CSC 214 ASSIGNMENT 07

The goal of this assignment is to practice with SQLite. If it is not clear in the description below, all persistence in this application must be implemented through a SQLite database. Eacc item that the user creates must be stored in the database and items must be restored whenever the application is restarted.

Assignment Instructions

Prerequisites (no credit)

1. **For this step you may reuse your model from assignment 6!** Create a `model` package under your main application package to contain your model. The model should contain a class of your own design that will be used in a list. The item should represent real world objects that have at least 3 attributes (such as a name, a number, a date, or other data). In addition, your model should contain a class that manages your items and can create and return a list of your items. ***The list should be empty by default.*** Refer to the `mobappdev.lecture15.model` package in the Lecture 15 project on github for examples.

Requirements (20 points each)

1. Create a database schema, **SQLiteOpenHelper**, and **CursorWrapper** for your model. See the mobappdev.lectue15.database package for examples. Modify your "model manager" class to use the database to add and load model items.

2. Create a main activity that uses a **RecyclerView** to display the items in your collection. The recycler view should display a view for each item in your model. Because your model starts without any items this means that the recycler view will be empty the first time that your app is executed, and this is OK. You don't have to create a complex view for each item; a simple text view is fine as long as it is sufficient to tell the items apart.

3. Create an action bar item that starts a second activity. The user will use this second activity to create a new instance of one of the items in your model. For example, you may display a series of **EditText** widgets that allow the user to type in the values for each of the fields in your model class. The user should have the option to create the new item or cancel. If they choose to create the item, it should be stored persistently in the SQLite database and displayed in the recycler view in the main activity. If the application is restarted, the item(s) created should be restored and displayed in the main activity.

HAND IN

Before handing in, create two additional files in your lab directory:

1. Create a README that contains the following:
    a. Your contact information, TA name, and assignment number.
    b. A brief (one paragraph at most) description of the assignment.
2. Create a directory titled “SampleOutput.” This directory should contain:
    a. A file called “logs.txt” that contains examples any relevant logs generated by your application. Remember to use LogCat filters to show *only* your log messages before copying them into the file.
    b. Screenshots (in PNG or JPG format) taken from an Android Virtual Device that show examples of your application’s user interface.
3. Name your file using your last name and the assignment number. For example: “stjacques_assignment01.zip”. This makes it easier for the TAs to organize when grading multiple students.

Hand in by uploading the compressed (i.e. “zipped”) folder containing your Android Studio project and the required additional files to Blackboard. Remember that **late submissions are not accepted**.