CPSC 5133 A02
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Module 7 Final Checkpoint

Included files:

DataImporter.java – Java data importer which reads text files & executes the SQL queries.
m4db.sl3 – Empty database with table structure from the create statement already executed.
m4newCreatev2.txt – Create statements in SQL to set up the database again (this is already. Executed for the empty file m4db.sl3).
samplePerson.txt – Sample data modified from handout Project.pdf with additional data.
sampleDoctor.txt – Sample data as specified in Project.pdf.
sampleTreatment.txt – Sample data modified from handout Project.pdf with additions.
SQLQueries.pdf – SQL queries with the question numbers as well.

DataImporter.java SETUP

Quick TLDR; run the Java project and use menu option "9" to import all data and execute all queries at once against the included empty database.

The included empty database file "m4db.sl3" already has the tables setup using the create statement that is included, so no need to run a create statement, just run the java file to be presented with the menu. Line 35 of the code is the connection string url if you would like to change from **String url = "jdbc:sqlite:m4db.sl3"** for the location of another file and populate it yourself with m4newCreatev2.txt.

I was not totally sure if we were supposed to have an empty database or a populated one, as this is the final combination of all weeks, so the database is currently not populated with the sample data, and I have restored the data importer options to the user menu.

The menu includes options to import the sample data files again, as well as execute the SQL queries which were previously in a separate PDF (also included). These SQL queries are now coded into the project beginning on line 699 with methods named for each query, **sql1()** creates connection string statements for each SQL query from section 1 and outputs the results to the terminal for example.

For importing data to the database, enter the letter of the type of file you are testing, P for Person file, D for Doctor file, T for Treatment file. The next prompt will be the file name of the data file ("samplePerson.txt" may be input here for example or any testing files). The program will output feedback if there were SQL errors or other errors with the data such as Not Null fields missing or Primary Keys missing.

For testing SQL queries, the SQL queries are divided by the section that they appear in from the project pdf. Type the number “1” for section “1. Room Utilization” which are the queries 1.1, 1.2, and 1.3. These queries all execute at once for each section instead of having to type 1, 2, and 3 again. Repeat for each section 1-4.

Additionally, you may type the number nine “9” to execute all import statements using hard-coded included file names of “samplePerson.txt,” “sampleDoctor.txt,” and “sampleTreatment.txt” and then automatically execute all SQL queries from all sections at once as well immediately following. You may change the hard-coded file names in lines 1447, 1448, 1449 of the Java code.

The SQL queries list the question, the SQL query below it, and then the results of that query immediately following that, such as this: