

ITIS/CS 4180 Mobile Application Development
Homework 01

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: **HW01_Groups#.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 required Android Virtual Device (AVD) should have **minimum SDK version set to 20 and target SDK at 25**.
7. **Failure to follow the above instructions will result in point deductions.**

Homework 01 (100 points)

Contacts

Create New

Edit Contact


Delete Contact

Display Contact

Finish

(a) Main Activity

Create New Contact



First

Last

Company

Phone

Email

(b) Scrollable Create New Contact Activity

Create New Contact

URL

Address

Birthday

Nickname

Facebook Profile URL

Twitter Profile URL

Skype

YouTube Channel

Save

(c) Create New Contact (Scrolled down)

Contacts List

	FirstName LastName 980 XXX XXXX
	FirstName LastName 980 XXX XXXX
	FirstName LastName 980 XXX XXXX
	FirstName LastName 980 XXX XXXX
	FirstName LastName 980 XXX XXXX
	FirstName LastName 980 XXX XXXX
	FirstName LastName 980 XXX XXXX

(d) Dynamic Layout for Contact List

Figure 1: App Wireframes

We will be developing a Contacts app in this homework, having multiple activities. We will be using ScrollViews, Camera App to take photo, DatePicker to pick the date, and Implicit intents to open the clickable URLs from the TextViews in this app.

Main Activity (10 Points)

The Main activity contains 5 buttons:

1. Create New: Takes you to Create New Contact activity.
2. Edit Contact: Enables you to edit contacts.
3. Delete Contact: Enables you to delete contacts.
4. Display Contact: Enables you to display saved contacts.
5. Finish: Quits the app.

Create New Contact (15 Points)

Follow the instructions:

1. Clicking on the Create New button should take you to the Create New Contact Activity.
2. This activity contains a form to create a new contact. The form should be scrollable.
3. Figure 1 (b) and (c) is showing the scrollable form.
4. First, it contains an ImageButton to take the contact photo using Camera app. Clicking on the Image button should take you to the Camera to take a photo and set it as the contact picture.
5. In case of no picture taken, use the default image provided with the resources.
6. Next, the form should contain 13 places to take inputs.
 1. First Name (EditText).
 2. Last Name (EditText).
 3. Company (EditText).
 4. Phone (EditText): Input validation needed, only numbers and '+' are allowed.
 5. Email (EditText): Input validation needed.
 6. URL (EditText).
 7. Address (EditText).
 8. Birthday (EditText): integrated with Date Picker. Input validation needed, cannot have a date before January 01, 1850.
 9. Nickname (EditText).
 10. Facebook Profile URL (EditText).
 11. Twitter Profile URL (EditText).
 12. Skype (EditText).
 13. YouTube Channel (EditText).
14. First Name, Last Name, and Phone are mandatory, and use Toasts to remind users in case of no inputs there.
7. Finally, a Save button to save the contact.

Edit Contact (20 Points)

Follow the instructions:

1. Clicking on the Edit Contact button in the main activity will take you to a Contact List activity (Figure 1, d).

2. Contact List activity contains a dynamically generated list for created contacts. Each contact contains the profile photo, First and Last name, and the Phone number.
3. Clicking on any of the contact in the list should take you a Detailed Edit activity of the contact. You need to replicate Create New Contact activity to accommodate all the data inside the Detailed Edit activity and make them editable.

Delete Contact (20 Points)

Follow the instructions:

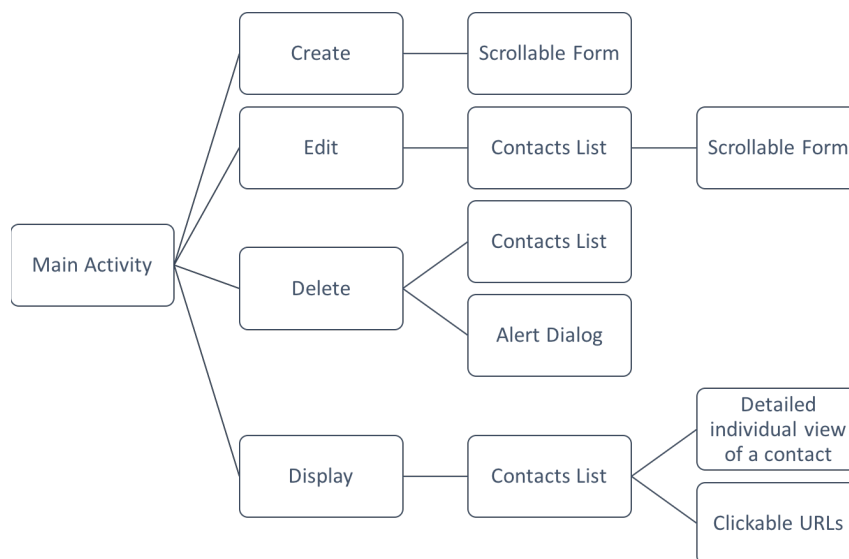
1. Clicking on Delete Contact button from the Main activity should take you to the Contact List again.
2. Now, in this phase, clicking on any contact should open a new alert dialog to ask you "Do you really want to delete this?". With two options "Yes", and "No".
3. Clicking on Yes should remove the contact from the Contact List, and delete it.

Display Contact (30 Points)

Follow the instructions:

1. Clicking on the Display Contact button from the main activity should take you to the Display Contact activity.
2. This again a list of contacts.
3. Clicking on any contact from the list should take you to detailed contact activity. You need to design this activity using your own sense.
4. The URL contents in the detailed contact activity (URL, FB profile URL, Twitter profile URL, Skype, and YouTube Channel URL) **should be made clickable**. Clicking on the URLs should use an implicit intent to open them using browsers.

Clicking on Finish button should close the application (5 Points).



Good Luck!