Exercise Sheet 4: Integration
(until Thursday 24.11.2011)

Please note that you need **50%** of all exercise points to receive the "Studienleistung". Exercises have to be turned in until **Thursday** of each respective week and must be completed in teams of two students each. You may hand in your solutions either on paper **before the lecture** or into the mailbox at the IFIS floor (Mühlenpfordtstraße 23, 2nd floor). Please do not forget your "Matrikel-nummer" and your tutorial group number on your solutions. Your solutions may be in German or English. Please note: To pass the "RDB 1 Modul" you need the exercise points and the exam! Please use your own words for all answers!

Exercise 4.1 (4 points)

Name the four major steps of conceptual schema integration. What are they about and what results or documents do we get after each step? Use your own words.

Exercise 4.2 (6 points)

a) What is meant by entity clustering and in what situations is it useful? (2 points)
b) What steps are necessary in the clustering process? (4 points)

Exercise 4.3 (9 points)

a) Create an ER model for each of the following two domain descriptions. (4 points)

Scenario A:
The data of interest is about digital content. Each item has a name, a type (e.g., video, or pc game) and is published by a publisher that has a name and an address. Furthermore, there are stores selling these items. Each store has a name and belongs to a city.

Scenario B:
The data of interest is about videos. Each video has a title, a publisher and a list of genres. Each genre has a name and a description.

b) Integrate both models into a common one. Explain how you arrived at your solution and defend all your design decisions. (5 points)