Quiz 6, on Chapter 8, Tuesday, June 5th, 2012

Name and student ID:

Answer each of the following questions concisely, within the number of words/sentences specified in parentheses after the question. No sentence should be longer than 2 lines (unless you have unusually big handwriting). Any text that goes beyond these limits will be ignored!

Show that you have learned something from the textbook and the lectures; avoid generating answers on the basis of common sense or prior knowledge.

There are 7 questions, but only the 6 best answers will be counted, at 1/2 point each.

1   Suppose you have administered a questionnaire asking 100 people, how much they like using the iTunes store. You have used a Likert scale for the main question, but you have also left space for the users to write in comments in free text. Give an example of a *quantitative* analysis that you could perform with the collected data. (1 sentence)
    8.2-8.4 in book, slides 4-8 of May 29th.

2   Assuming the same situation as in Question 1, give an example of a *qualitative* analysis that you could perform with the collected data. (1 sentence)
    Same material as for previous question.

3   In the context of data analysis, what is an *outlier*? (1 sentence)
    8.5 in the book.

4   Name two types of *tool* that are commonly used to support data analysis. (2 phrases, each shorter than a sentence.)
    8.5 in the book.
    In the lecture, spreadsheets and tools such as SPSS and R were discuussed briefly.

5 Give an example of a mistake that someone might make when preparing a graphical visualization of quantitative data which could make it harder for the reader to understand the graph fully. (Don't mention obvious mistakes like "drawing the heights of the bars incorrectly"; think of the examples discussed in class or in the book.) (1 or 2 sentences)

Figure 8.1 gives one example

Slides 12-16 From May 29th provide several specific examples.

Any other plausible example that is not trivial and that shows that the student has studied the book and/or slides is acceptable.

6 In the class on Wednesday, May 30th, we started analyzing the project reports from Assignment 1 as qualitative data. Give two examples of meaningful *categories* that can be applied to these particular data. (2 phrases, each shorter than a sentence)

8.4.2 and (less directly relevant) 8.6.1

Any answer is OK if the two categories are plausible and if they reveal that the student understands the idea of using categories to analyze data.

Examples of acceptable categories:

"Error in the conceptual model description."

"Suggested addition to the conceptual model description."

"Suggested interface improvement."

7 Explain the method of analyzing data in terms of *critical incidents*. (1 or 2 sentences)

8.4.3 in the book.