Department of Computer Science and Engineering

Faculty of Engineering

University of North Texas

Assignment 2 CSCE5350 Spring 2022

Due on or before March 30, 2022

1. Write a program (in java or any other language) to access and manage the contents of database tables. Follow the following steps to set your computer for the assignment and accomplish the goal.
   1. Download the University database from the class textbook website and load it to your local MySQL database server.

https://www.db-book.com/university-lab-dir/sample\_tables-dir/DDL.sql

* 1. Load the simple data set.

<https://www.db-book.com/university-lab-dir/sample_tables-dir/smallRelations/smallRelationsInsertFile.sql>

* 1. Download the database driver (mysql-connector.java for java language) set it up with your system

<https://dev.mysql.com/downloads/connector/j/>

* 1. Create a Java program to display the content of Instructor, department, and courses tables.
     1. Program should ask the table name to display when selecting the display data option from the main menu. Then display the content of the selected table.
  2. Add the functionality to insert record to the department table.
     1. User should be able to select the option to insert data from the main menu
     2. User should be asked to enter each column data one after the other and once the final column data is inserted, it should insert the data to the department table.
  3. Add a main menu item to modify the budget of a given record of the department table
     1. User should be able to select the modify budget menu option from the main menu.
     2. The user is presented to enter the department name and the program displays the content of that tuple and asks from the user the new value for the department budget. The program then updates the budget of that department
  4. Add a main menu item to delete a department from the department table
     1. User should be able to select the delete department menu option from the main menu.
     2. The user is presented to enter the department name and the program displays the information of that department. Then the program asks the user “Are you sure?”
        1. If the user selects yes-> delete that department from the department table
        2. If the user selects no -> return to main menu

**Note:** You can implement this assignment as a console application. If you are comfortable of using GUIs, feel free to do so.