Basic Instructions:

1. In every file submitted you MUST place the following comments:
    a. Assignment #.
    b. File Name.
    c. Full name
2. Each team is required to submit the assignment on Canvas.
3. Please download the support files provided (if there is any) with this assignment and use them when implementing your project.
4. Submission details:
    a. Compress the contents of your project folder. The file name is very important and should follow the following format: **InClass13_Group#.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.
    d. You will have two zip files in this assignment. So, zip them again into one zip to submit.
5. The required Android Virtual Device (AVD) should have **minimum SDK version set to 24 and target SDK at 28**.
6. **Failure to follow the above instructions will result in point deductions.**

In Class Assignment 13

In this assignment you will be developing an application to save the TODO tasks, where you can add tasks, set their priorities, mark them as Complete, Delete the tasks and if you mistakenly mark one task as Complete, you can unmark it as still Pending. You will
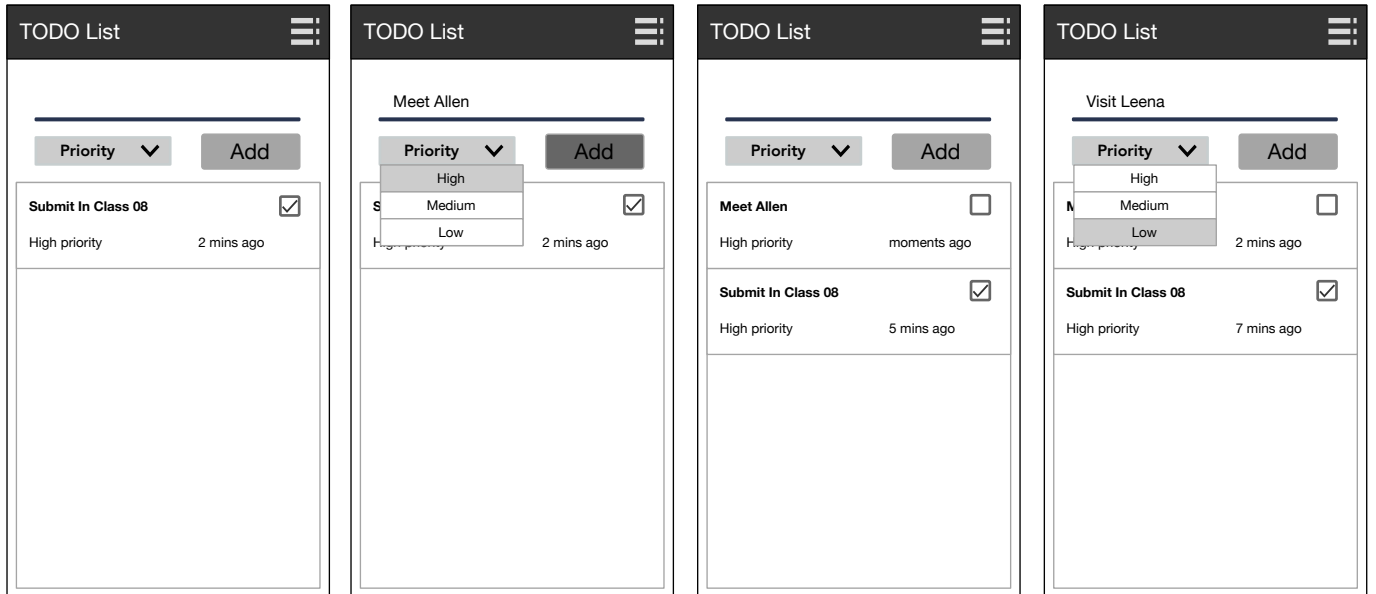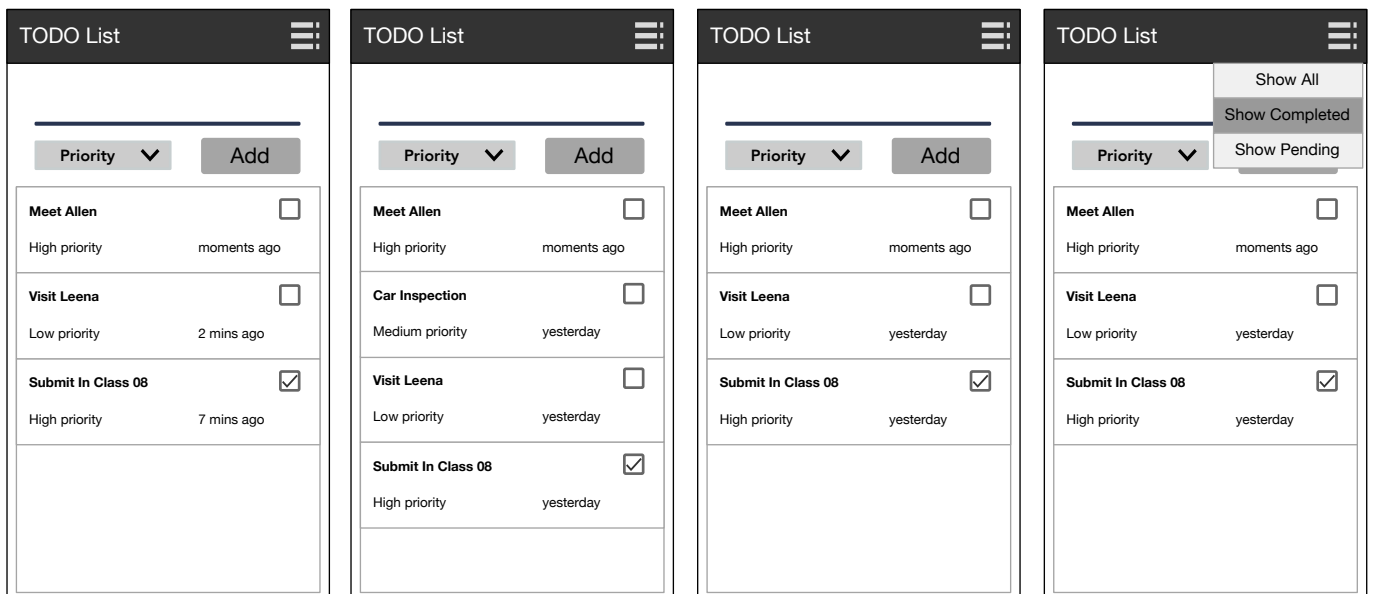
(a) Main screen

(b) Create a high priority task

(c) Added to the list, completed task is at the end

(d) Adding a Low priority task

(e) The list is always sorted according to the priority

(f) Added another task, and the list is sorted accordingly

(g) On long press, deleting the task

(h) Menu options

Figure 1: Application wireframes

keep all the tasks and their status in SQLite or Realm (whichever you prefer). Please follow the instructions below:

1. This app includes one activity. On the top there should be an Input EditText field.
2. Below that, there should be one drop down menu (Spinner) for priority selection. and an Add button, see Figure 1(a).
3. Next, there should be a List having all the Pending and Completed tasks. There will be two parts of the list. First display the list of Pending tasks, then below that display the list of completed tasks sorted by Priority. High priority tasks will be displayed on top followed by medium and low priority tasks.
4. In each element in the list, there are four things that should be displayed:
   1. Task note.
   2. Checkbox for marking the task as completed.
   3. Priority.
   4. Time the task was posted.
5. In Realm or Sqlite, you should store id, note, priority, update_time, and status. Check the documentation provided at **https://realm.io/docs/java/latest** to store and retrieve the objects from Realm.
6. To add a new task, a user should write the task note into the EditText, set the priority from the dropdown menu, and finally click on the Add button. Clicking on the Add button should store the Task object in Realm/SQLite including unique id, text for the note, priority, time and the **status (pending or, completed).**
7. You should display all the items in the database in the RecyclerView/ ListView, see Figures 1(b, c, d and e).
8. The user should be able to mark a task as Completed, you need to implement a checkbox to do that. It needs to update the database accordingly to mark its status as completed, and also update the time. After you click on the checkbox, you need to refresh the list accordingly. Display a toast confirming the change.
9. A user can delete the task. Long press on an item should ask if the item should be deleted or not. Use an alert dialog to ask for permission. In alert dialog there should be two buttons: Yes, and No. If clicked on Yes, the record should be deleted from database and it should disappear from the list.
10. **Menu buttons:** there are three buttons in the menu at the Action Bar: Show All, Show Completed, and Show Pending, see Figure 1(h).
11. Show All: Clicking on Show All button should display the whole list of tasks, including both, Pending or Completed. Pending tasks will be at the top followed by the Completed tasks.
12. Show Completed: Clicking on Show Completed should display only the Completed tasks.
13. Show Pending: Clicking on Show Pending should display only the Pending tasks.

IMPORTANT NOTES:
1. **Use Prettytime library to display time.**
2. **You should keep an eye on your GUI, Keep the alignments according to the Figures.**