**LAB Book partners up with Practical Tableau Book: Used for Tableau Desktop Level 2**

**This Lab book is Part 4 of 5 Parts**

Part 3 – Tips and Tricks

Chapter 19 - Exercise (Icons) - 8 Minutes – Book Pages: 295-299

1. Before you begin:
   1. Go out to Windows Explorer and go to: \documents\My Tableau Repository\Shapes
   2. Leave this open
   3. Go to the Desktop Level 2 Folder (where our class files are)
   4. Open the Images folder
   5. Right click the “Sports” folder and press CTRL + C to copy
   6. Go back to the open Windows Explorer and press CTRL + V to paste the folder into your Shapes Directory
2. Create a new WORKBOOK. Use the Excel Sample Super Store as your data source, Double Click the ORDERS Table to obtain the Dimensions and Measures for this Workbook.
3. Save and name the Workbook “PartThree.twbx”. (There is a copy of this workbook in the WORKBOOKS folder that has the solutions for the labs.)
4. Rename Sheet1 and call it “Icons”. Color the sheet tab if desired.
5. Get a new data source (icons.xlsx) in your Data Sources folder
6. There is only one field called “Icon Name” – Drag it to the Rows shelf
7. Change your Automatic chart type to Shape on the Marks shelf
8. Notice that Tableau assigned a shape to each of your Icon Names. Also notice you got a new legend to describe each shape.
9. Click the Shape card
10. Under the “Select Shape Palette” Option click the arrow pointing down next to “Default” Look for your Sports Folder (if you do not see it, Click the “Reload Shapes” button at the bottom.
11. Assign each Sports Icon Name to a picture by clicking the name, then clicking the corresponding picture (EX: Women’s Basketball to the icon that IS Women’s Basketball).
12. When they are all associated, Click OK – see each new custom Icon on your Worksheet.
13. Next, click the NEW DASHBOARD tab at the bottom of your Workbook
14. Name it “Icon Dashboard” and color it the same color as your Icon Worksheet (if you colored it)
15. Drag your only Worksheet (Icons) into it
16. Go to the “Dashboard” Menu above and choose “Actions” off the list
17. When in the Actions pop up, click “Add Action” at the bottom
18. Choose “Filter” off the list
19. Name this “Click Icons”
20. Under both SOURCE and TARGET, make sure that your “Icons” sheet is selected and be sure that your “Run Action On” option (right side of screen) is set to “Select”. If it is not, Click “Select”
21. \*\*Also Notice the option that says "Clearing the Selection Will” and notice the option is set to “Show All Values”
22. Click “OK” – notice your new Filter Action in the Dialogue Box
23. Click “OK” again.
24. Click an Icon. Notice it will select that Icon and show it to you in a “Zoom” mode
25. To get back to all Icons, click in a white area around the image. This is because your option was set to “Show All Values” when choosing “Clearing the Selection” (from step 21).

Chapter 19 - Exercise (What-If) - 8 Minutes – Book Pages: 302-305

1. Get a new sheet and call it “What If”. Color the sheet tab if desired.
2. We will use the Sample Superstore (Orders Table)
3. Right mouse click the white area underneath Measures and Select the option to “Create Parameter”
   1. Name it “What If”
   2. Change Type to Integer
   3. Change the “Allowable Values” to Range
   4. Click all three boxes (Minimum, Maximum, Step) and change Minimum to 0 (zero) and if necessary, change Maximum to 100. (Step should default to 1)
4. Click OK
5. Create a new calculated field:
   1. Right Click the white area in “Measures”
   2. Choose “Create Calculated Field”
   3. Name it “What-If Sales”
   4. Below, you can drag and drop your Sales Measure and your What-If Sales Parameter into the calculation as you type, or you can copy below: (or use Solution)
   5. The calculation is: [Sales] \* (1 + [What-If Sales]
   6. Click OK
6. RIGHT CLICK the Order Date field and drag to the Column. In the Pop Up, choose the green (continuous) MONTH Order Date (4th option from bottom)
7. Drag your “Measure Values” Measure into the Rows shelf – notice one of “each” Measure appears. In the end, you will only want the Sales measure and the “What-if Sales” measure here. The easiest way to accomplish this is to select “Discount” (The first measure), Then hold your Shift key down (and keep holding it down) and Select “Quantity” (so that it selects them both and everything in between). While you still have your SHIFT key held down, Right click into one of those selected fields and choose “Remove”. All but Sales and What-If Sales should be removed.
8. Notice that your Measure Names dimension will move to the FILTER shelf and if you edit it (just to look at it), you will notice it has been filtered for Sales and What-If Sales. – also notice that the Measure Names appears in the Detail card on the Marks shelf.
9. Move the Measure Names from Detail to the Color card on the Marks shelf – you will now have two colored lines in your view. If desired, click on the Color card and re-associate Sales and What-if Sales to your desired color(s) and click OK
10. One thing left!!!! Right mouse click your parameter and “Show Parameter Control”. Once that pops up on the top right of your view, you can slide the slider to change the Sales and the What-if Sales to show the “forecast” of sales if the What-If changes.

Chapter 19 - Exercise (Alerts) - 15 Minutes – Book Pages: 308-310

1. Get a new sheet and call it “Alerts”. Color the sheet tab if desired.
2. Right Click Order Date Dimension onto the Column shelf and choose Month (continuous)
3. Drag Sales Measure to the Row shelf
4. Create a Parameter as follows:
   1. Name: Set Date Aggregation
   2. Type: String
   3. Choose “List” from Available Values
   4. Type in your custom list by clicking first into the value field, then double clicking the Display field. Set them up as follows: (be sure to use all small letters on the Value (left) side.

|  |  |
| --- | --- |
| 1. day | 1. Day |
| 1. week | 1. Week |
| 1. quarter | 1. Quarter |
| 1. month | 1. Month |
| 1. year | 1. Year |

1. Create a calculation: Name it “Date Choice”. Calc: DATETRUNC([Set Date Aggregation], [Order Date])
2. Remove current ORDER DATE pill from column. Replace with new “Date Choice” Dimension.
3. Right Click Order Date to the Text card on the Marks shelf and choose MIN([Order Date]) (continuous) off the list.
4. Right Click Order Date to the Text card on the Marks shelf and choose MAX([Order Date]) (continuous) off the list.
5. Drag your Set Date Aggregation to the Text card on the Marks shelf
6. Click into the LABEL card (with the thought to format TEXT on the top of your view that will contain an alert about the data people are viewing). Make these choices:
   1. Click on the TEXT field. This will open a pop up box. Make it look like this:
   2. Shows dates from : <MIN(Order Date)> to: <MAX(Order Date)>
      1. by : <Parameters.Set Date Parameter>
      2. Hint: if you accidentally delete any of the fields, you can use the INSERT tool to get them back (take a look by clicking, to see what is available)
      3. Format the text as desired and then click OK (once)
   3. Back in the Label card:
      1. Click on “Line Ends” – Take middle check at bottom off (Label Start of Line)
      2. In the Alignment section, click where you want the text to appear (for example: Left, Top) - it will appear as “custom”

Chapter 19 - Exercise (Alerts 2) - 5 Minutes – Book Pages: 308-310

1. Get a new sheet and call it “Alerts 2” Color the sheet tab if desired.
2. Right Click Order Date Dimension to Column shelf and change to green MONTH(Order Date) Continuous.
3. Drag Sales Measure to Row shelf
4. Create a calculation:
   1. Name it : Dynamic Label Alert
   2. Calc:

IF SUM([Sales]) >= 9700 THEN " Extra Great"

ELSEIF Sum([Sales]) <= 12000 then " Extra Terrible"

ELSE NULL

END

* 1. Drag your new Dynamic Label Alert to the Label card. Click the label card and format as desired (color? Red?)

1. Labels will automatically appear

Chapter 19 - Exercise (Alert 3) - 5 Minutes – Book Pages: 308-310

1. Get a new sheet and call it “Alerts 3” Color the sheet tab if desired.
2. Drag Category and Ship Mode to Column shelf
3. Drag Region to Row shelf
4. On Marks card, Select Shape
5. Create a calculation named: KPI Ratio:

sum([Profit]) / sum([Sales])

1. Create a second calculation named KPI Ratio Color and Shape:

If [KPI Ratio Numbers] > .12 then "Green"

Elseif [KPI Ratio Numbers] > .7 then "Yellow"

Else "Red"

End

1. Drag KPI to Color. Then Edit the Color Card. Pick "Traffic Light" - Take the time to associate"green" with green color, "red" with red color", "yellow" with yellow color.
2. Next take the KPI Color and Shape and Drag it a second time onto the Shapes Card. Choose "Thin Arrows" from the palette Choices. Take the time to associate "Green" with UP arrow, "Red" with DOWN arrow, and "Yellow" with "Right Arrow"
3. Expand View to "Entire View" just while we do the next part
4. Change the Default property of KPI Ration Numbers to "Percent" with NO decimal places (right click and go to default properties, number, then choose percent, and no decimal places)
5. Drag KPI Ratio Numbers to "Text" Card. Then Right click and format column to "RIGHT" - so that it moves to the right of the arrow.