Assignment 2

This assignment is related to Chapters 3 and 4. You will thus need to conduct a small experiment, design an experimental study and analyze results using statistical analysis.

Part 1. The experiment design
Find a problem you think can be solved by experimental research in HCI. Conduct the experiment as if it was a true experiment (even though, very likely, it will not be randomized). State clearly your hypothesis. (yes, you can use the one from the last assignment, but you do need to come up with some data here, real or just 'realistically fake'). State what your variables are. You should have a minimum of 10 data entries for each condition. Make sure that your data set is free from errors and coded if data is not numerical to start with (see page 70-72).

1) Decide on experimental design (between groups, within group or split-plot). Explain why.
2) Put your data into a table.
3) Can you assume that your data set has a normal distribution? Draw a histogram showing your data.

Part 2. Descriptive statistics

1) Find all applicable descriptive statistics such as mean, median, mode, range, variance and deviation (pg. 73 and 74)

Part 3. Statistical analysis.
1) Use Excel or any other package that you may be familiar with containing statistical tests. Chose a test, which is appropriate, and apply it to your data. Please write explicitly your reasons for choosing a specific test.
2) Interpret obtained results.