## CS4301 Android Development

## Spring 2019 Assignment 5 – Contact Manager Phase 3

This is the third part of your contact manager. It involves changing from a text file to a SQLite database. Ideally, your program should not change at all in terms of visible functionality. Your new module should replace all of the functions in your sequential file module, although deletion and updating may now work differently. The database will require a primary key, which you should store in an object when the record is read. Do the following:

1. Create a module that implements a SQLite database. In onCreate, call a function in your module that checks for the existence of the database and creates if it does not exist.
2. If there are any contacts in the database, read them and put them in the list that the user sees.
3. Write functions to add, update, and delete records from the database.
4. Add an “import” function that reads your text file and puts your contacts into the database.
5. Add a “reinitialize contacts” function to your program and user interface to create a new blank contact database.

I suggest implementing the “import” and “reinitialize” functions as action bar buttons on the main screen.

**If you are working with a partner, stay with the same partner for this phase.** Only one person in a group should submit the assignment, but make sure you put the other person’s name in the upload information. Both people will get the same grade unless both agree one should get a different grade. In addition, if you are working with a partner, the names of both people must be in the header comments in each source file and the name of the person who wrote each function must be in the header comments for that function. You may be asked to demonstrate the program’s operation to the TA.

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| **Grading criteria** |
| Program correctly implements the SQLite database functionality. 10 points each for add, modify, delete, database creation, and database reinitialization. | 50 points |
| SQLIte functionality is encapsulated into a single module which is, as much as possible, a drop-in replacement for your sequential file module. | 20 points |
| Import function correctly brings in existing contacts. | 20 points |
| Program comments, including names of authors in functions | 10 points |