

# Relational Databases 1

### **Exercise Sheet 5: Relational Model**

# (until Thursday 01.12.2011)

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 (Informatikzentrum 2nd floor). Please do not forget to write your "Matrikelnummer" and your tutorial group number on your solutions. Your solutions may be in German or English. Please note: To pass the "RDB I Modul" you need both the exercise points and the exam!

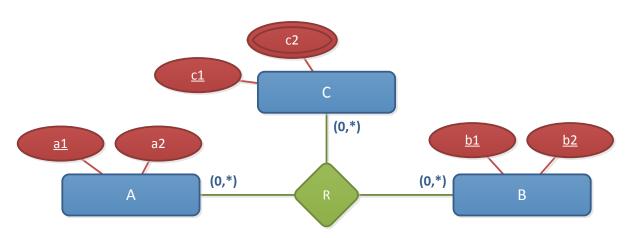
#### Exercise 5.1 (5 points)

- a. Name and explain the three structural constraints that need to be maintained within a database. Use your own words. (3 points)
- b. Briefly explain what is meant by the first normal form (2 points)

## Exercise 5.2 (9 points)

Translate the following conceptual schemata into relational schemata. Please write down all additional constraints that are not represented in your relational model.

a.



b.

