FIT1013 – Digital Futures: IT for Business
Tutorial 2 – Excel Table, PivotTable, PivotChart and Tableau

Objectives

- Create and modify an Excel Table
- Create and modify a PivotTable
- Apply PivotTable styles and formatting
- Filter a PivotTable
- Create a PivotChart
- Discover how Tableau works

- ***Please note that if you are using Mac Office version, some features might be slightly different from Ms Office. Hence, we suggest that you use Ms Office version to do this week's exercises.***
- ***You may check some of the screen shots (if that helps) in the corresponding pdf files while doing the exercises***
- Read through the following information on Excel's relative, absolute and mixed addressing/referencing before you proceed with the Excel exercises

Relative, absolute and mixed addressing/referencing

The parts of a cell reference which are to be absolute (unchanging) are prefixed by a $ sign. The following table provides examples of the different types of referencing:

Type	Cell Reference	Meaning
Relative	A10	When copied to another row and column, both the row and column in the cell reference are adjusted to reflect the new location.
Absolute	A10	Both column and row references remain the same when you copy this cell reference
Mixed	A$10	The column reference changes when you copy this cell reference to another column because it is relative. The row reference does not change because it is absolute.
Mixed	$A10	The row reference changes when you copy this cell reference to another row because it is relative. The column reference does not change because it is absolute.

Exercise 1
Download the Excel file February.xlsx

Laurie wants to analyze the cash receipts data for February. She entered this data into a new workbook and wants you to sort and filter the data, as well as create summary reports using the Subtotal command, PivotTables, and PivotCharts. Complete the following:

1. Open the **February** workbook, and then save the workbook as **Cash Receipts February**.
2. In the Documentation worksheet, enter your name and the date.
3. In the Cash Receipts worksheet, freeze the top row so the headers remain on the screen as you scroll.

4. Make a copy of the Cash Receipts worksheet, and then rename the copied worksheet as Feb Data. *(Hint:* To make a copy of the worksheet, press and hold the Ctrl key as you drag the sheet tab to the right of the Cash Receipts sheet tab.)
5. In the Feb Data worksheet, unfreeze the top row.
6. Create an Excel table for the cash receipts data.
7. Format the Excel table with Table Style Medium 25, and then change the Amount field to the Accounting format with two decimal places.
8. Rename the Excel table as FebruaryData.
9. Make the following changes to the FebruaryData table:
   a) Add a record for **29/2/2016, Monday, 10, Spec Drink, 353.11**.
   b) Edit the record for Coffee on 27/2/2016 by changing the Amount from 219.71 to **269.71**.
   c) Delete any duplicate records.
10. Make a copy of the Feb Data worksheet, and then rename the copied worksheet as **Sort Trn Date**. In the Sort Trn Date worksheet, sort the cash receipts by Trn Date, displaying the newest receipts first, and then by Amount displaying the largest amounts first.
11. Make a copy of the Feb Data worksheet, and then rename the copied worksheet as **Sort By Day**. In the Sort By Day worksheet, sort the cash receipts by Day (use the custom list order of Sunday, Monday, … etc), then by Segment (A to Z), and then by Amount (smallest to largest).
12. Make a copy of the Feb Data worksheet, and then rename the copied worksheet as **Filter Omit Gifts**. In the Filter Omit Gifts worksheet, filter the FebruaryData table to display the cash receipts for all items except Gifts.
13. In the Filter Omit Gifts worksheet, insert the Total row to calculate the average amount of the cash receipts for the filtered data. Change the label in the Total row to **Average**. Sort the filtered data by descending order by Amount.
14. Split the Filter Omit Gifts worksheet into two panes above the last row of the table. Display the cash receipt records in the top pane, and display only the Total row in the bottom pane.
15. Make a copy of the Feb Data worksheet, and then rename the copied worksheet as Filter By Day. In the worksheet, insert a slicer for the Day column. Move the slicer to row 1.
16. Format the slicer with Slicer Style Light 3. Change the slicer's width to 1.2" and its height to 2.5".
17. Use the slicer to display cash receipts for Saturday and Sunday.
18. Make a copy of the Feb Data worksheet, and then rename the copied worksheet as **Subtotals**.
19. In the Subtotals worksheet, convert the FebruaryData table to a range, and then sort the range by the Segment column.
20. In the Subtotals worksheet, use the Subtotal command to calculate the total cash receipts for each segment in the Amount column. Display only the subtotal results.
21. Based on the data in the Feb Data worksheet, create a PivotTable and PivotChart in a new worksheet that shows the total receipts by Day. Format the data area with the Currency format. Rename the worksheet with the PivotTable as **PivotTable By Day**.

Exercise 2

1. Go to the Tableau Student Resource Page in the following URL:

   https://community.tableau.com/community/students/overview

2. Scroll down and click on Download versions of Tableau. Download the latest Tableau Desktop version.

3. Explore Tableau – go through the Tableau tutorial exercise (will continue in laboratory 2)
   a. Go to the URL: https://www.tableau.com/support/help
   b. Select *Tableau Desktop and Web Authoring*
   c. Click on *Get Started*
   d. Click *Get Started with Tableau Desktop* from one of the choices: **For an in-depth tutorial on how to use Tableau, see** Get Started with Tableau Desktop.
   e. Use the same data file *February.xlsx* as Exercise 1 to present similar result (as step 21 in Exercise 1) in Tableau.