



American University of Beirut

Department of Computer Science

CMPS 209- Spring 2010

Lab Assignment 8

Week of: April 26- April 30

Objectives

- Using Application Software: Ms Excel .

Instructions

- Study the related material from Excel Lectures 2, and 3 before going to the lab.
- Solve the following exercises during the lab session.

Using your network drive

- Go to my computer then choose Z:// drive
- Right Click and choose to create a new folder
- Right click on this new folder and rename it as follows: Username.SectionNumber.AssignNumber
 - Example: If your user name is abc99 and you are in section 5 and you are doing assignment 1 then your folder should have the following name: **abc99.5.1**
- Your work should be saved into this folder so that it can be graded.

Exercise One: Bears

Open the data file then apply the following steps on the designated data sheets.

- Open the “*Bears_Conditional Formatting*” then:
 - Apply a data bar conditional formatting to the values of the age column such that the shortest bar is for the age 57 and the longest bar is for the age of 83.
 - Add to the WEIGHT field data icons that represent the 4 colored arrows, as shown in page 2 with:
 - The red arrow for the weights greater or equal to 220
 - The yellow downward arrow for the weights greater or equal to 150
 - The yellow upward arrow for the weights greater or equal than 100.
 - The green arrow for the weights less than 100.
- Sort the records according to these data icons with the green arrow at the top, the yellow upward in the

AGE	MONTH	SEX	HEADLEN	HEADWTH	WEIGHT
8	8	1	9	4.5	34
9	9	1	10	4	40
9	9	1	10	4	46
10	10	1	9.5	4.5	65
10	10	1	11.5	5	86
10	10	1	11	5	94
11	11	1	11.5	6	79
16	4	1	10	4	60
16	4	1	10	5	64
17	5	1	11.5	5	114
18	6	1	12.5	8.5	140
35	11	1	13.5	8.5	212
45	9	1	13.5	7	204
45	9	1	16	6	220
51	4	1	13.5	8	360
55	7	1	16.5	9	344
17	5	2	11.5	5	76
20	8	2	11.5	5	105
44	8	2	12.5	4.5	140
45	9	2	13	6.5	182
53	5	2	12.5	6	144
57	9	2	13	5.5	116
57	9	2	12.5	5	125
57	9	2	13.5	7	204
58	10	2	13.5	6.5	202
70	10	2	14.5	6.5	316
81	9	2	13	5	132
82	10	2	13.5	6.5	356
83	11	2	14.5	7	236
100	4	2	13	7	220
104	8	2	15.5	6.5	166

second place and then the yellow downward arrow, and according to the age in increasing order within the same icon set. *Save your work.*

- Open the “*Bears_Bottom 25 % Weight*” worksheet then the following:
 - Apply a filter to the weight column to show only the bottom 25% of the weights.

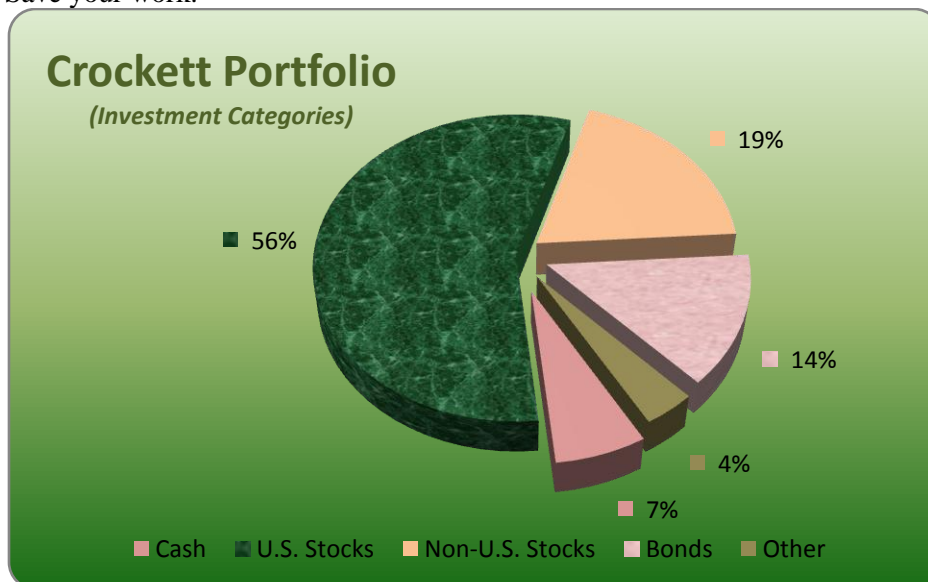
Exercise Two: Football Players

- Rename the sheet Question 1 with your Full Name, then apply a filter to the records so that only the players whose who were born in Spain are displayed.
- Open the sheet Question 2, then apply a filter to the records so that only the players whose positions are Forward and whose weight is greater than 70 and height less than 182 are displayed.
- Open the sheet Question 3, then sort the list of players by positions as follows(Goalkeeper then Defender then Forward) and then by weight from the highest to the lowest

Exercise Three: Pie Charts

Open "Composition" sheet, and then plot a 3d pie chart that shows that distribution by investment category of the funds in the Crockett portfolio.

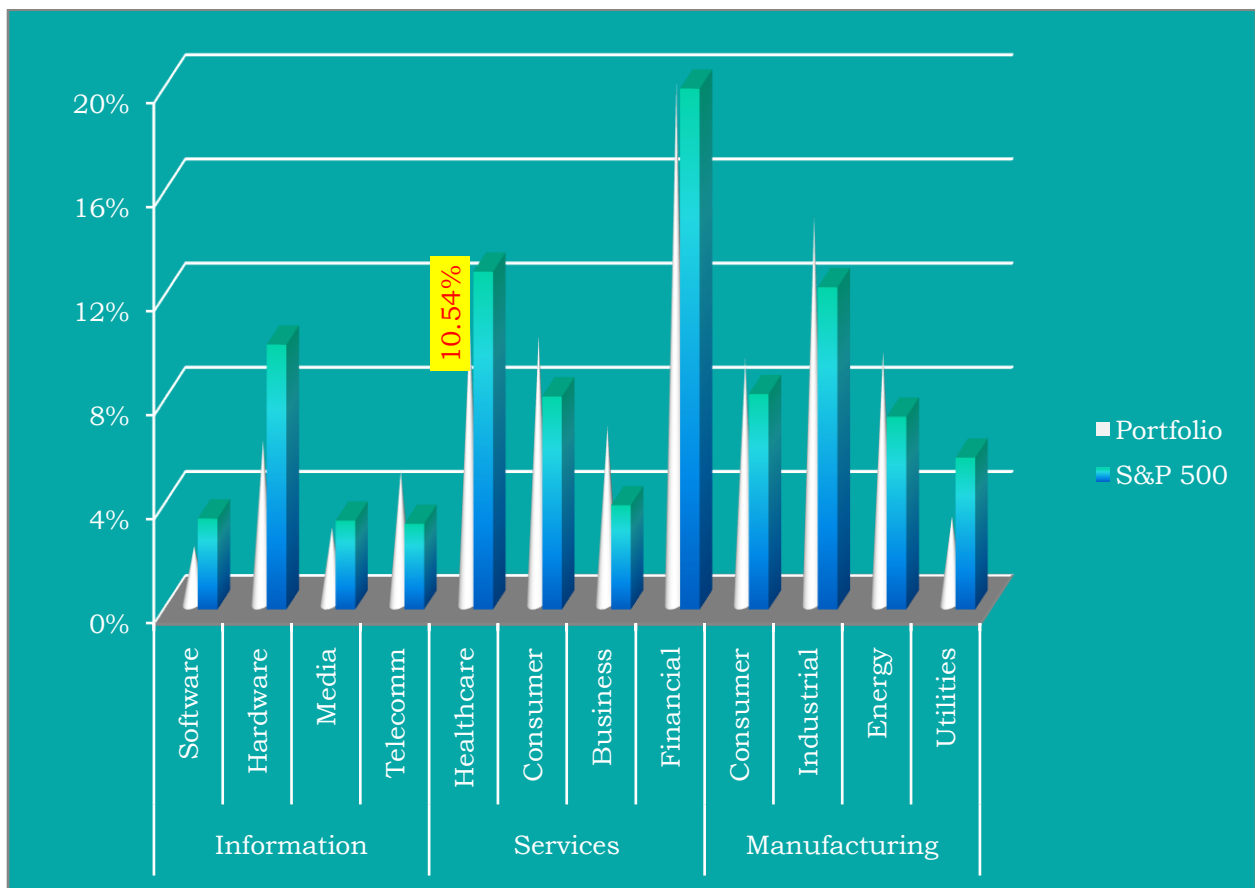
- 1) Apply the following layout and formatting options:
 - a) Format the title as shown.
 - b) Change the location of the legend as shown.
 - c) Rotate the chart by 150 degrees across the X-axis, 50 degrees along the Y- Axis, and 20.1 degrees perspective.
 - d) Explode the data points as shown.
 - e) Show the data labels with the legend key outside the pie.
 - f) Set the colors of the data points as shown.
 - g) Change the color of the chart area and the border style to rounded corners.
- 2) Save your work.



Exercise Four: Cylinder Chart

Open "Sector Weightings" sheet, and then plot a 3d cone chart that compares the rates of returns of the portfolio with those of the S&P 500 index.

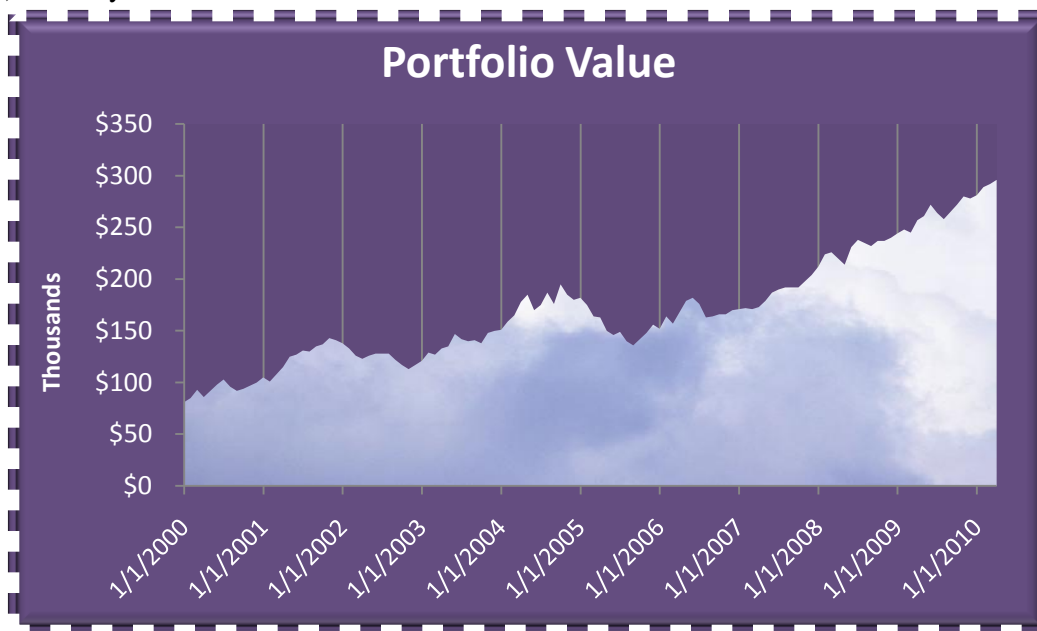
- 1) Apply the following layout and formatting options:
 - a) Insert the chart as an independent sheet in your workbook.
 - b) Change the shape of the S&P series to column
 - c) Change the scale of the value axis as follows:
 - ◆ Major unit = 4%
 - ◆ Maximum value = 20%
 - d) Change the color of the Chart Area to RGB (6,167,167).
 - e) Change the font color of the axes labels and the legend to white color.
 - f) Change the color of the S&P data series to ocean gradient and the portfolio data series to white.
 - g) Change the colors of the axes lines to white.
 - h) Change the color of the floor to light gray.
 - i) Show the data label on the healthcare services data point ONLY.
 - j) Rotate the chart by 40 degrees along the X axis, and 80 degrees along the Y axis.
 - k) Change the font type of the entire chart to Bookman Old Style and the font color to white.
- 2) Save your work.



Exercise Four:

Open "Sector Weightings" sheet, and then plot a 2d- area chart that plots the portfolio value from 1-1-2000 till 4-1-2010 as shown.

- 1) Apply the following layout and formatting options:
 - a) Change the color of the chart area and plot area to purple accent 4, darker 25% .
 - b) Set the major unit of the value axis to 12 months as shown
 - c) Change the scale of the major unit to show the thousands unit as shown.
 - d) Apply a dark thick white border to the chart as shown
 - e) Apply the grey clouds picture as a fill color to the portfolio value data series.
 - f) Remove the legend from the chart.
 - g) Remove the horizontal gridlines and show the vertical gridlines.
 - h) Apply a 3d shadow effect to the whole chart as shown below. Choose your preferred options.
 - i) Save your work.



Exercise Four: Macros

- 1) Record a macro in your workbook with the name ColumnMacro, and shortcut Ctrl + K that performs the following tasks:
 - a) Inserts a new column before column A. Inserts the current date and time into A1.
 - b) Gives the cells A1 through A10 a light red background and a red margin on the right border.
 - c) Modifies the header: Inserts the your name in the right part of the header, the page number in the center, and your section number in the right part of the header.
 - d) Modifies the footer: Inserts the name of the sheet tab in the center of the footer.
 - e) Changes the zoom to 80%
- 2) ***Save your work then submit your file to Moodle.***