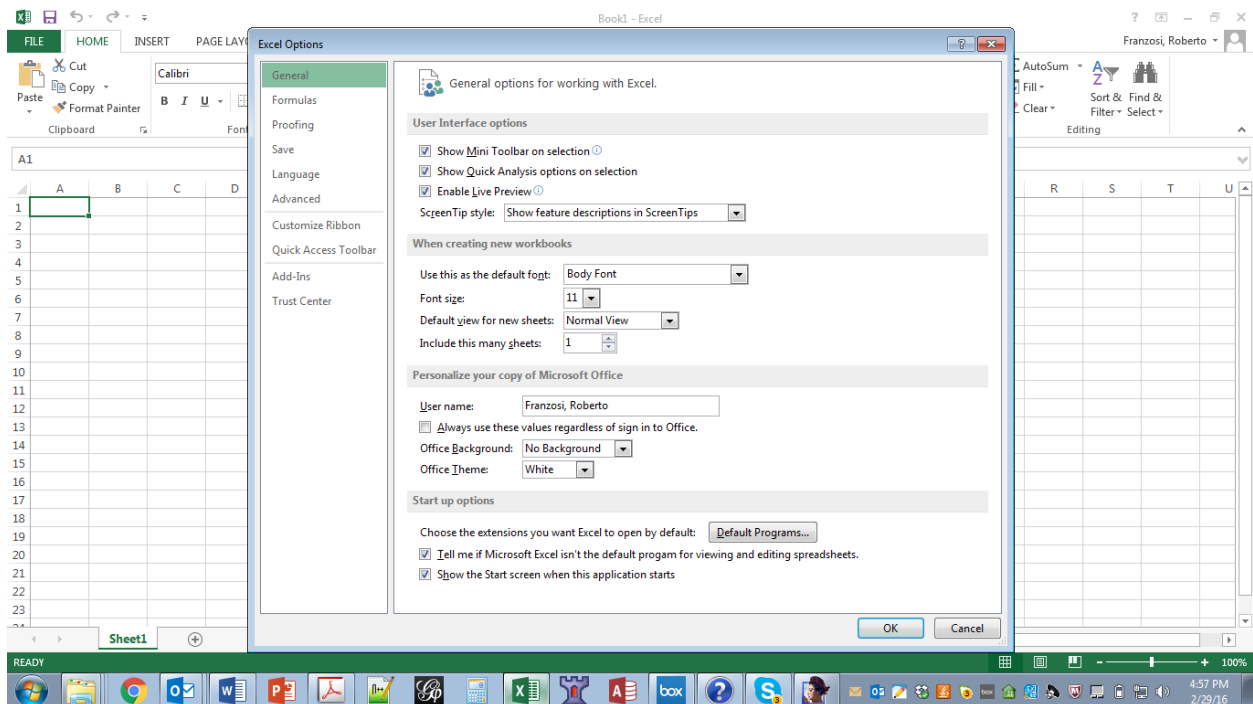
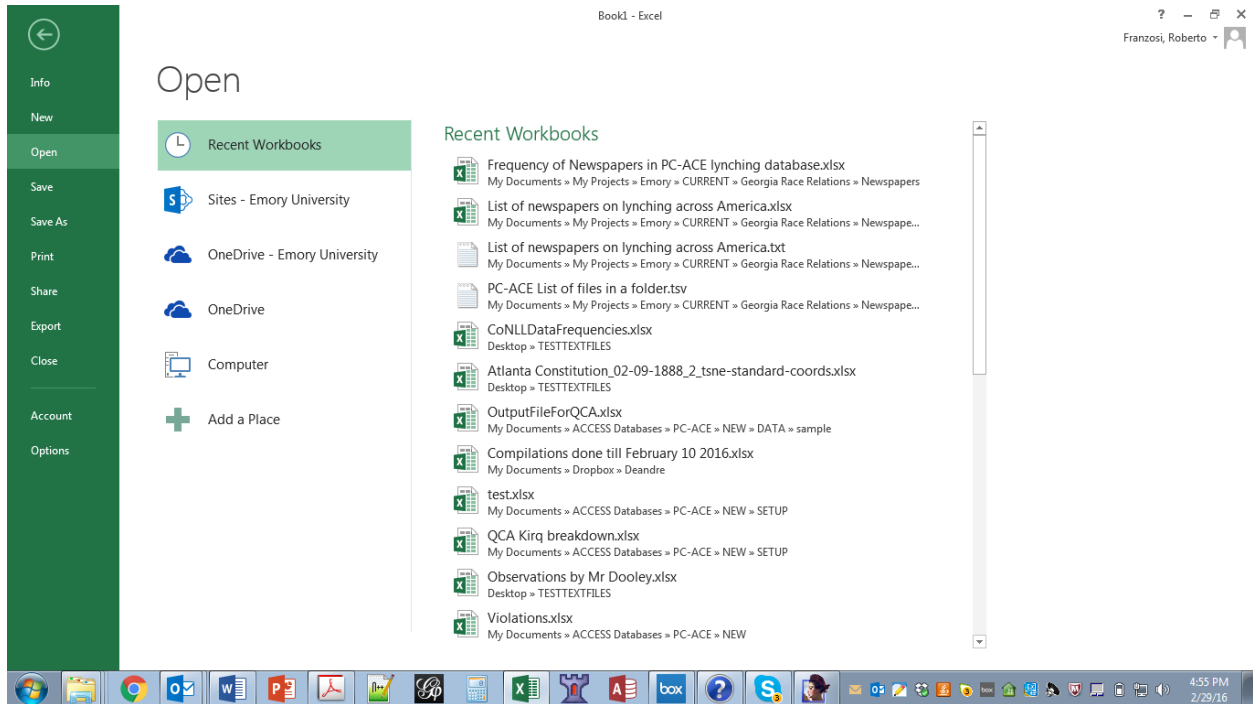
Windows OS

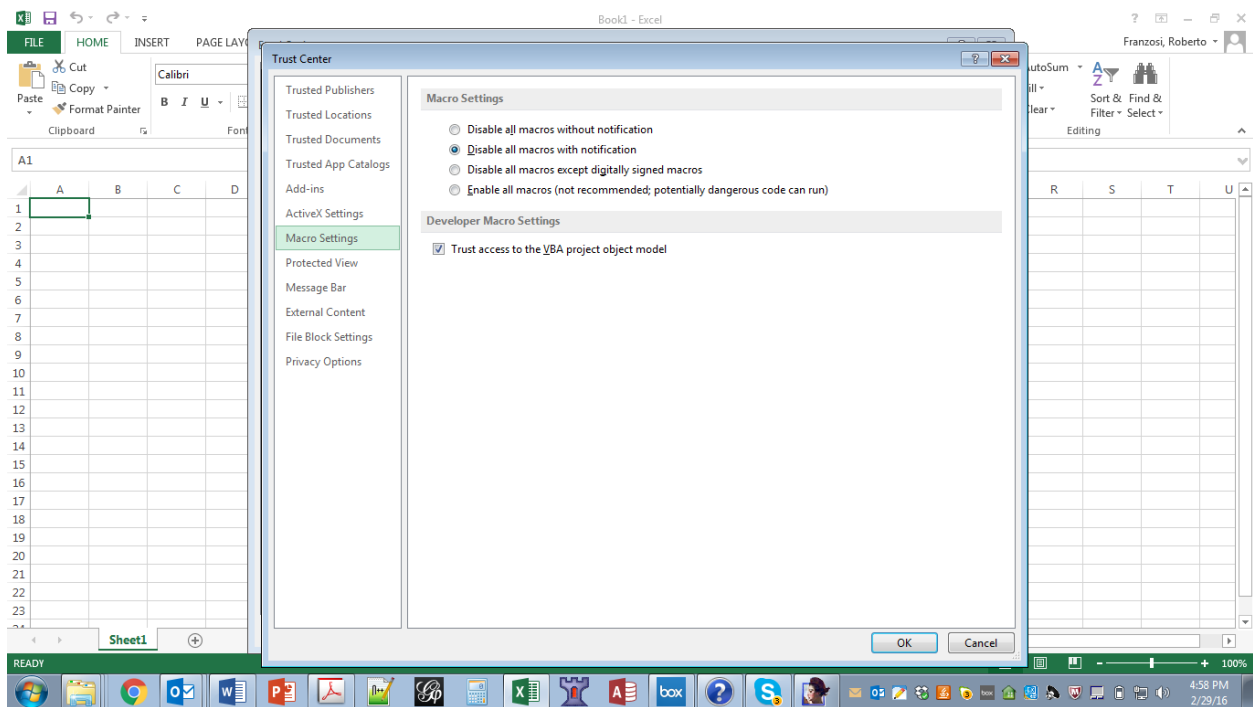
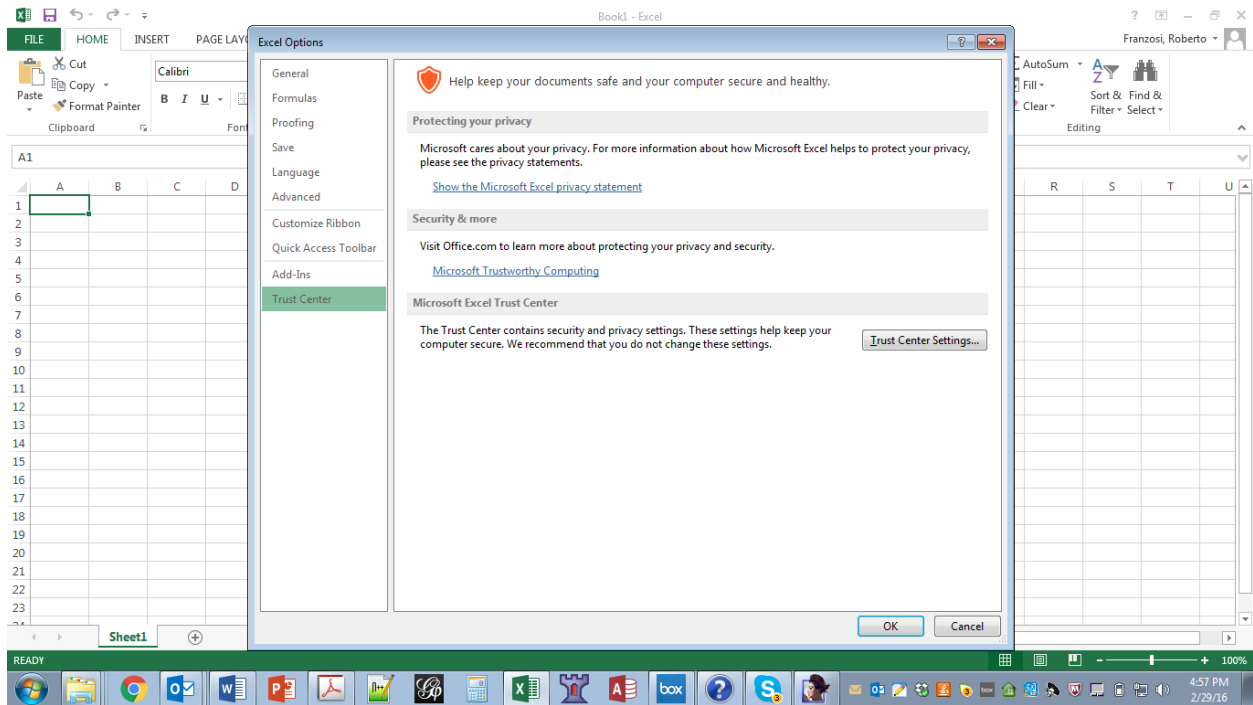
Step 1: Enabling macros

In order to display in a text box point-by-point information for a data series in an Excel chart, you need first to do the following:

1. Open Excel
2. Click on file and click on Options (the last item in the list on the left panel)
3. Select TRUST CENTER (last item on the list on the left panel)
4. Click on button TRUST CENTER SETTINGS...
5. Click on item MACRO SETTINGS (mid-way on the item list on the left panel)

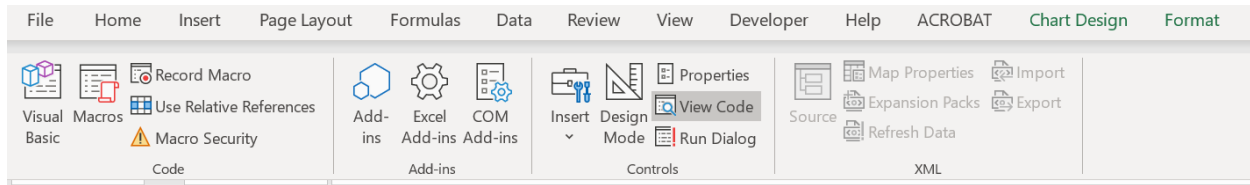
6. Click on check box Trust access to the VBA project object model
7. Click OK



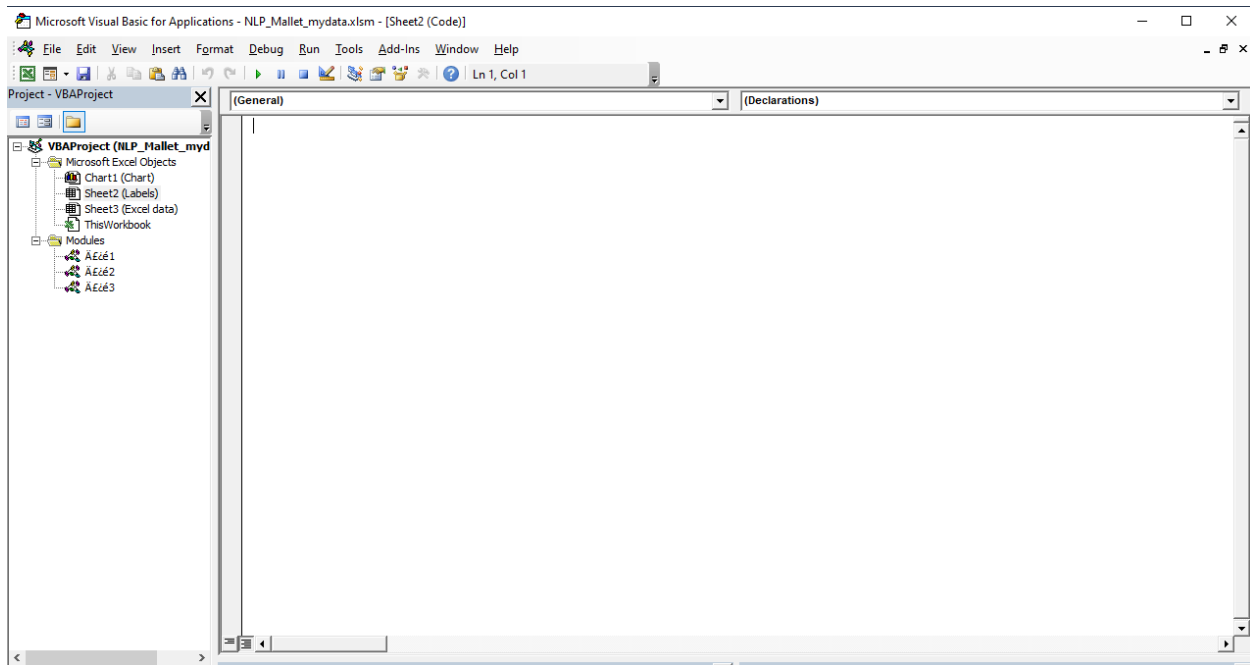


Step 2: Copy the VBA code for chart macro

The next step is to copy the VBA code. So, at the top, click on the tab **Developer** and then **View Code**



And here is what you see.



Click on Chart 1 on the left-hand side. You need to copy there the VBA code listed below into the empty area.

```

Private Sub Chart_Activate()
On Error Resume Next
Dim n As Integer, rng1 As Range, arr1, n3 As Integer, n4 As Integer, i As Integer, n5 As Integer
n = 2
n5 = ActiveChart.FullSeriesCollection.Count
ActiveChart.ChartArea.Select
Do While n <= n5
    ActiveChart.FullSeriesCollection(2).Delete
    n = n + 1
Loop
n3 = Sheets(3).Range("A1").End(xlToRight).Column
n4 = 3
Do While n4 <= n3
    ActiveChart.SeriesCollection.NewSeries
    ActiveChart.FullSeriesCollection(n4 - 1).Values = Sheets(3).Cells(2, n4).Resize(Sheets(3).Cells(2, n4).End(xlDown).Row - 1, 1)
    ActiveChart.FullSeriesCollection(n4 - 1).XValues = Sheets(3).Cells(2, 1).Resize(Sheets(3).Cells(1, 1).End(xlDown).Row - 1, 1)
    ActiveChart.FullSeriesCollection(n4 - 1).Name = Sheets(3).Range("A1").Offset(0, n4 - 1)
    n4 = n4 + 1
Loop
ActiveChart.FullSeriesCollection(1).Values = Sheets(3).Cells(2, 2).Resize(Sheets(3).Cells(2, 2).End(xlDown).Row - 1, 1)
ActiveChart.FullSeriesCollection(1).XValues = Sheets(3).Cells(2, 1).Resize(Sheets(3).Cells(1, 1).End(xlDown).Row - 1, 1)
ActiveChart.FullSeriesCollection(n4 - 1).Name = Sheets(3).Range("B1")
End Sub

Private Sub Chart_MouseMove(ByVal Button As Long, ByVal Shift As Long, ByVal x As Long, ByVal y As Long)
Dim ElementID As Long
Dim Arg1 As Long
Dim Arg2 As Long
Dim chart_data As Variant
Dim chart_label As Variant
Dim chrt As Chart
Dim ser As Series
Dim sht As Worksheet
Dim rng As Range
Dim lastCol As Long
On Error Resume Next
Me.GetChartElement x, y, ElementID, Arg1, Arg2

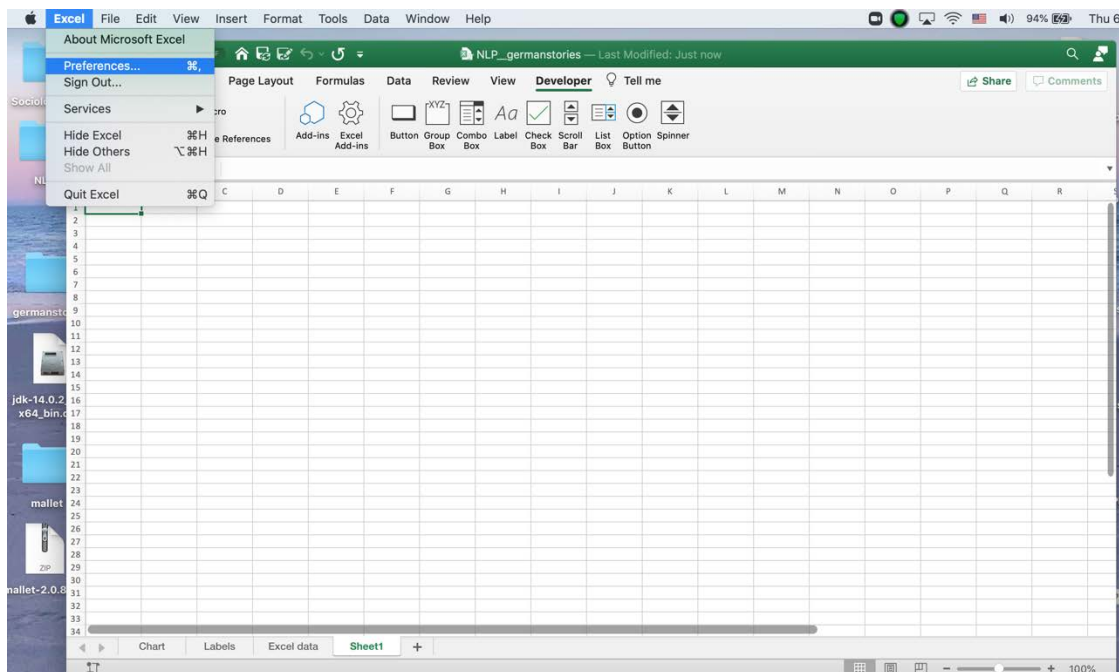
```

Mac OS: Enabling Excel macros

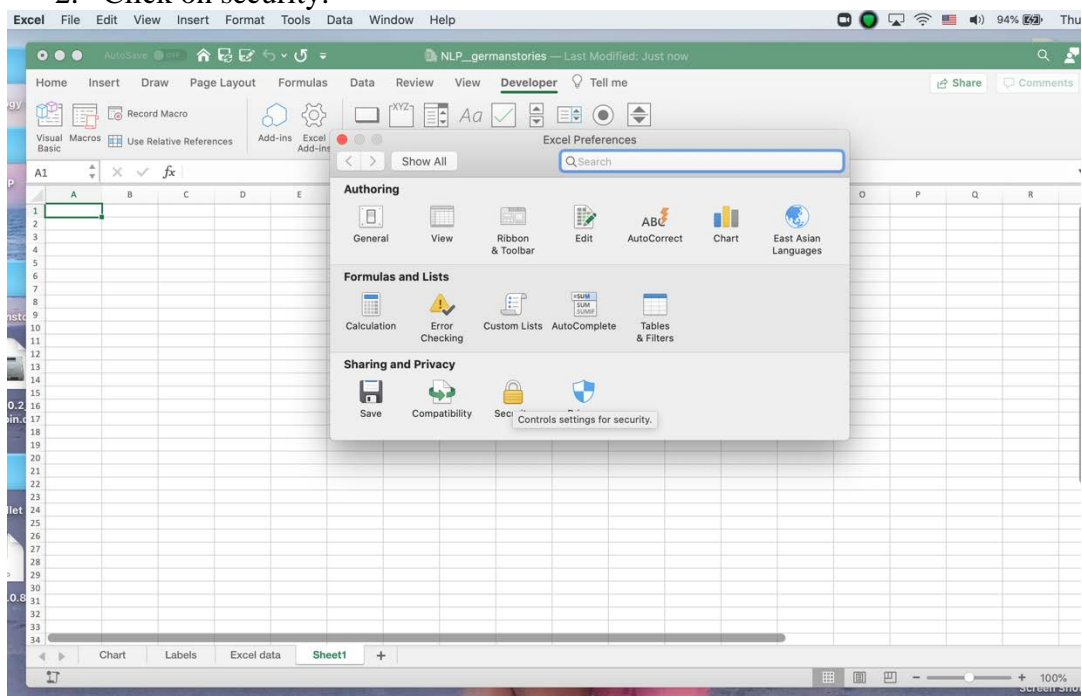
Step 1: Enabling macros

1. Open Excel.
2. Click on Excel in the upper left corner of the mac and click on preferences (the second option in the drop down menu).
3. Select Security (third item under sharing and privacy)
4. Enable ALL MACROS in addition to “trust access to the VBA project object model”
5. Return to the preferences tab.
6. Select Ribbon & Toolbar (third item under authoring)
7. Click the check mark for ‘Developer’ under “Main Tabs”
8. Return to your excel sheet and click on the developer tab on the top toolbar, then click on “visual basic” in the leftmost part of the toolbar.
9. Double click on “chart1” on the left hand side. (this should be blank if your charts is not working properly.)
10. Insert the chart code.
11. SAVE the excel sheet.
12. Close the excel sheet and reopen. Your chart should now be visible.

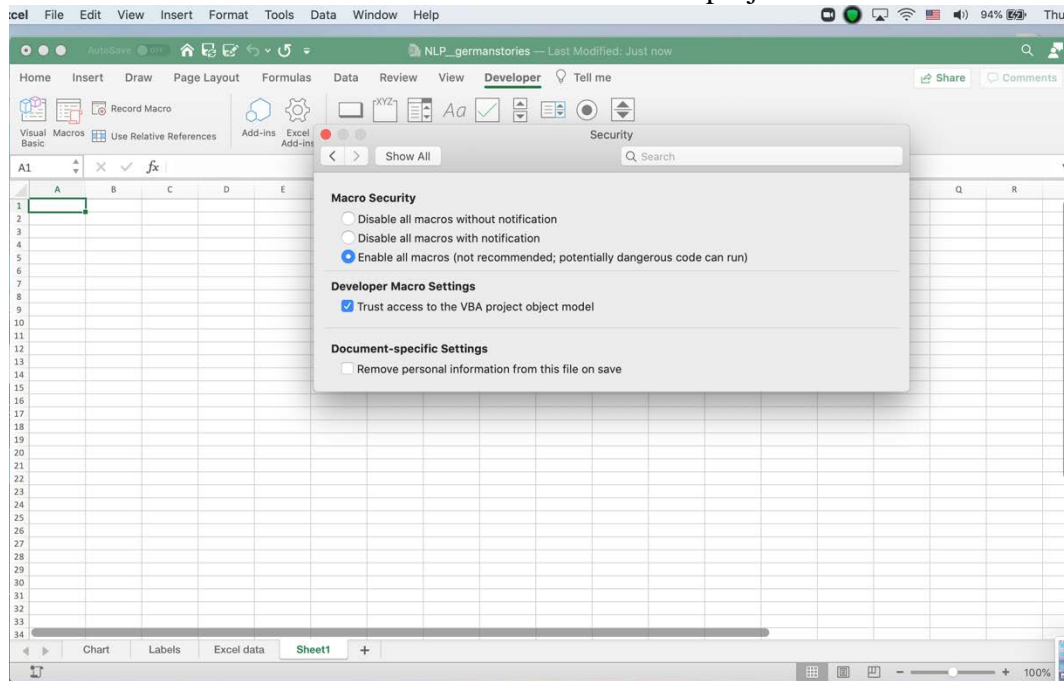
1. Open excel and click on preferences.



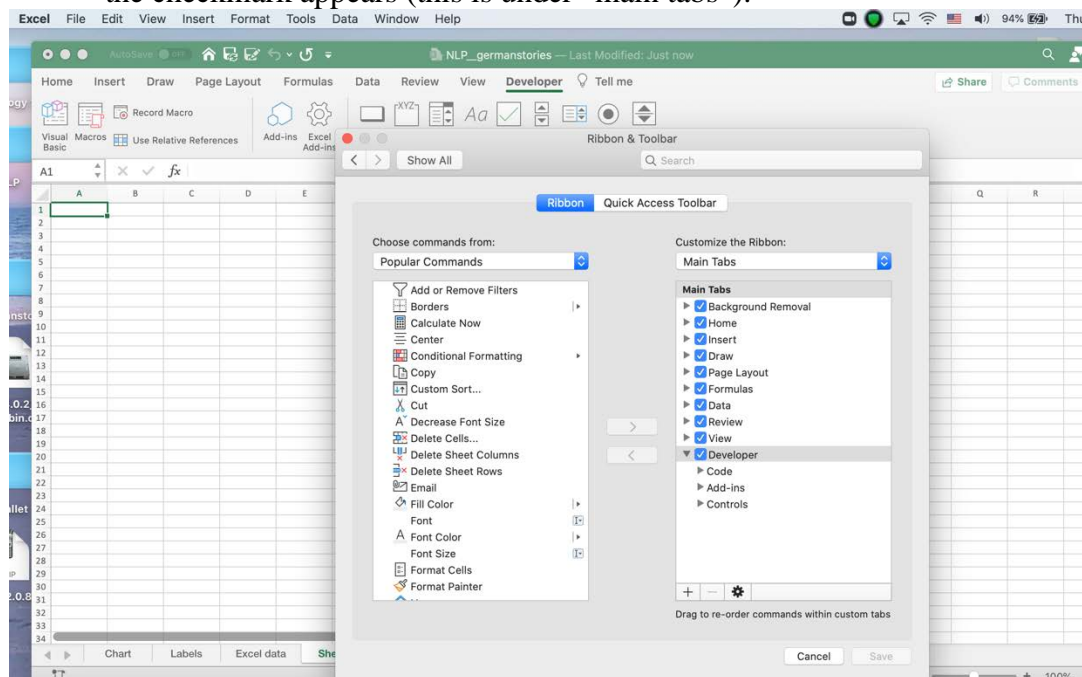
2. Click on security.



3. Enable all macros and trust access to the VBA project.

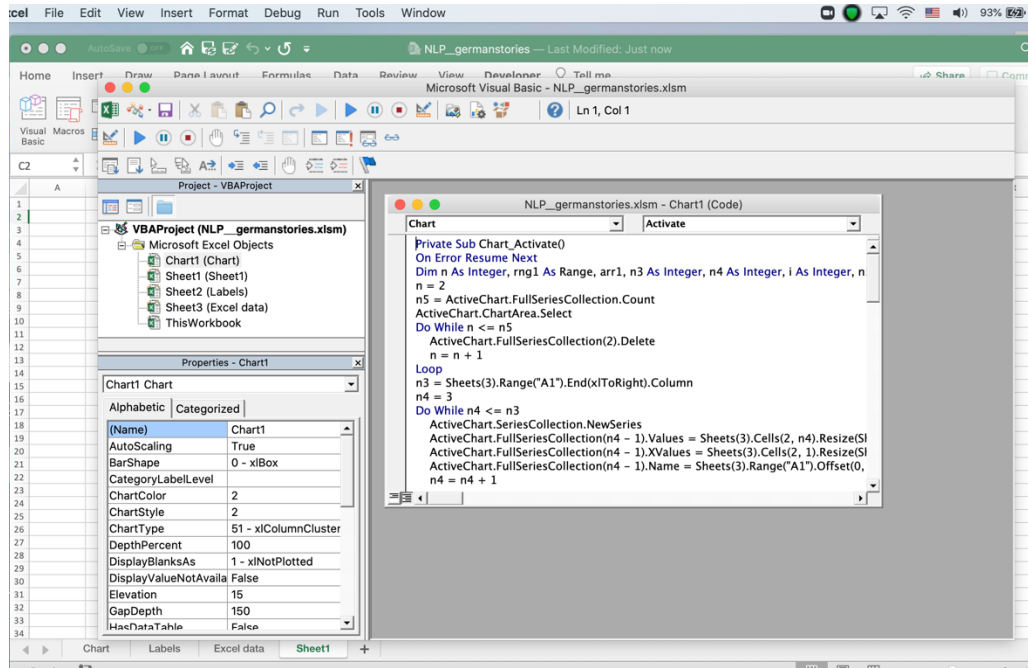


4. Return to preferences and click on Ribbon and toolbar. Then click the developer box until the checkmark appears (this is under “main tabs”).



Step 2: Copy the VBA code for chart macro

Double click on chart1 which appears on the left side. Copy and paste the following code into the chart1. NO SPACES BETWEEN LINES.



VBA code for chart macro

```
Private Sub Chart_Activate()  
On Error Resume Next  
Dim n As Integer, rng1 As Range, arr1, n3 As Integer, n4 As Integer, i As Integer, n5 As Integer  
n = 2  
n5 = ActiveChart.FullSeriesCollection.Count  
ActiveChart.ChartArea.Select  
Do While n <= n5  
    ActiveChart.FullSeriesCollection(2).Delete  
    n = n + 1  
Loop  
n3 = Sheets(3).Range("A1").End(xlToRight).Column  
n4 = 3  
Do While n4 <= n3  
    ActiveChart.SeriesCollection.NewSeries  
    ActiveChart.FullSeriesCollection(n4 - 1).Values = Sheets(3).Cells(2,  
n4).Resize(Sheets(3).Cells(2, n4).End(xlDown).Row - 1, 1)  
    ActiveChart.FullSeriesCollection(n4 - 1).XValues = Sheets(3).Cells(2,  
1).Resize(Sheets(3).Cells(1, 1).End(xlDown).Row - 1, 1)  
    ActiveChart.FullSeriesCollection(n4 - 1).Name = Sheets(3).Range("A1").Offset(0, n4 - 1)
```

```

    n4 = n4 + 1
Loop
ActiveChart.FullSeriesCollection(1).Values = Sheets(3).Cells(2, 2).Resize(Sheets(3).Cells(2, 2).End(xlDown).Row - 1, 1)
ActiveChart.FullSeriesCollection(1).XValues = Sheets(3).Cells(2, 1).Resize(Sheets(3).Cells(1, 1).End(xlDown).Row - 1, 1)
ActiveChart.FullSeriesCollection(n4 - 1).Name = Sheets(3).Range("B1")
End Sub

```

```

Private Sub Chart_MouseMove(ByVal Button As Long, ByVal Shift As Long, ByVal x As Long, ByVal y As Long)
Dim ElementID As Long
Dim Arg1 As Long
Dim Arg2 As Long
Dim chart_data As Variant
Dim chart_label As Variant
Dim chrt As Chart
Dim ser As Series
Dim sht As Worksheet
Dim rng As Range
Dim lastCol As Long
On Error Resume Next
Me.GetChartElement x, y, ElementID, Arg1, Arg2
Application.ScreenUpdating = False
Set chrt = ActiveChart
Set ser = ActiveChart.SeriesCollection(Arg1)
Set sht = ActiveWorkbook.Sheets("Labels")
chart_data = ser.Values
chart_label = ser.XValues
Set txtbox = ActiveSheet.Shapes("hover")
If ElementID = xlSeries And ActiveSheet.Shapes.Count = 0 Then
If Err.Number Then
Set txtbox = ActiveSheet.Shapes.AddTextbox(msoTextOrientationHorizontal, x - 150, y - 150, 100, 100)
txtbox.Name = "hover"
txtbox.Fill.Solid
txtbox.Fill.ForeColor.SchemeColor = 9
txtbox.Line.DashStyle = msoLineSolid
'get last column
lastCol = sht.Cells(1, sht.Columns.Count).End(xlToLeft).Column
'get appropriate column
labelCol = 1
chrt.Shapes("hover").TextFrame.Characters.Text = sht.Cells((Arg2 + 1), Arg1).Value
With chrt.Shapes("hover").TextFrame.Characters.Font
.Name = "Arial"
.Size = 12

```

```

.ColorIndex = 1
End With
With chrt.Shapes("hover")
.Width = 300
End With
With chrt.Shapes("hover").TextFrame2
.AutoSize = msoAutoSizeShapeToFitText
.WordWrap = True
End With
End If
txtbox.Left = x - 100
txtbox.Top = y - 100
Else
txtbox.Delete
End If
ActiveChart.ChartTitle.Select

    Selection.Format.TextFrame2.TextRange.Characters.Text = Sheet2.Range("zz1")
    ActiveChart.Axes(xlValue).AxisTitle.Select
    Selection.Format.TextFrame2.TextRange.Characters.Text = Sheet2.Range("zz2")
    ActiveChart.Axes(xlCategory).AxisTitle.Select
    Selection.Format.TextFrame2.TextRange.Characters.Text = Sheet2.Range("zz3")
    ActiveChart.ChartArea.Select
Application.ScreenUpdating = True
End Sub

```

Save and the macro VBA code will create all your Excel charts with hover-over effects.

FAQ

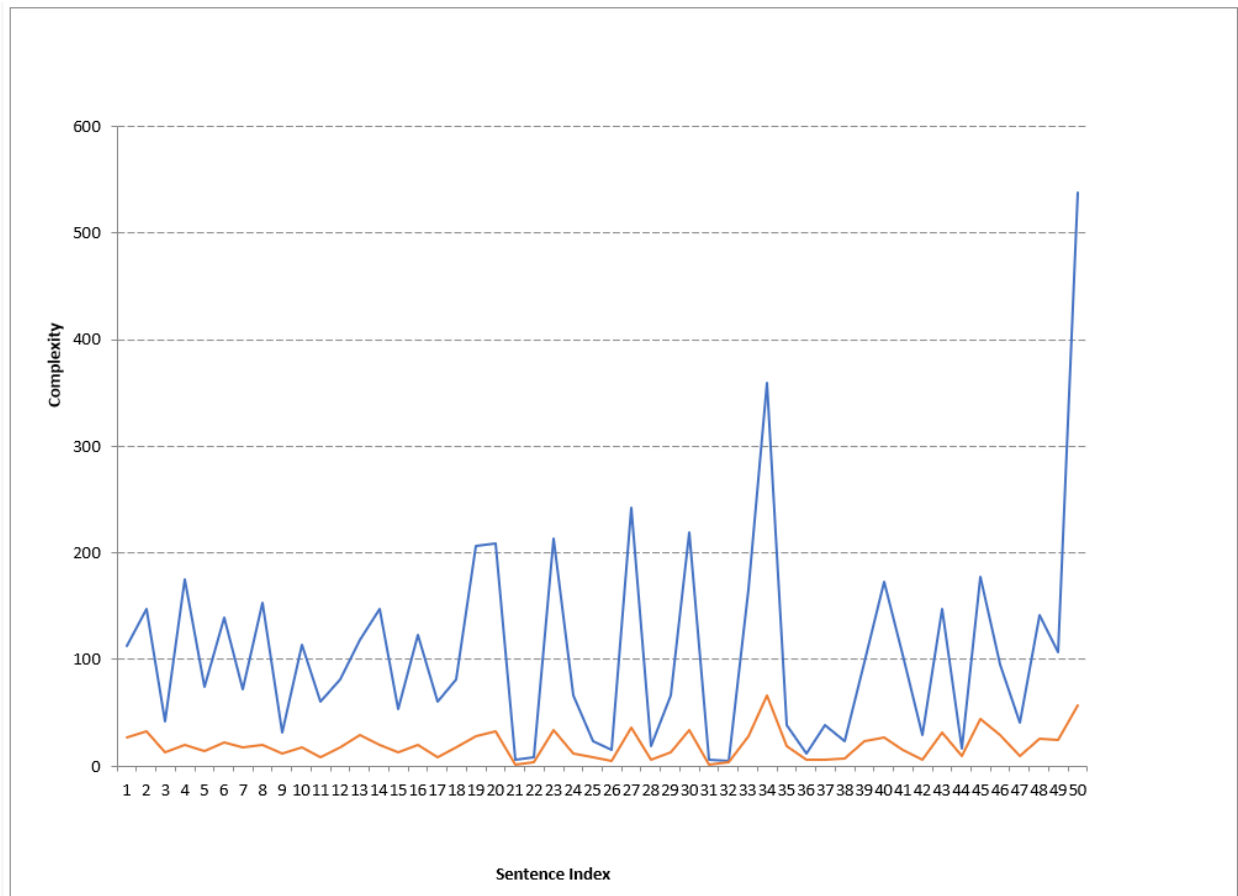
My Excel chart is empty: Why?



Two reasons.

- 1. You have NOT enabled the macros.**
- 2. Even after enabling the macros, when Excel opens on a chart, you need to hover the mouse over the chart area to display the content properly.**

My Excel chart has no title: Why?



Same reason. Just move the mouse over the chart area to see titles (and labels).