

## Excel Project 1 – MS Excel

Use the project description HERE to complete this activity. For a review of the complete rubric used in grading this exercise, click on the Assignments tab, then on the title "Excel Project 1." Click on Show Rubrics if the rubric is not already displayed.

### Summary

Create a Microsoft Excel file with four worksheets that provides extensive use of Excel capabilities including graphing, and written analysis and recommendations in support of a business enterprise.

A large rental car company has two metropolitan locations, one at the airport and another centrally located in downtown. It has been operating since 2015 and each location summarizes its car rental revenue quarterly. Both locations rent two classes of cars: economy and premium. Rental revenue is maintained separately for the two classes of rental vehicles.

The data for this case resides in the file **Excel Project 1-Data.txt** and can be downloaded by clicking on the Assignments tab, then on the data file name. It is a text file (with the file type .txt).

**Do not** create your own data. You must use the data provided and only the data provided.

### Tutorials

Note: Tutorials that address activities used in this project have been assigned in Week 1, 2 and 3.

	Requirement	Points Allocated	Comments
1	Open Excel and save a blank worksheet with the following name:  a. "Student's First InitialLast Name Excel Project 1" Example: JSmith Excel Project 1. b. Set Page Layout to Landscape	0.2	Use Print Preview to review how spreadsheet would print.
2	a. Change the name of the worksheet to <b>Analysis by</b> .	0.1	
3	a. In the <b>Analysis by</b> worksheet, enter the four labels vertically in column A in the following order: Name:, Class/Section:, Project:, Date Due: b. Place a blank row between each label. Please note the colon, (:) after each label. c. Align the labels to the right in the cell d. It may be necessary to adjust the column width so the four labels are clearly visible.	0.3	Use the following text format:  Arial 10 point  <b>Bold</b>  Align values Right in the cell
4	a. In the <b>Analysis by</b> worksheet, with all entries in <u>column C</u> , enter the appropriate values for Name, Class and Section, Project, Date Due. b. It may be necessary to adjust the column width so the four labels are clearly visible. c. Use the formatting listed in the <b>Comments</b>	0.3	Use the following text format: Arial 10 point <b>Bold</b> Align values left in the cells

	Requirement	Points Allocated	Comments
5	a. Create new worksheets: <b>Data</b> , <b>Sorted</b> , and <b>Airport</b> . Upon completion, there should be <b>Analysis by</b> as well as the three newly created worksheets. b. Delete any other worksheets.	0.2	
6	a. If necessary, reorder the four worksheets so they are in the following order: <b>Analysis by</b> , <b>Data</b> , <b>Sorted</b> , <b>Airport</b> .	0.1	
7	<p>In the <b>Data</b> worksheet, import the text file <b>Excel Project 1-Data.txt</b>.</p> <p>Though the intent is to import the text file into the Data worksheet, sometimes when text data is imported into a worksheet, a new worksheet is created. If this happens, delete the blank Data worksheet, and then rename the new worksheet which HAS the recently imported data as "Data." It may be necessary to change Revenue to Currency format with NO decimal points and to change NumCars to numerical format, with no decimal points, as a result of the import operation.</p> <p>This may or may not occur, but in case it does it needs to be corrected.</p>	0.5	<p>Format all data (field names and numbers) to <b>Arial 10 point</b>.</p> <p>The field names should be in the top row of the worksheet with the data directly under it in rows. This action may not be necessary as this is part of the Excel table creation process. The data should begin in Column A.</p>
8	<p>In the <b>Data</b> worksheet,</p> <ol style="list-style-type: none"> <li>create an Excel <b>table</b> with the recently imported data.</li> <li>Pick a style with the styles group to format the table,</li> <li>The style should highlight the field names in the first row.</li> <li>Ensure NO blank spaces are part of the specified data range. Insure the table has headers.</li> <li>Insure that Header Row and Banded Rows are selected in the Table Style Options Group Box.</li> </ol>	0.6	<p>Some adjustment may be necessary to column widths to insure all field names and all data are readable (not truncated or obscured).</p>
9	<p>In the <b>Data</b> worksheet,</p> <ol style="list-style-type: none"> <li>select the entire table (data and headers) using a mouse.</li> <li>Copy the table to the <b>Sorted</b> worksheet.</li> <li>The upper left hand corner of the header/data in <b>Sorted</b> should be in cell A1.</li> <li>Adjust columns widths if necessary to insure all data and field names are readable.</li> </ol>	0.4	
10	<p>In the <b>Sorted</b> worksheet,</p> <ol style="list-style-type: none"> <li>sort the data by location (ascending)</li> <li>(All cells with data in the table should be selected)</li> </ol>	0.2	<p>Insure all the table is selected, NOT just the location column.</p>
11	<ol style="list-style-type: none"> <li>Copy the entire table from the <b>Sorted</b> worksheet to the <b>Airport</b> worksheet.</li> <li>Some column adjustments may be necessary to insure the field names as well as the data is all readable.</li> </ol>	0.2	<p>Insure all cells with data are selected.</p>
12	In the <b>Airport</b> worksheet,	0.3	

	Requirement	Points Allocated	Comments
	a. delete all the rows in the table where the data is for Downtown, b. the field names should remain at the top of the table, and c. the remaining data should be for the Airport location.		
13	In the <b>Airport</b> worksheet, a. sort all the data first by CarClass (Ascending), b. then by Year (Ascending), c. then by Quarter (Ascending).	0.3	Insure that all cells with data have been selected.
14	In the <b>Airport</b> worksheet, a. add a new column head AvgRev that calculates the Average Revenue for a row, b. add a formula to calculate the AvgRev by dividing the Revenue by the NumCars for all rows in the table, and c. use 2 decimal points in the values. d. Column adjustment may be needed to insure both the title and the data is visible. e. Use the formatting instructions in the <b>Comments</b> .	0.5	The format of the table should be extended to the new column. Use the following text format: Arial 10 point <b>Bold</b> Insure all of the data values for AvgRev are Currency Format (using the Format Cells option).
15	In the <b>Airport</b> worksheet, a. create a range named AE that includes every AvgRev value for Economy cars, and b. create a range named AP that includes every AvgRev value for Premium cars.	0.4	AE stands for Airport Economy, AP stands for Airport Premium.
16	In the <b>Airport</b> worksheet, a. on the third row below the final row of the data, b. create a label called Average Quarterly Revenue per Economy Car (Airport). c. Use the formatting instructions in the <b>Comments</b> .	0.3	Use the following text format: Arial 10 point <b>Bold</b>
17	In the <b>Airport</b> worksheet, a. in the first fully visible cell to the right of the label, b. calculate the Average Quarterly Revenue per Economy Car (Airport) using the average function and the named range AE. Insure the Average is Currency format with two decimal points. No credit will be awarded if anything other than AE as the function range is used instead of the named range.	0.5	Use the following text format: Arial 10 point Normal
18	In the <b>Airport</b> worksheet, a. on the fourth row below the final row of the data, b. create a label called Average Quarterly Revenue per Premium Car (Airport). c. Use the formatting instructions in the <b>Comments</b> .	0.3	Use the following text format: Arial 10 point <b>Bold</b>
19	In the <b>Airport</b> worksheet, a. in the first fully visible cell to the right of the label, b. calculate the Average Quarterly Revenue per Premium Car (Airport) c. using the average function and the named range AP. Insure the Average is Currency format. d. Use the formatting instructions in the <b>Comments</b> . No credit will be awarded if anything other than AP as the function range is used instead of the named range.	0.4	Use the following text format: Arial 10 point Normal
20	In the <b>Airport</b> worksheet,	<b>0.75</b>	

	Requirement	Points Allocated	Comments
	a. create a bar chart that clearly shows the average revenue per economy car versus the quarter for 2015. b. Provide an internal chart title that explains what is portrayed on the graph. c. Place the chart to the right of the data.		
21	In the <b>Airport</b> worksheet, a. create a bar chart that clearly shows the average revenue per premium car versus the quarter for 2015. b. Provide an internal chart title that explains what is portrayed on the graph. c. Place the chart to the right of the data and below the first chart.	0.75	
	For the questions below, present your answers in a very readable format <u>under the data</u> . These answers may be placed on the page below your chart if there is not sufficient room on page 1. Do not let the answers be "split" over more than one page. You can type your answer in one cell (in Column A), then highlighting and selecting several rows and columns, selecting merge cells and selecting Wrap Text. Do NOT widen the columns as this will adversely impact the appearance of the data above. You will want to change the text from Center to Left justification. Play with this a bit. If you simply type your answer on a single line in Column A, that will also be ok. <b>But be sure the entire answer can be read without the reader having to change any formatting.</b>		
22	<b>Question1:</b> Is there a trend that is shared between the Economy and Premium average revenue per car based on the two graphs? Along with the yes or no explain why there is or why there is not a trend.  a. Label your response Question 1. Answer this question in 2 to 3 sentences after the average revenue per premium car (airport). DO NOT change your spreadsheet. Just respond to the question. (1.0) b. Readability, format and location (0.2)	1.2	Use the following text format:  Arial 10 point  Normal/Black  Align text left in the cell  Position on worksheet
23	<b>Question 2:</b> Explain one possible cause for the average revenue per share in Q3. The answer should relate to both economy and premium cars.  a. Label your response Question 2. Answer this question in 2 to 3 sentences in a new row under your response to Question 1. DO NOT change your spreadsheet. Just respond to the question. (1.0) b. Readability, format and location (0.2)	1.2	Use the following text format:  Arial 10 point  Normal/Black  Align text left in the cell
<b>Total Points</b>		10	