Database System Concepts for Non-Computer Scientist - WiSe 23/24
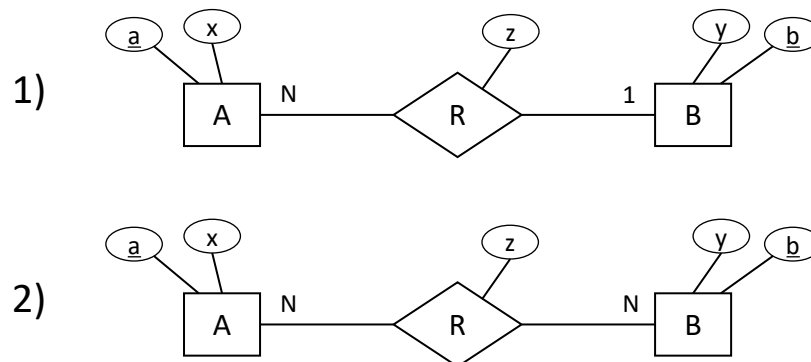Alice Rey (rey@in.tum.de)
http://db.in.tum.de/teaching/ws2324/DBSandere/?lang=en

Sheet 06

Exercise 1

Consider the following ER-diagram:

Refine and transform this diagram into a database schema (SQL DDL). You can assume that each attribute is an integer. Use **not null**, **primary key**, **references**, **unique** and **cascade** when possible/necessary.

Exercise 2

In the following ER-diagram, we model people (*person*). The *married* relation models the German law (i.e., each person can have at most one spouse). The *parent_of* is to be interpreted in the traditional biological way (i.e., each person has exactly one mother and one father).
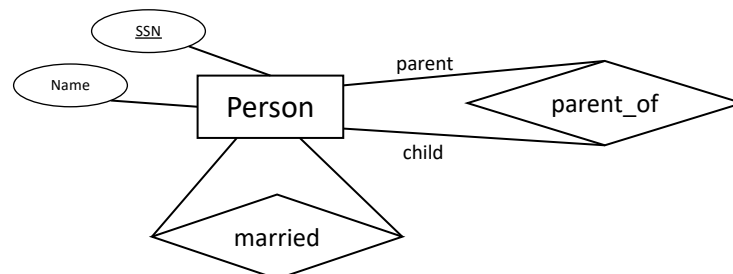
First, refine the diagram by adding the min/max notation. Then, create SQL-statements that would create the corresponding tables in a database system. Use **not null**, **primary key**, **references**, **unique** and **cascade** when possible/necessary.

Exercise 3

Write your first SQL query !

You can setup your own database system and import the university schema (on our website: `https://db.in.tum.de/teaching/ws2021/DBSandere/uni_schema.sql`) or use the Hyper WebInterface (`https://hyper-db.de/interface.html`).

Try finding the name and the semester of all students (this is mainly to validate that you have access to a working database).