CSE 3330 - Database Systems, Spring 2018

**Instructor: Medhat Saleh** 

Due Date: February Sunday 11th, 2018, by 11:59pm

### **Project 1: Description and Deliverables**

Create and Populate the Database. Create the database in MySQL and insert the given data set. This is the first project from a series of four.

### This project must be done individually. No copying is allowed.

### **Description: Creation of Airline Database**

In this project, you create a database for the given relations into Relational database management system (RDBMS). The relation is (*airLineDataBase.png*) in project folder.

#### \*\*Platform

We ONLY use MySQL RDBMS on Omega@UTA.EDU for testing your project. You need to make sure that your database is runnable on OMEGA/MYSQL command line.

Please contact to OIT Computing Helpdesk to open an account and check your login on MYSQL with them to make sure your account works on Omega@UTA.EDU and MYSQL properly.

## Instruction to create your database

#### 1. Create Script [YourNetID c.sql]

Make a script file containing the SQL statements that create your entire database schema, say YourNetID\_c.sql. This includes the tables with their attributes, constraints, and indexes. Define PK, FK properly for each table

Make sure you create the tables that do not reference any other tables first. Otherwise, if you write a CREATE statement and the referenced entity does not exist, the CREATE will fail based on PK and FK.

#### 2. Insert Script file [YourNetID i.sql]

Make a script file containing INSERT statements that populate the tables created in step 1, say **YourNetID**\_c.sql. This script file will contain SQL commands to fill data in your tables. You should insert the given data set in each table. All data set should be written in script file through

insert command. The Data set file is attached in Project1 folder and please use this to create your table.

#### 3. Drop Script file [YourNetID d.sql]

Create a script file that drop all the tables you have created for your project. This will be useful to start from a clean slate. You should be able to clean everything through this script and reload the database instance via steps 1 and 2.

Again, make sure you drop tables that are not referenced by other tables first. If you try to drop a table that is being referenced by some other table, the DROP will fail.

#### **Submission instruction**

All files should be in a folder name (YourNetID P1) and must be submitted electronically.

Add a header to each of your submitted files submission using following format:

-- Class: CSE 3330 -- Semester: Spring 2018

-- Student Name: your name (Last, First, NETID)

Student ID: your idAssignment: project #1

For the electronic submission purposes, combine all of the required files in a one zip file names **YourNetID\_pr1.zip** and submit through Blackboard.

Note: submission rule is mandatory and student will lose 5% if does not follow the rule for naming the files.

A sample script file is attached in project folder. If you are not familiar with script file, make sure to review the sample.sql.

# **Some Useful Tips:**

Make sure you transform all your constraints into appropriate constraints on the corresponding tables.

Your username will be your NETID and OIT will provide a new password to access to MYSQL on OMEGA.UTA@UTA.EDU.

(1) To Login on <u>OMEGA.UTA@UTA.EDU</u> with following command: ssh NETID@omega.uta.edu

## (2) Connecting to MySQL with following command:

```
mysql -u NETID -p PASS ( -u and NETID ) and ( -p and password)
```

(3) Find your exiting database to create tables (no need to create a database)

```
mysql> show databases;
mysql> use NETID;
mysql> show tables;
```

# (4) Running script file:

source \*.sql;

### Here are useful links may you are interested.

 $https://www.ntu.edu.sg/home/ehchua/programming/sql/MySQL\_Intermediate.html \\ http://dev.mysql.com/$