

Contacts Project

You are to create a layout as shown in the images below. The layout must match the images shown in both landscape and portrait modes. The spacing needs to be relatively close but does not have to be exact. There are to be no errors or warnings in any of the layouts as shown in the screen shots.

Interaction:

The user be presented with a screen where they can view, add, sort and delete a contact name and phone number. The process is as follows.

Add – The user will enter a name (first and last) and phone number and click the add button. The name and phone number will be added to the database and displayed in a card on the recycle view. If the user does not have a value in the name or phone number field, then a toast will appear with a message that informs them the need to enter a name and phone number.

Find – The user will enter a search criteria name field it can be a full name or just a part of the name (it can just be a letter). The program will search for all names that contain that search string. When found the recycle view will be updated with the names that matched the search. If no names match the search than a toast will appear stating, you must enter a search criteria in the name field.

Sort (ASC, DESC) – The user will click either the sort asc or sort desc button. The application will sort the names based upon what was clicked. The program will sort either via the database or they can sort the arrays.

Delete – When the user clicks the garbage icon (and only the garbage icon) on each card that contact will be deleted from the database and the recycle list will be updated.

Specs:

This was written in Kotlin Oreo 8.0

I used Pixel 2 XL API 26 as my emulator. You can use another just this is what I used.

Images sizes can be whatever works but must be close to what is shown.

You must use the room database as indicated in the book.

Figure 1 Shows portrait screen.

Figure 2 Shows the landscape after names are entered.

Figure 3 Shows the classes you will only be using

Hints:

Start with the book example and work from there.

Here are the database queries that are used in the solution (just the queries).

@Insert

```
fun insertContact(contact: Contact)
```

@Query("SELECT * FROM contacts WHERE contactName LIKE '%' || :name || '%'")

@Query("DELETE FROM contacts WHERE contactId = :id")

@Query("SELECT * FROM contacts")

//THIS DOES THE ASC SORT FROM THE DATABASE

@Query("SELECT * FROM contacts ORDER BY contactName ASC")

//THIS DOES THE DESC SORT FROM THE DATABASE

@Query("SELECT * FROM contacts ORDER BY contactName DESC")

One of the trickiest parts of this assignment is getting the garbage can click to work. The problem comes in when you need to have an event on the recycleview adapter that must pass information to the main fragment. This is done using an interface and this is something I want you to work out. The posting I used to help figure it out is located here: <https://stackoverflow.com/questions/52829707/how-to-pass-or-send-data-from-recyclerview-adapter-to-fragment/52830847#52830847>. I suggest you get everything else working and do this part last.

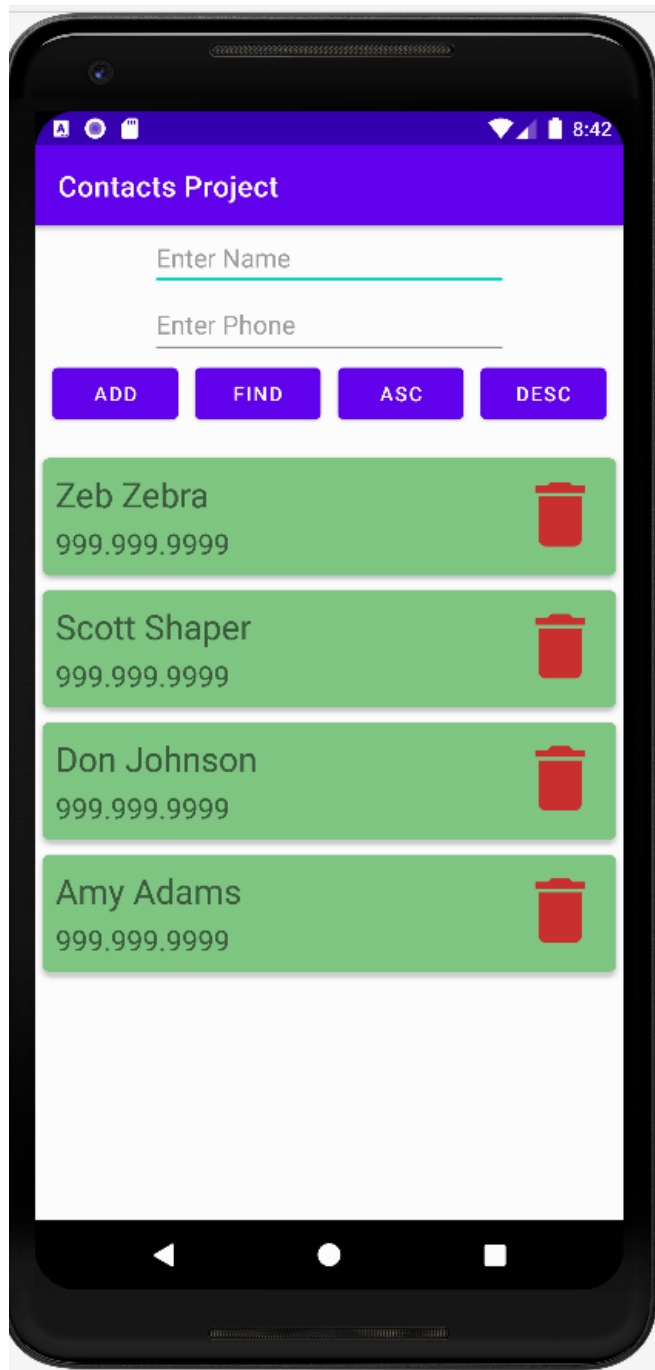


Figure 1-portrait screen

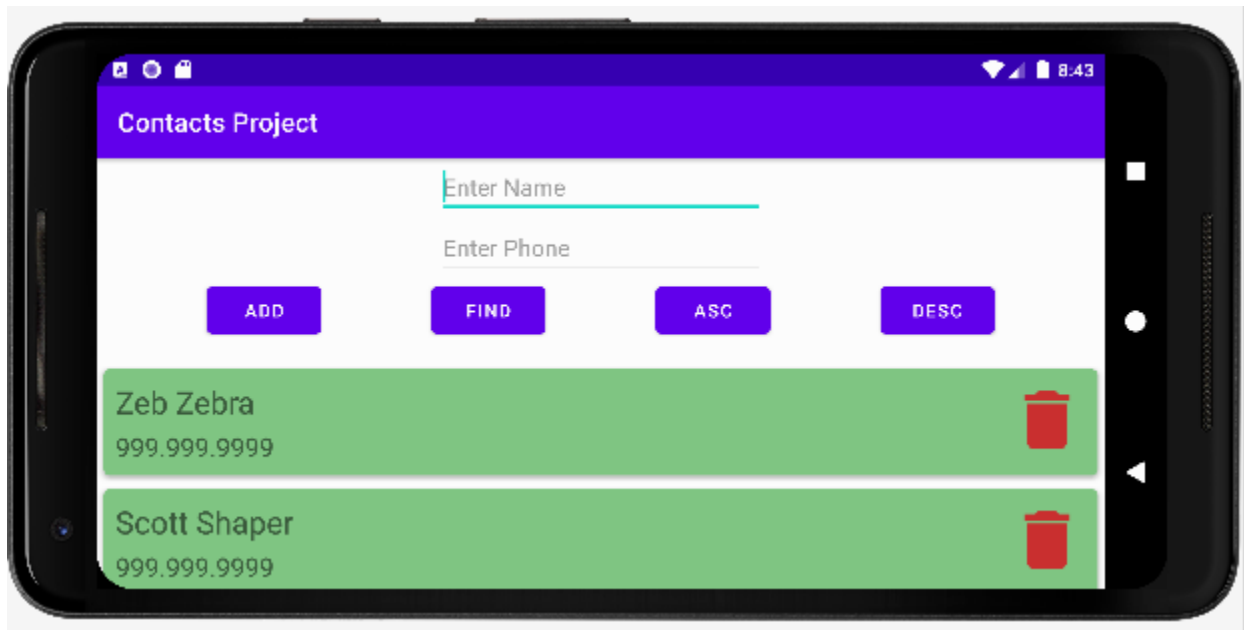


Figure 2-Landscape screen

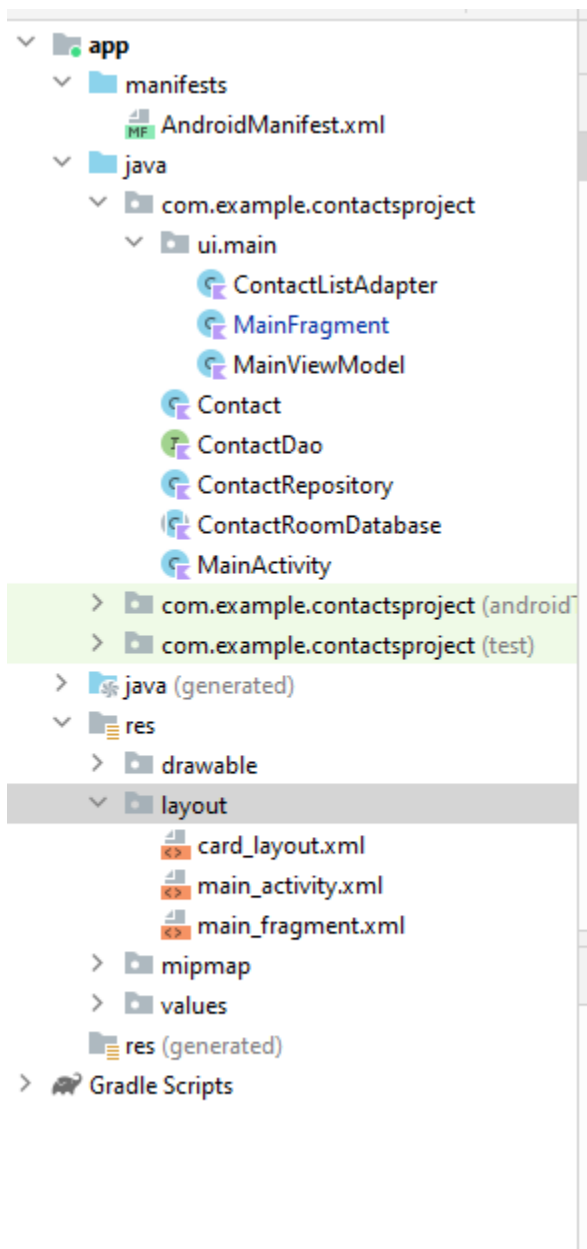


Figure 3-classes you will use names can be different