

## **General information**

The database project is implemented in groups of two to four students. The topic of the project can be chosen from a list of common topics, but hopefully you will find a topic that really interests you and a problem you want to solve during the project. Please ask your teacher for permission to continue with your own topic.

At the beginning of the project, you create a short requirements specification. There you specify the problem you are solving, who you are developing the database for, what the basic functional requirements (must, important, and nice-to-have) and non-functional requirements are (e.g. usability and response time requirements).

Then you perform a conceptual analysis, create a conceptual model (ER diagram), and normalize it to the 3<sup>rd</sup> normal form. Please show your specification to the teacher before the implementation: you typically get some advice on how to improve it. You can use any CASE tool as well as a database.

For the actual database, you need to create tables, primary and foreign keys, additional indexes, referential integrity, queries, and views. In order to achieve a good grade, you need to document the database properly.

## Documentation and returning the project work

- 1. When returning the work, you need to include the following:
  - a requirements specification, including the code and the name of the course, the name of the topic, your names, student numbers, and email addresses
  - a document containing the conceptual model (ER diagrams) and a reasoning for the solution to the problem
  - the actual database including SQL (DDL) script, queries (views); a prototype with a user interface and reports is optional (part of the IIO30220 Database Management course)
  - a summary document (final report or presentation) which includes the problems and solutions encountered during the project + your suggestion for the grade (on a scale from 1 to 5)
- 2. Return all the items mentioned previously in one zip packet to the Optima system. The name of the zip file is constructed in the following form: LastNames.zip, where LastNames are your surnames.
- 3. Your individual learning diary will be returned separately to the Optima system.
- 4. Reserve time for presentation.