## Assignment 2 – Budget (Excel)

## Summary

Use the project description below to complete this assignment.

Tracking personal expenses and creating a budget is an excellent use of spreadsheet applications. For this exercise, you will create a spreadsheet to enter a personal budget and track actual expenses for the year. You may choose to use real data with your actual paycheck or create a fictitious budget using a monthly income amount of \$3,200.

Divide your expenses for the month into at least ten different categories that you spend money on which may include: Housing (Rent/Mortgage), Utilities, Food, Entertainment, Internet, Telecommunications, Health Insurance, Transportation, Car Payment, Car Insurance, Gas, Loan Payment, Medical, Tobacco, Beer, and Other.

Note that some of these expenses like Insurance and Medical may not occur every month.

Step	Requirement	Format
1	<ul> <li>Open Excel and save a blank worksheet with the following name:</li> <li>a) Asgn2-Excel-YourName.xlsx</li> <li>b) Set Page Layout to Landscape</li> </ul>	Use Print Preview to review how spreadsheet would print.
2	<ul> <li>a) Change the name of the left most worksheet by double clicking on Sheet1 tab at the bottom of worksheet and change to 20XX Budget</li> <li>b) Delete any other worksheets by right-clicking on tab and delete</li> <li>c) In the worksheet, <i>Insert</i> a <i>Header</i> titled, "20XX Budget"</li> </ul>	Use this year = 20XX Header text must be Arial, 16 point, Bold, and centered on page
3	<ul><li><i>Insert</i> a <i>Footer</i></li><li>a) in the left section put your full name.</li><li>b) In footer center section put date this assignment is due</li><li>c) In footer right section write Page then automatic pagination</li></ul>	Footer text must be Arial,10 point, Normal November 15, 2017 Page #
4	<ul> <li>Enter column headings :</li> <li>a) EXPENSE ITEM, ESTIMATE, and the 12 months</li> <li>b) Abbreviate the months with three letters: JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC</li> </ul>	All column headings must use format: Arial, 10 point, Bold centered in column All capital letters
5	Enter a minimum of ten budget category labels in the rows under the column heading <i>EXPENSE ITEM</i> . See suggested categories in above summary. Other must be the last item for any other unplanned expenses.	Arial, 10 point, Normal Title Case, Align text left in cell
6	Format all cells that will contain numeric data to Currency, using two decimal places. If you have this set up correctly Excel will automatically insert a "\$" in front of the amounts that you enter. Do NOT type \$ sign.	Arial,10 point, Normal Optionally, you could use the currency of your resident country
7	In the column under your <i>ESTIMATE</i> label, enter a monthly estimate amount for each <i>EXPENSE ITEM</i> category. This would be the limit of what you want to spend on each category in one month's time.	Arial 10 point, Normal, Blue, Align values Right in column

Step	Requirement	Format
8	Enter the label "EXPENSE ESTIMATE TOTAL" in the row after your last <i>Expense Item</i> in the <i>EXPENSE ITEM</i> column.	Arial, 10 point, Bold, Blue, Align values Right in column
9	Use the SUM function with a range of values to calculate the total amount of the <i>ESTIMATE</i> column in the cell to the right of the label <i>EXPENSE ESTIMATE TOTAL</i> . Note: Amount will appear in ONLY ONE cell (do not copy to remaining cells in the same row).	Arial 10 point, Bold, Blue, Align values Right in column
10	Under the heading for each Month, enter an actual expense amount for that item for that month. Contracted expense items like Rent, Cell Phone, and Internet may be the same each month but other expenses must change from month to month.	Arial, 10 point, Normal, Black Align Right in cell
11	In the next row in the <i>EXPENSE ITEM</i> column (under the <i>EXPENSE ESTIMATE TOTAL</i> label) enter the label TOTAL MONTHLY EXPENSES.	Arial, 10 point, Bold DarkRed, Align Right
12	For the JAN cell in this <i>TOTAL MONTHLY EXPENSES</i> row, insert a formula that will calculate the total actual expenses. Use the SUM function to add the amounts in JAN column using a range of values. NOTE: Do Not include empty TOTAL cells in your formula. Then copy this JAN cell formula to each monthly cell in same row and notice range letters update automatically for this relative address duplication.	Arial, 10 point, Bold DarkRed, Align Right
13	In the next row under the <i>TOTAL MONTHLY EXPENSES</i> label put the label "Projected versus Actual".	Arial, 10 point, Bold, <b>Black</b> , Align Right
14	In the cell under the Total Monthly Expenses values for JAN, use a simple formula that will subtract the actual total monthly expenses for JAN from the <i>EXPENSE ESTIMATE TOTAL</i> value.	Arial, 10 point, Normal, Black, Align Right, Change to Currency Format such that negative numbers show up as Red with Parenthesis by selecting more number formats. Accountants use terms Black = Profit Red = Loss.
	To make this formula work for duplication to other months (and prevent point loss on assignment) you must use Absolute Reference in your formula by preceding the column letter or row number with a'\$'. [F4 Key]	
	If the result of your calculation is a positive number, then you are under budget for the month. (You have money left over and are in the Black).	
	If the number is negative, then you are over budget. (You didn't have enough money to pay all of the expenses that month and are in the Red).	
	If formula works then copy JAN cell to other months FEB through DEC. Examine formula for copied cells and note absolute address \$B13 is unchanged, but the relative cell address C14 does change.	

Step	Requirement	Format
15	Enter column label titled "TOTAL" to the right of your last DEC month.	Arial, 10 point, Bold, Black, Align Center
16	Enter formula using SUM() function with a range for the first Expense Item. Copy this cell formula down for all the expense categories. This will calculate the total for each Expense Item in your budget list for the year. NOTE: Be certain to total just the months; do not include the <i>ESTIMATE</i> column and use a range of address for all months.	Arial 10 point, Bold, Blue, Align values Right in column Set to Currency Adjust Column width
17	Enter column label titled " Average" to the right of the Item Total column.	Arial, 10 point, Bold, Black, Align Center
18	Enter formula using AVERAGE() function with a range for the first Expense Item. Copy this cell formula down for all the expense categories. This will calculate the average for each Expense Item in your budget. NOTE: Be certain to average just the months; do not include the <i>ESTIMATE</i> column and use a range of address for all months.	Arial, 10 point, Bold, <b>Black</b> , Align values Right in column Set to Currency Adjust Column width
19	Enter label "MONTHLY INCOME" in the row after <i>Project versus Actual</i> . In the <i>Monthly Income</i> row enter your income each month. Format this row to currency with two places to right of decimal.	Arial, 10 point, Bold <b>Green</b> , Align Right
20	Enter label "BANK BALANCE" in the row after <i>MONTHLY INCOME</i> . In <i>Bank Balance</i> row and <i>Estimate</i> column enter your current bank balance as a value and format this number to currency.	Arial, 10 point, Bold Blue, Align Right
21	In the <i>BANK BALANCE</i> row enter a formula that takes the previous month's bank balance add the current Monthly Income and subtract current month's Total Monthly Expenses. After you verify the calculated value copy and paste it to the other 11 columns for the month and watch your bank balance grow. Adjust column width to show values and labels.	Arial, 10 point, Bold Blue, Align Right Format number to currency.
22	Apply All Borders to the spreadsheet area only. This means that there will be lines around all the individual cells that make up your spreadsheet. Format your first row (column headings) by shading it to distinguish the headings from the number entries. These headings should already Bold. Ensure that all column headings and row labels are fully visible. Either use Wrap Text OR expand the column width so that no labels are truncated. Excel has the <i>Format as Table</i> style ribbon item which allows you to format the table with alternating colors. Apply the Table Style Medium 2	Format the spreadsheet for readability and clarity. Be sure font size and type are used consistently. Use color appropriately to improve the appearance.

Step	Requirement	Format
23	Insert a pie chart that shows the Expense Items and Average values column as slices of the pie chart. You must select two columns for your chart – the <i>EXPENSE ITEM</i> column and the <i>AVERAGE</i> column by holding down the control key (Mac command key) when select the second column. Move the chart directly below your Average column and adjust size so that it fits on the page below table. You may need to resize the chart to do this in the Page Layout View.	
24	Title the pie chart: "My Average Expenses" Show dollar amounts on each segment of the chart. Show Chart Legend that has expense items text and color-coded to match the color of chart slices.	
For the questions below, present your answers in a very readable format by typing your answer in one cell (in Column A) below <i>BANK BALANCE</i> label, then highlighting and selecting several rows an columns, selecting merge cells and selecting Wrap Text. You will need to change the text from to Left justification. If you simply type your answer on a single line in Column A, be sure the entire answer caread without the reader having to change any formatting.		g several rows and text from to Left
25	Question 1: If you become unemployed the beginning of September and your only monthly income for September through December is the \$1400 per month that you receive from unemployment insurance what will your Bank Balance be in December assuming your expenses do not change? Does your pie chart change? Perform What If Analysis using your spreadsheet to answer this question, but then undo the changed values to view original spreadsheet.	Arial, 10 point, Normal, Align Left
26	Question 2: You decide it is time to buy a house the beginning of July and secure a zero down payment mortgage with a monthly payment of \$2100 per month. How does this affect your Bank Balance by December? Does your pie chart change? Perform What If Analysis using your spreadsheet to answer this question, but then undo the changed values to view original spreadsheet.	Arial, 10 point, Normal, Align Left
27	Question 3: Your automobile transmission fails in August and you receive a \$1400 repair bill. How will you deal with this added expense. Perform What If Analysis using your spreadsheet to answer this question, but then undo the changed values to view original spreadsheet.	Arial, 10 point, Normal, Align Left

Upload your **Asgn2-Excel-YourName.xlsx** in the assignment 2 folder on LEO, before the posted due date.