Excel Training

As we cover the course, we shall cover several excel functionalities applied to various datasets. The exercises below are intended to demonstrate the use of excel functionalities.

**Participants:**

* should have a copy of the excel sheet titled Excel\_Exercises
* should be using Office 365 (preferably)
* should have downloaded the Developer tab in the ribbon

**Exercises**

1. For the given data set, set each individual column (from column A to column X) with a width of 8.57 units. Show the stocks that are listed on the Abu Dhabi and Dubai markets as well as present on the MSCI.

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1. (Part 1) For the given data set, use excel functions that return:
	1. “Yes” for all sales figures less than 50,000 and “No” otherwise (in Column C)
	2. “Yes” for all sales figures equal to 50,000 and “No” otherwise (in Column D)
	3. “Yes” for all sales figures more than 50,000 and “No” otherwise (in Column E)

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 (Part 2) If Sales are:

1. Less than or equal to 50,000, calculate the 10% bonus of total sales (in Column F)
2. Greater than 50,000 but less than or equal to 100,000, calculate the 15% bonus of total sales (Column G)
3. Greater than 100,000, calc calculate the 20% bonus of total sales (in Column H)
4. In Cell K3, count the number of sales above 80,000

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1. From the global data provided, calculate the total value of assets for companies incorporated in the UK (Cell L6).

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1. Refer the Data Set given in this tab. You are a broker and this is a list of securities trades done by some of your Asset Management (Investor) Clients, whose names are shown in Column B. Now do the following:
	* 1. Open a New Tab and call this ‘Client Analysis’
		2. In Column B of the New Tab, create a list of your client names without duplication
		3. In Column C & D of the New Tab, calculate respectively the (a) Total Gross Value traded per client and (b) Total Revenue earned per Client.
		4. In Column E of the New Tab, calculate the number of trades executed by each client
		5. In Column F, calculate the Revenue per Trade for each client
		6. Format the calculated revenues per trade to show databars for each calculated revenue per trade
		7. Insert a 2-D stacked column chart with the Clients names on the x-axis and revenue per trade on the y-axis. Rename the chart title as "Revenue per Trade"

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1. Refer the DataSet in this tab. Now do the following:
	* 1. In column F, have a drop-down list for the following departments: Accounts, Admin, HR, IT, Marketing, Sales, Web sales
		2. In column D, restrict the data entry to allow only whole numbers between 0 and 26 to be entered

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1. Refer the DataSet in this tab. Now do the following:
	* 1. Use an appropriate function in the designated area to lookup the ISBN number and return the desired results
		2. Repeat the same with a more robust function that mixes a lookup function with the MATCH function

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1. The tab provides segment-wise sales data for Apple Inc. Calculate the Compounded Annual Growth Rate for each segment as well as for the total sales of the company

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1. This tab provides ‘loan-level’ information for a bank. Calculate the total interest chargeable from the start of the loans to the current date based on the number of days of loan outstanding (assume Actual/365)

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1. Observe the data in the tab. Now convert the data from a vertical table into a horizontal table format.

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1. This tab has daily prices of Tesla stock over three months. Chart the daily returns of Tesla stock prices over this period.
	* 1. How many instances of daily negative returns are there?
		2. What is the highest and lowest daily return found over this period?
		3. What is the mean daily return and volatility over this period?

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1. This tab has simplified data for a toy company. Using the data given:
	* 1. Calculate the total sales, Operating Expenses and Operating Profit in JPY (use the yellow cells)
		2. Given the possible fluctuations in FX Rates and Sales Volumes, create 2-dimensional table that shows the potential range of Operating Profit outcomes

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1. Use Excel to:
	* 1. automatically record the email contact details of the staff member, if you are given their ‘first name’ and ‘surname’? Their email should be in the format ‘firstname.surname@mubadala.ae’. Complete this in Columns D & E
		2. reformat the (poorly formatted) full name of the employee given in Column G with only one space between the first name and the surname. Your responses should be in Column H

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1. In this tab, you are given the full name of the employee. You are now required to split the names into First Names and Surnames and ensure that the output are in the cells marked yellow

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1. Your raw data also contains the details of the employee, such as their:
	1. Birth date: calculate their age of today in Column F.
	2. Years of Service: Use the information in Column G to calculate the number of years of service they have undertaken with you (Column H)
	3. Passport date of expiry: you would like to remind the employee with periodic reminders for their expiring passports.
		1. In the first scenario, set a Reminder if the employees passport is expiring within 365 days
		2. In the second scenario, set Reminder 1 if the employees passport is expiring within 365, and Reminder 2 if the employees passport is expiring withing 180 days

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1. Your raw data now needs to capture the location of the employee. This includes fields for:
	* 1. Country of Work in Column F. Create a drop down menu and create options for 3 countries: Qatar, United Kingdom and United States
		2. Based on the Country of Work chosen, the employees Full Phone Number with the Country Code for the respective country should automatically populate in Column G, prefixed by a ‘+’ sign. Use the Country Code List (file name: Country\_Code\_List) to import the data into a new excel tab for use in this exercise. Name the list imported as ‘Country\_Codes’

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1. Using the information offered on salaries, calculate the following:
	* 1. The total salary paid to all the employees
		2. The sum of salaries paid to employees earning over 200,000
		3. The sum of salaries paid to women earning over 200,000
		4. The number of women employees
		5. The number of employees earning salaries above 300,000
		6. The number of employees earning salaries between 150,000 and 300,000
		7. The number of women earning salaries below 150,000
		8. The highest salary
		9. The lowest salary
		10. Highest salary paid to a woman employee
		11. You would like to keep a track of the gender-wise breakdown of (a) employee numbers, (b) total salaries paid, (c) average salary, and (d) maximum salary paid. Based on the information provided, you would like to record this in a tabular form for a presentation you are about to make to senior management.

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1. In this tab, you would like to know:
	* 1. Which employee has earned the highest salary?
		2. Which employee has earned the lowest salary?

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1. You are preparing some analysis for a new project being undertaken in your department. Your colleagues have given you the estimates of the incomes and expenses of the project. They would like you to use this information to calculate some metrics that would eventually be presented to senior management. The metrics to be calculated include:
	* 1. The Present Value (as of today) of the Final Year’s Net Cash Flow
		2. The Future Value (as of the Final Year) of the Initial Investment of the Project
		3. The Internal Rate of Return of the Project
		4. The Net Present Value of the Project
		5. Create a cell style for the row titles/headings, with dark blue font, bold, Arial font size 12
		6. Format the cell content with a consistent font size of Arial 12 and black font (if positive) and red font (if negative).
		7. Format the ‘Years’ at the top of the columns, such that each cell states ‘Year 1’, ‘Year 2’, etc. However, the cell contents should remain as numeric (and not as text). In other words, these should retain the values of 1, 2, 3, etc.

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1. In this tab, you have been given a range of scenarios (3 scenarios) showing different possible outcomes for Revenues and Costs. At the top of the sheet (in Cell C1), the scenario number can be changed.
	* 1. Use the CHOOSE function in Excel so that, whenever the scenario number is changed, the main table is updated with the corresponding data
		2. Create a Combo Box with the following choices for the user (Scenario 1, Scenario 2 and Scenario 3). Link the output for the Combo Box to Cell C1.

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1. In this tab, you are given information about a borrower who has taken a financing for USD 5 mln, at an interest rate of 4.5%. The loan is for 3 years and repayable in 36 equal monthly instalments. You are asked to:
	* 1. Assess the interest that is paid each month
		2. Assess the principal amount that is repaid each month
		3. Calculate the monthly instalment that the borrower needs to pay to close the loan at the end of 36 months

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