# CSE305-2, Spring 2019: Assignment 3 and Final Project

Deadline for the submission of the following is May 5, 2019 11:59 PM

- a. Assignment 3
- b. Final Project

#### **Assignment 3:**

In the assignment 3, you are required to designing an interface (front end) for your database system. This will be graded along with your project, during final demonstration. Make sure that your database system implements some useful and interesting transactions.

As an example, for e-commerce database, some useful transactions could be:

- 1) Using your database system list the items available for sale.
- 2) List the sellers in your system.
- 3) A transaction involving a customer purchasing items using your e-commerce system.
- 4) Listing the price of the items available in your store.
- 5) Listing most popular items.

Above are just few examples of transactions. You can come up with your own set of useful and meaningful transactions.

Note\*: You can use your favorite host language/framework for designing the interface and writing transactions.

#### **Project submission guidelines:**

Your project should have:

- 1) An interface so that the user can interact with your database.
- 2) Should have the backend database implementation in SQL.
- 3) Project should have implementation of some useful transactions for the application.
- 4) Project submission should have a good documentation highlighting different stages of the project development:
  - E-R diagram stage
  - Mapping of the E-R diagram to relations (Tables in SQL)
  - Implementation of the transactions
  - List of the transactions that the system supports
  - Project submission should also document the contribution of the individual group member.
- 5) Your project submission should include: source code for the project, documentation and the presentation.
- 6) Each group will be required to present the project, which will involve demonstration. The schedule for the presentation will be available soon.

## Presentation/ demonstration information:

Duration: 15 minutes

## Presentation: (General guidelines, optional)

- 1) First slide should have the project name and the group members' name.
- 2) Second slide should contain the ER diagram for your project.
- 3) Next few slides (1 to 3) should show the mapping of the ER diagram to the SQL Tables, constraints etc.
- 4) Optional: You may include some snap shots of the system's transaction results.
- 5) Contribution slide: Last slide should contain the information about the contribution of individual group member.

#### **Demonstration:**

- 1) Show few transactions (approximately 5) that your system supports.
- 2) You may also demo some features of your project that you feel are important.

## **Grading Criteria:**

- 1) Design of the project: ER diagram and its mapping in SQL to Tables and Constraints 10 points
- 2) Interface design and demonstration: 15 points
- 3) Presentation: 5 points

Demonstration scheduling information will be posted soon.