

# Handex - Microsoft Excel Expert (Microsoft 365 Apps)

## Student Study Guide: Project 1

**Instructions:** This file includes 51 tasks for the MO-211 - Microsoft Excel Expert (Microsoft 365 Apps) exam. When starting each project, make sure to use the specified Excel file listed under it. These tasks were created by the Handex Training Center and are not to be used without the organization's permission.

### Project 1-1 Tasks

#### Resources:

- **Project#1-1\_datafile.xlsx** in the **Practise#1** folder.

#### 1.1.1 Manage Workbook Options and Settings

- ☐ Configure Excel to disable all macros in the workbook without notification.
- ☐ Configure the workbook so that users have to enter the password, "Wendys" before they can make structural changes to the workbook.
- ☐ Configure Excel to automatically evaluate formulas only when a workbook is saved, and not each time the data changes.

#### 1.1.2 Manage and Format Data (These tasks must be completed on green Excel sheets.)

- ☐ On the "Student Enrollments" worksheet, in cells D4:F7, use the Fill Series feature to complete the enrollment growth rate of 100 students per year.
- ☐ On the "Subtotals" worksheet, use the Data Subtotal feature to calculate the total number of lessons and total due by instructor. Display the total lessons and total due for all instructors below the data.
- ☐ On the "Weekend Classes" worksheet, change the data validation error message for cells E4:E24 to "Please enter a number between 5-10"
- ☐ On the "Availability" worksheet, remove duplicates from column A.
- ☐ On the "Availability" worksheet, modify the conditional formatting rule applied to the cells in column B so that it applies Bold Italic font and no fill color to the cells that contain "Every day".

- ☐ On the "Profit Analysis" worksheet in cells D4:D10, create a conditional formatting rule that uses a 3-Color Scale format style to display the minimum in Yellow, the midpoint in Light Green, and the maximum in Green.

### 1.1.3 Create Advanced Formulas and Macros (These tasks must be completed on red Excel sheets.)

- ☐ On the "Proctors" worksheet, in cell C4, enter a formula that returns the sign-up phone number from the "sign-up information" range, using an exact match for the "Exam" in column B.
- ☐ From the "Proctors" worksheet, create a macro named, "Header". Store the macro in the current workbook. Configure the macro to display, "Massachusetts Testing Center" in the center header of the active worksheet.
- ☐ On the "Wendy's" worksheet, In cell O17, enter a formula that returns the average "Sales Revenue" for stores located in Montreal and are considered "Full" restaurants.
- ☐ On the "Wendy's" worksheet, Use the error checking features to locate the formula that is inconsistent with those around it. Correct the error.
- ☐ On the "Hours" worksheet, in cell B14, use a function to calculate the weekday that the swim school begins.
- ☐ On the "Craig's Cookies" worksheet, in column F, enter a formula that returns the sales for each city using the data from the "2020 Craig's Cookies" worksheet.
- ☐ On the "Car Loan" worksheet, in cell B8, use a function to calculate the number of months needed to pay off the loan.
- ☐ Add cells A2:F5 on the "NHLplayers" worksheet to the Watch Window.
- ☐ In cell B6 on the "About last week" sheet, add a formula that uses a single logical function to display TRUE if all of the players (who get paid way too much) scored at least one goal in the last week and FALSE if even one player did not score a goal last week..
- ☐ In cell C3 of the "Champions" worksheet, add a formula that uses a single function to look up the team abbreviation in the "Abbreviation" worksheet for the team listed in cell B3 of the "Champions" worksheet.
- ☐ In cell G3 in the "Recent Wins" worksheet, create a formula that will show if a recent winning team ranked in the top ten in the league for both goals scored and goals

allowed during the season. Display "Expected" if the team did this, and "Not expected" if the team did not rank better than 10 in both.

#### 1.1.4 Manage Advanced Charts and Tables (These tasks must be completed on orange Excel sheets.)

- ☐ On the "Profit Analysis" worksheet, create a chart that displays the "Salary" for each instructor as an Area chart and the "Revenue", as a Line chart on the same axis.
- ☐ On the "Revenue per Lesson" worksheet, modify the chart to use Layout 3 and Style 6. Change the colors to Monochromatic 5 and the chart title to, "Revenue per lesson".
- ☐ On the "Advertising" worksheet, create a funnel chart that displays the "Enrollment" data with the descriptions on the left of the chart. Change the chart title to "Enrollment from Advertising".
- ☐ On the "Family Memberships" worksheet, modify the PivotTable to group the data by the values in the "Price" column. Group the values in steps of 100, beginning at 1 and ending at 200.
- ☐ On the "Family Memberships Filter" worksheet, insert a slicer for the PivotTable that allows you to filter the table by "Description". Use the slicer to display all of the records except for the "Individual" and "Couple" ones.
- ☐ On the "Enrollment Change" worksheet, create a pie PivotChart that shows the PivotTable data. Filter the chart to display only the enrollment change for Aqua tots and Aqua fit.
- ☐ On the "Enrollment Trend" worksheet, create a calculated field named, "Trend" that displays the enrollment increase from 2019 to 2020.

## Project 1-2 Tasks

### Resources:

- **Project#1-2\_datafile.xlsx** in the **Practise#1** folder.

1.2.1 You manage an online retail company that ships specialty products to countries in Europe, and you are preparing a workbook to track key business metrics. (These tasks must be completed on red Excel sheets.)

- ☐ On the Orders worksheet, use a formula to fill the Product Name column using the information in the Products worksheet.
- ☐ In cell L2 on the Orders worksheet, use a formula to calculate the number of orders from the Country selected in cell K2 with a Revenue greater than or equal to \$100.
- ☐ On the Countries worksheet, insert a Filled Map using the information in cells A1:B15.
- ☐ In cell B5 of the Warehouse Extension worksheet, use a formula that calculates the monthly payment amount, assuming the payment is due at the beginning of each month.
- ☐ On the Summary Chart worksheet, add a Line Pivot Chart and change the Pivot Chart formatting to Style 5 and Layout 4.

1.2.2 You are the Sales Director of a beer manufacturing company that supplies the beer for all Major League Baseball stadiums, and you are preparing a workbook to help manage pricing. (These tasks must be completed on green Excel sheets.)

- ☐ On the Team Selector worksheet, add a data validation list to cell C6 using range A2:A31 from the Beer Prices worksheet as the source; select the Philadelphia Phillies.
- ☐ On the Beer Prices worksheet, group columns B:C.
- ☐ On the Price per Ounce worksheet, use conditional formatting to apply a Red - White - Green color scale to range B2:F31.
- ☐ On the Price per Ounce worksheet, add a formula in cell G2 that displays "None" if the Price per Ounce in 2018 was equal to the Price per Ounce in 2013, displays "Increase" if the Price per Ounce in 2018 is greater than the Price per Ounce in 2016

or greater than the average Price per Ounce from 2013-2016. Otherwise, display "Decrease".

1.2.3 You are the Sales Director of a beer manufacturing company that supplies the beer for all Major League Baseball stadiums, and you are preparing a workbook to help manage pricing. (These tasks must be completed on black Excel sheets.)

- ☐ On the Indicators worksheet, remove duplicates from the Indicators table by only considering the values in the Country column.
- ☐ Disable all macros except digitally signed macros in this workbook.
- ☐ For the Pivot Table on the Region Summary worksheet, sort the Region descending by Sum of Population.
- ☐ On the Region Summary worksheet, add a calculated field called "Population Density" to the Pivot Table that is equal to Population divided by Area.

1.2.4 You are the Head of Purchasing at a regional winery and you are preparing an Excel workbook to track your current inventory and orders. (These tasks must be completed on blue Excel sheets.)

- ☐ In cell F2 of the Inventory worksheet, write the year between parenthesis in the Name column and use Flash Fill to fill in the year for the rest of the wines in the inventory.
- ☐ On the Inventory worksheet, create a formula based conditional formatting rule to range A2:I101 that applies a bold font and light orange fill to rows where the Stock on Hand is less than or equal to the Reorder Quantity.
- ☐ On the Order Tracker worksheet, add a formula in cell B5 to calculate the arrival date for the order.
- ☐ Protect the workbook so users cannot add, edit, or delete worksheets using password 12345.

1.2.5 You've been hired as an analyst by a coffee roasting company and you are preparing a workbook to compare sales across stores and product categories. (These tasks must be completed on orange Excel sheets.)

- ☐ On the Product Sales worksheet, insert a Subtotal that calculates the Sum on the Units Sold and Sales columns for each Product Group.
- ☐ On the Sales by Store worksheet, consolidate the quarterly sales figures for all 3 stores in the NYC Totals table using a Sum.
- ☐ On the New Product worksheet, add a custom number format for cell B8 so that positive values have a dollar sign (\$), a thousand separator and no decimal points; for negative values use the same format but wrap the number in parenthesis and give it a red font.
- ☐ Use an Excel forecasting tool in cell B6 on the New Product worksheet to calculate the Units Sold that will result in a Profit of \$3,000.

1.2.6 You've been contracted to track traffic accidents in New York City, and you are preparing a workbook to analyze monthly trends and contributing factors. (These tasks must be completed on purple Excel sheets.)

- ☐ On the Van Collisions worksheet, record a macro named "TableHeader" with Ctrl+Shift+T as the Shortcut key that selects range A1:F1, makes the font bold and size 14pt, and merges & centers the selection; run the macro using the Shortcut on the Taxi Collisions worksheet.
- ☐ On the Monthly Trend worksheet, add a chart that shows the Collisions, as a clustered column chart, and the Injury %, as a line chart on a secondary axis, by Month.
- ☐ On the Collision Causes worksheet, show values as % of Column Total for the Sum of # of Persons Injured.