

UDel CISC 861

Fall 2013

UD Campus Tour: Part 1

1 Setup

In this assignment, you will design a Notepad-like app that reads the UD building information from the file `/cdcard/UDBuildingPositions` on your AVD into the SQLite database `udbuildings`.

Please follow the instructions of the **Notepad** tutorial at <http://developer.android.com/training/notepad/index.html> to implement this app. Exercises 1 and 2 of the Notepad Tutorial are important for this assignment, which will familiarize you with the SQLite database and using activities.

2 Using SQLite to Store/Query UD Buildings Database

You will build a database of UD buildings with associated information.

- The UD building information, located in <http://www.cis.udel.edu/~cshen/861/Android/UDBuildingPositions> is provided in the form of rows of `building code:building name:latitude:longitude`.
- You can copy the building data file, `UDBuildingPositions`, into the emulated SD card using the `adb` tool as follows.

```
adb push ./UDBuildingPositions /sdcard/.
```

After that you can read the file in the emulator and parse it using standard Java methods such as `readLine` and `split`. The given Android template shows how this is done.

- Having parsed the data, you can create a database with a single table containing the 4-letter building code, building name, latitude, and longitude for each building. The SQLite functions to insert, delete, and fetch are similar to the Notepad tutorial.
- Build a manu-driven application that allows the user to query and modify the contents of the database as follows.
 - Display a list of the buildings in the database.
 - Allows the user to search for a building either by its 4-letter code or its (partial) building name.
 - When the user selects a building, the associated information is displayed.
 - The user should be able to select and delete a building from the database.
 - Add new building information.

3 Submission

Via Sakai.