

ITIS/ITCS 5180 Mobile Application Development
In Class Assignment 14

Basic Instructions:

1. In every file submitted you **MUST** place the following comments:
 - a. Assignment #.
 - b. File Name.
 - c. Full name of all students in your group.
2. Each group should submit only one assignment on behalf of all the other group members.
3. Your assignment will be graded for functional requirements and efficiency of your submitted solution. You will lose points if your code is not efficient, does unnecessary processing or blocks the UI thread.
4. Export your Android project and create a zip file which includes all the project folder and any required libraries.
5. Submission details:
 - a. Compress the contents of your project folder. The file name is very important and should follow the following format: **Group#_InClass14.zip**
 - b. Only one group member is required to submit on behalf of the whole group.
 - c. You should submit the assignment through Canvas: Submit the zip file.
6. **The minimum SDK version should be set to 20, and the target SDK version should be set to 25.**
7. **Failure to follow the above instructions will result in point deductions.**

In Class Assignment 14 (100 points)

(a) Contacts List

(b) Create Contact

Figure 1, App Wireframes.

In this assignment you will be building an application that uses local storage (SQLite) to manage the user contacts. You are free to use either fragments or activities.

Part 1, Contacts List (60 Points):

The contact list should display a ListView or RecyclerView showing the list of contacts retrieved from local database as showing in Figure 1(a). Below are the requirements:

1. Create a contact class to store the contact information, name, email, phone and department.
2. Retrieve the contacts from the local database. The list of contacts should be displayed using a ListView or RecyclerView as shown in Figure 1(a).
3. Long press on a list item should delete the contact and refresh the list.
4. Clicking on the “Create New Contact” button should display the “Create New Contact” screen.
5. Typing the name of the a contact or part of the name, then clicking “Filter” button should query the database and retrieve only the contacts that match the selected criteria. The retrieve contacts should be displayed in the list. If the name entered is empty then display all the contacts stored in the local database.

Part 2, Create New Contact (40 Points):

This screen is used to create a new contact, see Figure 1(b). The requirements are as follows:

1. After entering all the contact details, clicking submit should store the contact to the local database. Then should finish the current activity and show the Contacts List activity.
2. The Contacts List activity should be refreshed to display the latest list of contacts stored in the local database.