# **CS170 – Computer Applications for Business**

# Spring 2024 • Assignment 9

Due Date:	Before 11:59 p.m. on Friday, April 12 <sup>th</sup> , 2024			
Accept Until:	Before 11:59 p.m. on Friday, April 19 <sup>th</sup> , 2024			
Evaluation:	20 points			
Submit to Canvas:	Assignment9.xlsx file			

YOU ARE ON YOUR HONOR TO COMPLETE THIS ASSIGNMENT WITHOUT ASSISTANCE. You may use your text and resources available to you through Canvas. You MAY NOT ask any human for assistance, give assistance to anyone, or use any online tutoring service.

## **Learning Objective:**

This assignment is designed to introduce:

- 1. The basics of worksheets using MS Excel.
- 2. Creating simple and complex formulas,
- 3. Formatting for appeal and emphasis.
- 4. Creating interpretive charts.

## To get credit for this assignment:

1. Submit the assignment9.xlsx file to Canvas on time.

#### **Directions:**

- Follow the requirements listed below.
- Use formulas to analyze the scorecard sheet.
- Remember the different between ctrl-click and shift-click to do your multi-selects
- Submit your assignment9.xlsx file to Canvas using the Canvas-> Assignments link.

## **Requirements:**

#### 1. Scorecard sheet

Please put name, section, and honor code statement in cells A2, B2, and B3 of the Scorecard sheet

Name	Section	Honor Code		
		Towns	Rating	Target Rating
			Year 1	Year 2
			65	
<			75	
Region A			70	
			68	
			90	
			95	
<u> </u>				
Region B				
Ş.				
O <sub>u</sub>				
Region C				
	Region A	Region B	Region C	
Average rating Year 1	_			
Average rating Year 2				
Max rating Year 1				
Max rating Year 2				
Min rating Year 1				
Min rating Year 2				

<u>Formulas</u>: Complete the missing information using formulas. Please round results to whole numbers.

- a. Fill in the towns with any town names you can choose on your own (there is no correct answer)
- b. In the rating year 1 column, the region A year 1 ratings are filled in already.
- c. Please assign numerical ratings for region B and region C for year 1 such that the following criteria are met:
  - The average rating for towns in region B is 88, with a minimum rating of 80 and a maximum rating of 96.
  - The average rating for towns in region C is 79, with a minimum rating of 71 and a maximum rating of 86.
- d. In target rating year 2, please put formulas such that the year 2 target is 10 percent increase on year 1 for region A, 3 percent increase for region B, and 7 percent increase for region C
- e. In range B25:D30, highlighted in yellow, please use excel formulas to calculate the appropriate values.

#### 2. Pizza spreadsheet

Take the ingredients listed in rows 2-7 and put them in rows 11 and onward. The Percentage, column B, is calculated as ingredient amount/sum of ounces for all

the ingredients. Please make sure percentage is calculated as formula. Once you set this data up, please create charts using ingredient and percentage columns and place charts to the right of the ingredients data.

For a pie chart, please use style 8 as the screenshot below. These styles are accessible on Excel desktop version. Please change chart title to Pizza Dough and set the legend option to left.



For a clustered bar chart use style 8 as shown in below screenshot. Also update the Chart title to Pizza Dough



#### 3. Formulas sheet

Create excel calculations by entering excel formula in the cells indicated – yellow background – using the formulas listed below and referencing the data for variables in column C. Note the Excel function SQRT() to calculate the square root

a. 
$$X = \frac{1}{2}h\pi b^3$$

b. 
$$X = \sqrt{(X_2 - X_1)^3 + (Y_2 - Y_1)^3}$$

### **References:**

- 1. Chapter 13 of the Fluency7 textbook
- 2. Recitations and Lectures