CP212 Assignment 2 Fall 2022

Weight: 3.75% of final grade **Marks: 20**

Due: Monday, October 10, 11:30 pm **This document has 2 pages.**

Name your spreadsheet with your network login followed by _a02.xlsm. For example, if your network login was barn4520, then your assignment file should be named barn4520_a02.xlsm.

Important: Put Both Parts in Single .xlsm file NOT two files

Part A

The **Data** worksheet in the file **Product Info.xlsx** lists information on various software packages a company sells. Eachproduct has an associated category listed in column B.

Write a sub that creates a worksheet for each category represented in the list, with the name of the worksheet being the category, such as Business. Place a button on the **Data** worksheet to execute your code.

For each category worksheet, the sub should enter the product names and their prices in columns A and B, starting in row 4. Each category worksheet should have an appropriate label, such as "**Products in the Business Category**" in cell A1; it should have the labels "**Product**" and "**Price**" in cells A3 and B3 respectively; and the column width for column A should be the same as the column width of column A in the Data worksheet.

Note: There are only 3 categories in the worksheet, but your code should work no matter how many categories (or products) there are. Imagine that this code was tested on a different list of products.

Tip: When in doubt, format to 2 decimal places. It looks cleaner. Unless otherwisespecified.

Skills in this Assignment

- Finding the size of a range
- Entering values into a cell/range
- Manipulating worksheets
- Writing a new subroutine in VBA
- Adding a Form control button to a worksheet to run a subroutine

Notes and Tips

a) Use multiple subs or functions as appropriate to make your program modular.
b) Ensure your name and current date are at the top of each code module by using the code template provided in lab.
c) Remember to upload the .**xlsm** file to the A2 Dropbox in MyLearningSpace before the due date ends.

Part B

The file **CustomerOrders.xlsx** shows orders by date for a company's customers on the Data worksheet. Many customers have ordered more than once, so they have multiple entries in the list. Write a sub that asks the user for a total (for example, $3000), finds the total amount spent by each customer on the list and reports those whose total is more than the amount provided by the user on a new worksheet called Report. Have the program ask the user for a total until the user enters a valid value.

As part of your sub, sort the list on the Report worksheet in ascending order by total amount spent. (Hint: The orders in the Data worksheet are currently sorted by date. It might be helpful to use VBA to sort them by Customer ID. Then at the end of the sub, restore the list to its original condition by sorting on Date.)

Make sure your code checks for the Report worksheet before it does any new calculations. Any previous existing Report worksheet should be deleted before a new one is created. Create your Results worksheet so it looks something like this before your data gets filled in:

	A	B	C
1	**Customers who spent more than $3000**		
2			
3	Customer ID	Total amount spent	
4			

Notes and Tips:

- Be sure to include basic data validation/error checking to avoid data type mismatches and other errors. Have the program ask the user for a total until the user enters a valid value.
- Make a button on the Data worksheet to run your subroutine.
- Save the file with the data and your code as username_a2.xlsm where username is your network login.
- Ensure your name and current date are at the top of each module.
- Add comments to your code to clarify meaning wherever needed.
- In case an existing Report worksheet is deleted, **don't** show the user a warning message before deletion.
- Don't forget to re-enable warning message again after deletion.

Rubric: **Part A**
- Instructions [2]
- Finding the size of a range and Entering values into a cell/range [2]
- Placing button to run the code [2]
- Creating worksheets [2]
- Sheets labels and adjusting column width [2]

Rubric: **Part B**
- Instructions [2]
- Formatting [2]
- Sort the list in ascending way [2]
- Data validation [2]
- Check that any previous existing Report worksheet should be deleted before a new one is created [2]