Database Management Systems

- Follow the steps shown below in your term project:
- Choose your teammate (groups of two at most)
- Choose a title, e.g. Library Database
- Send your team members, and project title to me by email.

- Create a list of **data items** that will be stored in your project. For example, in library project, you may ask the library. Items need not be put in any order.
- Find and list all **entities**.
- Find the **attributes** of entities (the attributes are data items that you already found)
- Define **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-Relationship (ER)** model of your database.
- Create necessary **tables** for your database.
- Design and write necessary **queries** (example: find a book in a library, or find a product in a store).

- Write necessary SQL commands to create tables and queries
- Add some data to your database to test your queries
- Write a report for your project (put all steps explained above)
- Implement your project using a DBMS (use **MySQL**)

#### **Evaluation**

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

#### Presentations

- Will be during the last week of the semester on December 8
- The presentation schedule will be posted on BB.