Date Assigned: Thursday, March 22, 2012
Date Due: Thursday, April 5, 2012 4:30 pm
Points: 50

Goals: Build a worksheet, format data correctly, use named cells, build simple formulas, use built in Functions, build a table, and build a simple chart.

In a Workbook called **01ExcelPUNetID**, create each of the following worksheets:

Worksheet #1 (Name it ExamGrades)

I need to calculate student exam grades and perform some simple analyses of each exam question. Which questions were most difficult? Which questions were easiest? Which questions had the largest spread in answers?

The attached spreadsheet allows me to perform the analysis I need. The spreadsheet has a column for each exam question and a row for each student.

You need to build the spreadsheet as shown.

You must write formulas to calculate: Total Points, Student Score, Average, Median, Average Percent, and Standard Deviation. Use may use Excel functions to perform these calculations. I must be able to add information for students 1006 through 1010 and have your spreadsheet update all the calculated values correctly.

In a comment in cell T1, answer the following questions:

- Which question was the most difficult (students scored the worst)?
- Which question was easiest (students scored the best)?

In a comment in cell U2, answer the following question:

- Which question had the largest spread in answers?
- Explain exactly what data you used to make this determination.

You may add calculations to the spreadsheet to answer the above questions. Add these calculations below the table.

Make sure all of your data is formatted correctly. Numeric data and column headers for numeric data must be right justified. Text data and column headers for text data must be left justified. Any value that is a percent must not have any digits after the decimal point. Average and Median must have one digit after the decimal point, and Standard Deviation must have two digits after the decimal point.

Worksheet #2 (Name it Savings)

Your parents put $5,000 away in a savings account for you on the day you were born. That savings account earned 5% interest on the last day of each year. Build a worksheet that contains a table displaying, for 1-18 years, the Starting Balance of the account, the Interest Earned that year, the Total interest earned to date, the Ending Balance of the account, and the year (1-18).

Allow the user to input the amount of money initially in the account and the yearly interest rate. Don't use any built-in functions from Excel to solve this problem. Be sure to use Named Cells where appropriate.

When you submit your workbook, the initial amount of the account must be $5,000 and the Interest rate must be 5%. In a comment in cell G2, list the Ending Balance in the account if the Initial Amount is $6,000 and the interest rate is 4.5%.

The top of the spreadsheet must look as follows but you need to format the spreadsheet to make it look better:

Initial Amount invested	$5,000.00			
Interest Rate	5.00%			
Starting Balance	Interest Earned	Total Interest Earned to Date	Ending Balance	Year
$5,000.00	$250.00	$250.00	$5,250.00	1
$5,250.00	$262.50	$512.50	$5,512.50	2

Formatting:

Use the Currency Format to display money. Display the Interest Rate to two digits past the decimal point.

Chart:

Below the table build a chart that graphs the Ending Balance and Total Interest Earned to Date for each year. Properly label the chart axis and legend. Be sure to give the chart an appropriate title.

How to Submit and Grading Policies

A copy of your single Excel file (properly named) with the two worksheets (properly named) is to be placed in the CS130 Drop Box by **4:30pm** on the due date to be considered on time.

Grading will be based on:

- Correctness of your results
- Completeness of your results
- Professional look of the worksheets as described above and discussed in class
- Ability to perform a what-if analysis by changing any of the user input data with accurate results computed and displayed in the worksheet.