

## Database Term Project 2015

Follow the following steps in your term project:

1. Choose your teammate (groups of three at most)
2. Choose a title, e.g. Library Database
3. Send your team members, project title by email to me. (Deadline April 8) (put "204351 Project" as email subject)
4. Database Design
  - Create a list of data items that will be stored in your project. For example, in library project, you may ask the library.
  - Find and list all entities.
  - Find the attributes of entities (the attributes are data items that you already found)
  - Define data types and restrictions for each attribute (e.g. Number of digits in student ID, range of values for Age attribute, ...)
  - Define relationships between entities and their types (Explain how you found the type of the relationships)
  - Create Entity-Relation (ER) model of your database.
  - Create necessary tables for your database.
  - Show in which normal forms your tables are.
5. Application design & development
  - Design necessary queries based on the requirements of the project
  - Write necessary SQL commands to create tables and queries
  - Write a report for your project (put all steps explained above)
  - Implement your project using a DBMS (Oracle, MS-SQL, MySQL, MS-Access, ... )

\*\*\* at least 10 tables and 10 SQL queries with some Type 1 and Type 2 queries \*\*\*\*\*

## Evaluation

- Gathering data items (10)
- Defining entities, the attributes of the entities, the restrictions on the attributes (15)
- Relationships (5)
- ER model (5)
- Normalization (10)
- Queries (15)
- Implementation (15)
- Report (10)
- Presentation (15) (is necessary)

**Due Date: April 30, 2015**