Database System 1

Individual/Pair Project (50% in total)

Deadlines:

Stage #1 – 20% - Fri 1st April @ 5pm

Stage #2 – 30% - Sunday 1st May @ 5pm

Design and implement a MySQL database for an application of your choice.   
The database will typically contain at least 5 related tables.

* Develop a scenario in an area that interests you. Use the class examples as a guide for this exercise.
* Develop an entity/relationship diagram to model your scenario.
* Assign appropriate data types, field sizes and possible constraints to the fields of each table. Ensure all tables are related to at least one other table.
* Populate each table with at least 10 records.
* Design a variety of SQL statements to delete, update and retrieve data from your database.

**Submission Requirements:**

**Project Topic:** no two projects are allowed to use the same topic. You are required to discuss with your lecturer the topic you have chosen by 10th March and make sure you receive your lecturer’s approval of your topic before proceeding to Stage #1.

**Stage #1: Initial design** (Worth 20% of the module) will be submitted on Friday, 1st April. Stage #1 should include (a) draft scenario (b) E/R diagram showing entities and relationships and (c) some sample data for each table. You will receive feedback at this stage in the week beginning with 4th April, during your regular class, allowing you to continue working towards your final design. This Stage #1 documentation will be included as part of your final submission.

**Stage #2: Final upload** (Worth 30% of the module) will be submitted on Sunday, 1st May, and will contain two files:

* Word document containing (a) Stage#1 documentation and an outline of any changes made for the final version (b) Final scenario (c) Final E/R diagram (d) Dump of table data on which your queries were tested
* .SQL file containing (a) Create statements (b) Insert statements for at least 10 records in each table (c) A variety of SQL statements to show your understanding of both the data and SQL commands. You need to ensure to include SQL statements which make use of all topics covered this semester, including JOIN between more than 2 tables, UPDATEs, DELETEs, ALTER TABLE, Alias, Aggregate Functions, ORDER BY, etc. At least 15 SQL statements are expected.

The Upload should clearly state the names of the student(s) making the submission. If you submitted a pair project, ensure to clarify in your document which parts of the project were completed by which team member

Criteria for grading the project will be discussed in class.