# ITEC 4550

## Assignment – Master/Detail List Persist

Modify the provided ListPersist Android starter app so that it persists the master list of generated words. The master list is persisted via locally in Android's SQLLite instance. The visit count and last visit timestamp are persisted with Android's SharedPreferences.

A screenshot of a cell phone

Description automatically generatedA screenshot of a cell phone

Description automatically generated

[Demo Video](https://media.ggc.edu/media/t/0_c3zip1fk)

### Your implementation must comply with the following.

|  |  |  |
| --- | --- | --- |
| # | Points | **Description** |
| 1 | 25 | Writes master list to SQL properly |
| 2 | 25 | Reads persisted list from SQL properly |
| 3 | 20 | Writes visit counter and last visit timestamp to SharedPrefs properly |
| 4 | 20 | Reads visit counter and last visit from SharedPrefs properly |
| 5 | 10 | Demonstrate usage of sqlite3 command line to query database |

### Submission Info

Your D2L Dropbox submission must include:

* *Zip* file with your entire android project. Missing archives or archives in non-supported formats (rar, tgz, bzip, 7z, etc) will receive ***a grade of zero***.
* Include a demonstration video or a link to one. Submissions missing this item receive **a grade of zero**.
* Be accessible (check any links!)

Your demo video should highlight and describe each item in the rubric.

### Hints

Start with zybooks chapter.

Remember to use the Log class and the logcat to debug your app

Try using the [sqlite3](https://developer.android.com/training/data-storage/sqlite#dbDebugging) direct access to the database for verification and debugging. To get sqlite3 to run:

* adb must be on your PATH
* use an emulator image that is not a Google Play image
* restart adb environment at command line with:

$ *adb root*

* run emulator
* enter shell with:

$ *adb shell*

* invoke with:

$ *sqlite3 /data/data/<<your package>>/databases/YourDB.db*

sqlite3 /data/data/edu.ggc.lutz.listpersistsolution/databases/ WordListPersist.db

* list tables with:

sqlite3> *.tables*

* query database rows:

sqlite3> *select \* from wordlist*

This [article on stackoverflow](https://stackoverflow.com/questions/43923996/adb-root-is-not-working-on-emulator-cannot-run-as-root-in-production-builds) may help.

Note that the package and class naming has been refactored from the template master detail defaults:

* dummy/DummyContent to data/WordContent
* dummy/DummyContent.DummyItem to data.WordContent.WordItem

in the starter project.

Additionally, [this link](https://developer.android.com/training/data-storage/sqlite#java) was helpful in building the assignment. The corresponding *WordListPersistContract* and *WordListPersistDbHelper* are provided in the starter program and can be used, at the student's discretion.

Except for instance variables and findViewById(…) initializations, all changes needed can be performed within onPause() and onResume() in the ItemListActivity.

Begin with the provided starter project.