Homework: Data Integrity

Task

To avoid invalid states of a database several mechanisms are available which are managed by the DBMS.

Methods to retain or ensure integrity of data and relations are

- do not allow **NULL** values
- checking the value domain of attributes
- use a primary key
- checking referential integrity

These different methods are in the focus of this exercise, try to practiced them using the students' database.

a) Adding a new student without specifying it's given name and name makes no sense. To avoid this, alter table **students_2016**.

b) In your table students_2016 you can put any character in the row gender. Restrict this possibility and ensure that only f or m are allowed as valid input if you add a new student. (Constraint)

c) Make sure, that the age of the student's is between 17 and 60 years.

d) Select most often practiced hobbies and list them dependent on students' nationality

e) Create a table **HOBBIES** where you copy all the hobbies of the students (from table **students_2016**) into this new table and make sure that you afterwards still can connect the hobbies to the right person.

Therefore, you can change the table **students_2016** the way you need it.

Please, submit the homework till 8th December 2016, 23:59 o'clock.