EAST TENNESSEE STATE UNIVERSITY

CSCI 2020 – Database Fundamentals

Project Deliverable 5

Deliverable Information

Points Possible:	30
Date Due:	Friday, April 29th, 2022, by 11:59pm
Submission Details:	• Submit to D2L Project Deliverable 5 Drop Box Folder • ***SQL Format*** with the filename specified below. • The file must contain the standard SQL header block, as specified in previous assignments. • See the format below for additional details.
Filename Format:	LastnameFirstinitial_Del5.sql (Ex: RezwanaT_Del5.sql)

Details

In this deliverable, you will be creating the database you defined in Project Deliverable 4. **Please consider my feedback for your Deliverable 4 submission as you work on this**. In addition, you will be creating indexes, and proving that your database design is valid using insert, update, and delete statements. See the Format below for specific details.

Format

Be sure to include the standard SQL header block comments specified in the SQL Labs.

1. Table Creation

Write SQL statements to create each table according to the specifications listed in the data dictionary from your Project Deliverable 4. Provide the SQL statements used to fully create the database (creation of tables and relationships). This includes all primary and foreign keys**. Do not use ON DELETE CASCADE** for foreign key constraints for this assignment. I will deduct points if you do.

2. Index Creation

Implement each index from your specifications from Project 4 and provide the SQL statements used to create the indexes.

3. Insert Test Data

Write SQL statements to insert test data into your database. You must insert at least ONE row into each table. Insert yourself as an employee. Insert at least two buildings and give each one **TWO** apartments. Pay particular attention to the PK/FK constraints that exist. You must insert the row containing a PK before you can insert the row with referencing FK.

4. Update Data

Write the SQL statement that updates one of the maintenance requests in your database and changes their issue type to "Plumbing" and their request status as "Pending".

5. Delete Data

Write the SQL statement that deletes ONE of the apartments in your database. You may have to write additional SQL statements that manipulate other tables in order to delete the apartment. Ensure you write all of the necessary SQL to delete the apartment.

Special Consideration

As mentioned above take into account my feedback and the various assumptions you have made. The purpose of this ongoing project is to improve and refine the design as you move forward.

Relations

Below is a list of the relations used in this project—given simply as a reminder.

Double underline indicates a field that is both part of a primary key and is a foreign key field. Dotted underlines indicate foreign key fields that are NOT part of the primary key.

Apartment (Building_No, Apartment_Num, Apartment_Type, Size, Floor_Plan, Availability, Rental_Fee)

Applicant (Applicant_ID, First_Name, Last_Name, Phone, SSN, Email, Street, City, ZIP, State, Occupation, Current_Employer, Annual_Income)

Application (Application_ID, Application_Type, Fee, Status, Preferred_MoveIn_Date, Apartment_ID)

Building (Building_Num, Location, Floors)

Dependent (Employee_ID, First_Name, Last_Name, DateofBirth, Relationship, Street, City, State, ZIP, State)

Employee (Employee_ID, First_Name, Last_Name, Email, Phone, DateofBirth, Street, City, State, ZIP, Salary, Job_Title)

Maintenance_Request (Request_ID, Issue_Type, Isse_Desc, Date_Requested, Date_Completed, Request_Status, Employee_Assigned, Tenant_ID)

Submission (Application_ID, Applicant_ID, Date)

Tenant (Tenant_ID, First_Name, Last_Name, Phone, SSN, Email, DateofBirth, Num_of_Dependents, Occupation, Current_Employer, Lease_Start_Date, Lease_End_Date, Security_Deposit, Apartment)

Submission

Submit your SQL file to the Deliverable 5 Dropbox folder as specified at the beginning of this document.