Sheet 06

Exercise 1

Consider the following ER-diagram:

1) 

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

Exercise 2

In the following ER-diagram, we model people (person). The \textit{married} relation models the German law (i.e., each person can have at most one spouse). The \textit{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).