**Project 3**

**The Due date: 11:55 pm on 11/10 (Thursday)**

# DESCRIPTION:

The goal is to implement a relational database for a **University-Lib** application domain using SQL in Oracle.

# PROCESURE:

(All items will be regraded for correctness and completeness.)

1. What you will do in this project:
   1. Revise your EER diagram (if anything needs to be fixed).
      1. The result of your project 1 is called “a conceptual database schema.”
   2. Revise your mappings correctly (if anything needs to be fixed).
      1. The result of your project 2 is called “a relational database schema.”
   3. Create relations of your relational database schema in Oracle.
   4. Populate your database.
      1. This means that you insert tuples into relations in your relational database.
   5. Show the populated database using SQL as follows:
      1. Select \* from YOUR-INDIVIDUAL-TABLE-NAME;
2. What you will submit:
   1. (10 points) Your final EER diagram. (in word, pdf or png format)
   2. (10 points) Your final mapped relations (i.e., a relational database schema for the **University-Lib** domain. (in word, pdf or png format)
   3. (75 points) An .sql file that creates all relations in your relational database schema and insert tuples. (Your .sql file will be tested in Oracle for grading.)
      1. This .sql file should include the following SQL statements:
         1. CREATE all of individual tables
      2. Insert three tuples to each relation in your relational database schema. You have to make sure that the database satisfies the three relational integrity constraints (i.e., key constraint, entity integrity, and referential integrity constraints).
      3. SELECT \* From YOUR-INDIVIDUAL-TABLE-NAME;
      4. Write SQL statements for the following queries. Each query should have at least one tuple in the output.
         1. Retrieve all borrowers (their attribute values) who reserved library item(s).
         2. Retrieve the name and address of a borrower who checked out a specific book in your database. For example, a borrower checked out a book named database processing.
         3. Retrieve the URL and name of a publisher that published a specific magazine (e.g., COMPUTER) in your database.
   4. Your output file in .txt after executing .sql file in Question 6.c.

# FINAL SUBMISSION:

1. Group submission **(The Due date: 11:55 pm on 4/21 (Thursday)**
   1. Submit your softcopy in a zip file to ReggieNet.
      1. (5 points) Write your group members’ names as well as your Group number inside each file.
2. Individual submission for peer evaluation
   1. Peer Evaluations of Team Members
   2. A Google form will be sent out for the peer evaluation