CECS 323 LAB BUILD LAB DATABASE

OBJECTIVE:

Build the database that we will use for our lab work, and get some experience doing queries in SQL.

INTRODUCTION:

Our sample database supports a small shop that sells models of various objects: cars, aircraft, ships, … The UML diagram for the database design is here. Do not worry that you do not recognize some of the UML class diagram constructs. We will get to that soon. The relation scheme diagram for this database is here.

Get into the habit of making a copy of anything that you enter an execution window in DataGrip into a .txt file using NotePad or some other text editor. Sophisticated editors will put in special characters that the database will not be able to parse, so stick to the basics. When you take the lab midterms, you can use any SQL that you have written. So, keep your lab work for later.

PROCEDURE:

1. Open DataGrip and create a new database called **CECS323Lab**.
    a. You should have a connection to the Derby database showing up in the Database navigator window over to the left. Right click on the "Derby App" entry and select New | Schema.
    b. The easiest way to get started is to right click the Derby App connection and select New | Query Console.
        i. The Console file is associated with the connection. DataGrip stores that file for you without you having to bother with remembering where it is on your hard drive. But remember, if you ever remove the connection, the console goes with it.
        ii. Once you have the execution window opened, enter and run the statement: "CREATE SCHEMA "CECS323Lab;"
            1. This will build a separate schema in your new Derby database that we will use for the practice database, and nothing else.
            2. Do not change **any** of the data in this schema. You will use this for the rest of the semester for your Practice SQL labs as well as your lab exams, and it is important that you get the expected results from your SQL queries.
2. The SQL statements to create the tables and all the associations between those tables is located here.
    a. Go that URL address. Your browser will open a new window with all the DDL.
    b. Select the entire contents of the document and put that into your clipboard.
3. Run the instructions:
    a. Click in the blank execution window in the middle of the DataGrip window.
    b. Paste the statements in.
    c. Staring with the set scheme statement (which tells Derby the default schema that you want to use), execute each of the DDL/DML statements in order:

       i. Put your cursor anywhere inside the statement. You don't have to select any of the code, just get you cursor **in** the code.

      ii. Click the green run button up near the top in the ribbon just above the execution window.

4. Paste the DDL statements that you got from the above link into the execution window.
5. Create an inventory of your newly-created tables. In alphabetical order:
   a. Issue the statement select count(*) from <your table name here>;
      i. Remember that the ";" must be there at the end of each SQL statement.
      ii. A SQL statement can span many lines if it has to.
      iii. If you do not include the ";" at the end of the statement, NetBeans does not know where the statement ends.
   b. Get a screen shot of the statement and the response back from DataGrip.

WHAT TO TURN IN:

- A Word document of your screenshots (again, in alphabetical order).