

ITIS/ITCS 5180 Mobile Application Development  
Homework 07

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**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#\_HW7.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 23, and the target SDK version should be set to 27.**
- 7. Failure to follow the above instructions will result in point deductions.**

## Homework 07 (100 points)



Figure 1: App wireframes

In this assignment you will learn how to use ViewPager with Fragments to develop tabbed sliding screens in Android. You will be developing a Task management application. It should have three types of tasks, e.g. To do, Doing, and Done. You need to follow the instructions below to complete the assignment.

Requirements:

1. All the tasks must be stored in Firebase Realtime database.
2. Different kind of tasks must be displayed in different tabs, see Figure 1.
3. Todo tab (Figure 1(a)):
  1. This tab should display a list of tasks, yet to be started.
  2. In each item of the list, it should include the task name, deadline, and a `ImageView` to mark the task as Doing.
  3. If you click on the mark as doing image, the item should be removed from the To do list, and added to the Doing list.
  4. There should be a Create new button to add a new task in the To do list.
4. Doing tasks (Figure 1(b)):
  1. You should display a list of tasks what you are currently doing. You have to mark a task as doing from the To do list.
  2. There should be a `ImageView` to mark the task as done in each of the Doing tasks. Clicking on that image should mark the task as Done, add the task into the Done list, and remove the task from the Doing list.
5. Done tasks (Figure 1(c)):
  1. This tab should display a list of done tasks.
  2. Every done task should have a delete `ImageView`. Clicking on that should delete the task permanently.
6. Alert dialog (Figure 1(d)):

1. Whenever you click on the delete ImageView it should ask you, "Do you really want to delete the task?" You need to implement it using Alert Dialog, as it is shown in Figure 1(d).