**Handling Hotel Data in Excel**

This project will walk you through the beginning and ending stages of data analysis in Excel. You’ll be working with an analysis of [hotel reservations data](https://www.kaggle.com/datasets/jessemostipak/hotel-booking-demand) designed to assess cancellation rates and revenue from special charges.

You will load the raw data and inspect it for missing, suspect, or incorrectly coded data. You will use that information to inform the subsequent analysis, which you will also format and protect before presenting to others.

**First Group of Checkboxes (Import and Inspect):**

* Import the bookings CSV file to a new sheet. Make sure your imported data starts in cell A1. If it isn’t already, name the new sheet bookings (right- or control-click the sheet name to change it).
* If you aren’t there already, click over to the imported data on the bookings tab. Since it is hard to spot extra whitespace in text data, let’s start by trimming whitespace from the hotel, status, and day columns. Write a formula in F2 that trims whitespace from the hotel data in A2. Drag the formula down by double-clicking the green box in the lower right of F2.
* Write a formula in G2 that trims whitespace from the status data in B2. Drag the formula down by double-clicking the green box in the lower right.
* Write a formula in H2 that trims whitespace from the day data in D2. Drag the formula down by double-clicking the green box in the lower right.
* Open up the filter menu on the hotel column. It looks like two different encodings were used: one with the word hotel and one without. Write a formula in I2 that truncates the trimmed hotel data in F2 to just one letter to maintain consistency. Drag the formula down by double-clicking the green box in the lower right.
* Let’s take a look for missing data. Filter each column one at a time on (Blanks) (some columns might not have any!) Make a note of what data is missing in the summary table on the Import and Inspect sheet.
* Let’s take a look for suspicious data. Remove any filters. Sort arrival and note any suspiciously early or late data in the summary table on the Import and Inspect sheet.
* Sort Number of special requests and note any suspiciously large or small entries in the summary table on the Import and Inspect sheet.

**Second Group of Checkboxes (Format Numbers):**

* After inspecting the data, you’ve been asked to produce a couple of reports. These are on the Format Numbers sheet. The top table has the monthly percentage of total reservations by hotel type and reservation status. This table is hard to read due to the formatting. Format all the numbers in this table to be percentages with no decimal points.
* The second table on this sheet is a list of all the reservations with 5 special requests (the largest non-suspect number of special requests). When the table was copied onto this sheet, the dates got formatted as numbers. Reformat the dates as Short Date.
* Sort the second table to make it easier to read.

**Third Group of Checkboxes (Protect and Present):**

* The hotel chain is experimenting with lowering charges for special requests. They’ve asked for a table that calculates revenue based on new levels of charges. This table is on the Format and Protect sheet. Try a few different average charges to see how the average revenue changes.
* Since we’re going to be presenting this to others, let’s write a note in A17 explaining why we’re excluding 2020 from the average calculation.
* We’d like to protect the sheet so that the data doesn’t accidentally get altered. Before doing that, we want to make sure that F10 will still be editable. Unlock F10.
* Protect the Format and Protect sheet.
* Test that the protection worked!
* Hide the bookings sheet to clean up the file for presentation.