Assignment 3

In this assignment, you will add basic task creation functionality and two lists of archived and due tasks to the application you started in the previous assignment.

Main Page:

In the main page of the app, we had six grid buttons for different options of the app. Now the *Due Tasks* button should open the due tasks page, and the *Archived Tasks* button should open the archived tasks page, which are explained below.

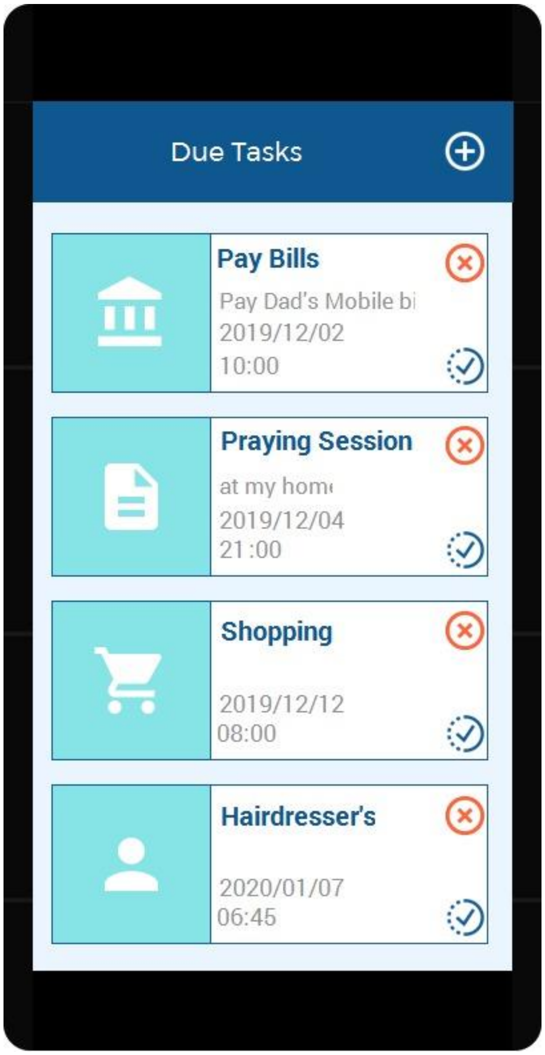
Due Tasks Page:

In this page, the list of next tasks to be done is shown. Each task includes a title, a description, a type, a due date and a due time.

The layout of each row in the list should be similar to the figure below. Based on the type of each task (e.g. job, university, shopping, etc.), a general icon should be shown in the left of the row. The title, description snippet, and due date and time should be displayed in the middle on top of each other.

In the right of each row, there should be two icons for delete and check buttons. Clicking the delete button should remove the task from the list. Checking a task should change the task to archived state, and remove it from this list. Archived tasks should be displayed in a different page, as explained later. After removing or checking a task, a Toast message should also be shown.

At the top of this page, there should be a toolbar, which shows the title of the page as well as the plus icon for creating new tasks. Clicking the plus button should open the new task page which is explained below.



Due Tasks

Pay Bills
Pay Dad's Mobile bi
2019/12/02
10:00

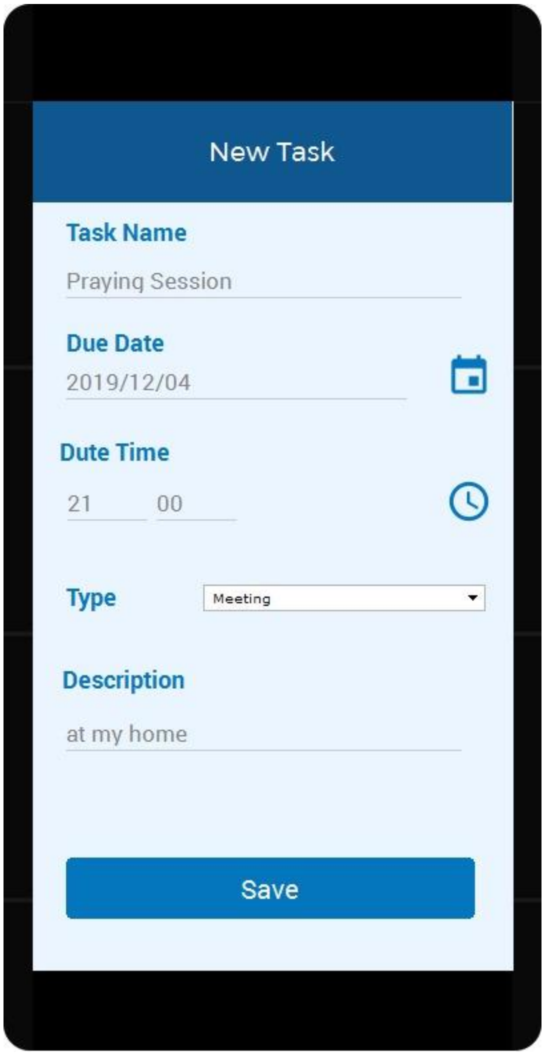
Praying Session
at my hom
2019/12/04
21:00

Shopping
2019/12/12
08:00

Hairdresser's
2020/01/07
06:45

New Task Page:

In this page, the user can enter the information of a new task like below. After clicking the *Save* button, the due tasks page should reopen with the new task added to the list.



Task Name
Praying Session

Due Date
2019/12/04

Dute Time
21 00

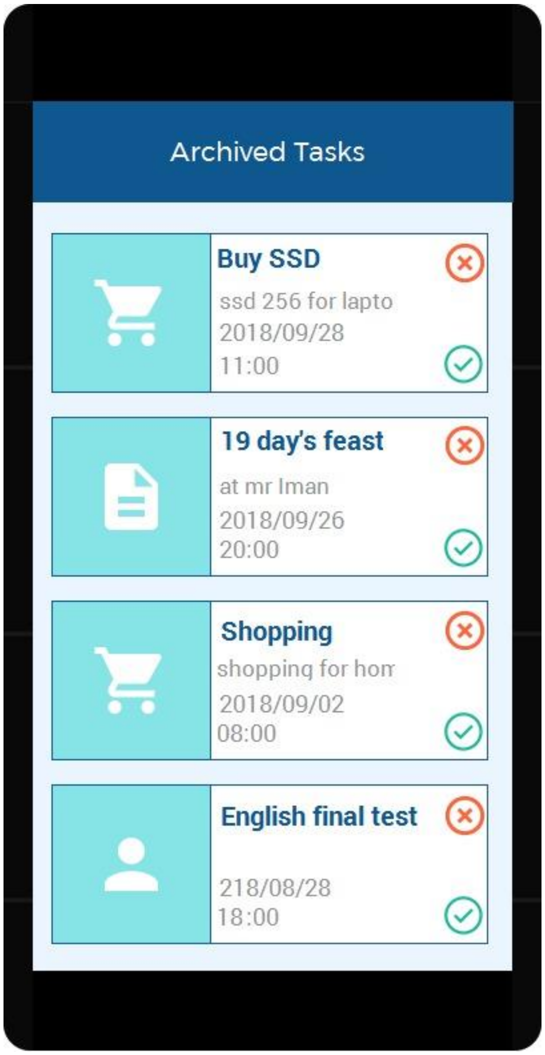
Type
Meeting

Description
at my home

Archived Tasks Page:

In this page, the list of archived or finished tasks should be displayed.

View of each row in this list is very similar to the rows of the due tasks list. The only difference is the check button, which should change the task back to due state (which is the reverse of what this button does in due tasks list), and then remove the task from the list.



Archived Tasks

Buy SSD ⊗
ssd 256 for lapto
2018/09/28
11:00 ✓

19 day's feast ⊗
at mr Iman
2018/09/26
20:00 ✓

Shopping ⊗
shopping for hom
2018/09/02
08:00 ✓

English final test ⊗
218/08/28
18:00 ✓

Notes about Implementation:

You should respect common implementation notes mentioned in your previous assignments in this assignment too. In addition:

1. Before working on this assignment, make sure the main functionalities of your Assignment 2 app work as expected, because in this assignment you should complete your code for the previous assignment.

2. For displaying the lists, you should use RecyclerView. Because the view and functionality of both lists are very similar, you should use a single row layout and a single adapter class for both lists. You can then handle the difference in icon and functionality of check buttons dynamically in your adapter class.

3. When removing or checking a task in lists, the Toast message should be displayed by the activity, so you need to implement an interface to notify the activity from the adapter.

4. For the toolbar on top of pages, you should use the Toolbar widget in Android. You can check this link for guidance on how to add toolbar to your app, and this link for adding buttons on your toolbar, which is similar to defining an options menu for your activity.

5. For getting date inputs like task date, you can set the EditText to open a DatePickerDialog when clicked, and then get the date using its callback. Also for time inputs you can use TimePickerDialog in a similar way.

6. In this assignment it is not required to save tasks permanently. The data should be kept in memory (e.g. in a central ArrayList in the app) until the user closes the app.

Notes about Submission:

1. You should submit a zipped file which includes both your root project folder and the final APK file of your project. You can find the generated APK file of your project in the path YOURPROJECT/app/build/outputs/apk/ on disk.

2. In order to reduce the size of the project for submission, you can remove the two folders called *build* in your project folders, one is in the path YOURPROJECT/build and the other in the path YOURPROJECT/app/build. Make sure to get out the APK file before removing these folders.