

## CS3095D DBMS Lab

### Exercise No: 3 & 4

**Marks: 10**

**Date of Announcement: 02.10.2020**

**Due Date: 11.10.2020**

#### **Problem Definition:**

For the web portal design problem given in the previous exercise (Exercise #2), design a relational database by translating the ER Model (ERM) that you have developed into the corresponding Relational Model (ensure that primary key, foreign key and cardinalities are fulfilled in your ER-to-Relation mapping).

Students are requested to note the following instructions:

- i. Incorporate the necessary suggestions (if any) given by the TAs during the evaluation of Exercise 2, in your ER diagram. Only after making the necessary modifications (if any), do the ER mapping.
- ii. Translate the ERM, which you have developed, into the corresponding Relational Model.
- iii. Create tables in the Database (based on your ER Mapping).
- iv. Insert at least 5 tuples in those tables.
- v. Justify with your relation, how to interact with SQL queries: Create DB, Drop DB, Backup DB, Create Table, Alter Table, Delete, Update, Where, Constraints, Not NULL, Unique, Primary Key, Foreign Key, Views, Auto Increment, SQL Injection. You may take any one relation to justify the queries.
- vi. Upload your pdf file to Eduserver before the deadline **(11.10.2020, 23.59 PM)**.

#### **Note:**

Students are requested to take care of the following points:

1. Save the solution document as single pdf file.  
*File name format:* RegNumberYourNameExerciseNo.pdf  
*Example:* B190585CSJohnE01.pdf
2. Submit the pdf file to Eduserver before the deadline (11.10.2020, 23.59 PM). (No further extension will be entertained.)
3. Late submission may incur a penalty of -0.5 marks.
4. Evaluation will not be conducted for those who did not submit their solution within the stipulated time.
5. Viva (Interactions) will be conducted through WebEx/google meet. (Share your screen and show your execution as per evaluator's instructions, if needed.)
6. Due to unpredictable situations, students who cannot appear for online viva sessions may get a chance to attend the oral viva through mobile phones.  
Note: Only genuine cases will be entertained, and students will have to get prior permission from faculty.
7. Google meet link/Eduserver & Join meeting link, and evaluators' details will be sent to the students one day earlier.
8. The student may use any open source editor for SQL queries. (Notations and shapes of ER Diagram should strictly follow the textbook.)
9. Please take snapshots of all the executions and put them in a word file, and then save it as a pdf file for submission (along with it, you should write the justification on each notation).

If any doubts about the uploaded marks and uploaded exercises, please mail to  
(prabum@nitc.ac.in and [praneshdas@nitc.ac.in](mailto:praneshdas@nitc.ac.in)).

### **Tentative Plan of Evaluation**

Sl. No	Task	Details	Marks
01	Submission	i. Timely submission	01
02	Submission of Report (11.10.2020, 11.59 PM).  Based on the question posted in Eduserver (02.10.2020)	i. Incorporate the necessary suggestions (if any) given by the TAs during the evaluation of Exercise 2, in your ER diagram. Only after making the necessary modifications (if any), do the ER mapping. ii. Create tables in the Database (based on your ER Mapping) and insert at least 5 tuples in the tables. iii. Justify with your relation, how to interact with SQL queries: Create DB, Drop DB, Backup DB, Create Table, Alter Table, Delete, Update, Where, Constraints, Not NULL, Unique, Primary Key, Foreign Key, Views, Auto Increment, SQL Injection. You may take any one relation to justify the queries. iv. Upload your pdf file to Eduserver before the deadline <b>(11.10.2020 11.59 PM)</b> .	03
03	Evaluation – I (on 13.10.2020)	i. The lab team will post the question to you <u>on 13.10.2020 at 1.30PM</u> , and you can take 45 minutes to upload the solution script in Eduserver (file format: pdf file). ii. Evaluation will not be conducted for those who don't submit their solutions on time. (late submissions are not allowed to participate in viva)	03
04	Evaluation –II (on 13.10.2020)	Based on the submission, viva will be conducted for students (schedule will be circulated later).	03

\*\*\*\*\* All the Best\*\*\*\*\*