

Mobile App Engineering and User Experience - Fall 2017

1st Assignment – To Do List

Published: Friday Sept 22nd, 2017

Deadline: Sunday Oct. 1st 11:55pm, 2017

The required API level for this assignment is 23 (Android 6.0).

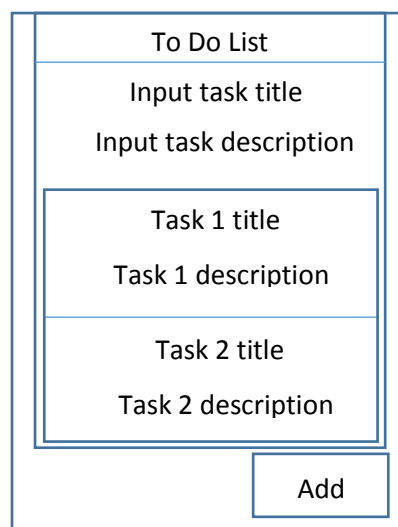
As before, if you do not have access to an Android phone, please contact John Scafidi as soon as possible. The phones are available today for daily loans near the campus.

All projects are required to be submitted with up to a one-page report that specifies what was implemented, and until what point range. You need to also justify your design decisions. Graduate students need to submit additional report of the graduate student requirements.

1) 40 points maximum

We're going to write a "To-do list" app. The goal of this app is to be able to add things that you need to do to a list on the screen. The requirements for the layout are:

- There should be a general title: To Do List (5 points)
- There should be two line of EditText boxes to input the "task title" and the "task description". (5 points)
 - A hint should be displaying what each form field means.
 - The title and the subtitle description should be separate TextView objects. You cannot use one TextView object.
- There should be an "Add" button that show the "task title" and "task description" as task 1, task 2, etc. (10 points). This is a **sub-description** of the item. Help might be found:
 - <https://developer.android.com/guide/topics/ui/layout/listview.html>
- For each task, there should be a task title and a short task description. (5 points)
- The alignment of the all the titles and descriptions should be centralized. (5 points)
- The list should occupy the full range under the form fields all the way to the Add button. (5 points)
- The Add button should NOT be touching the borders of the screen or the list in any way. It must be oriented in the bottom right. (5 points)



2) 60 points maximum

Add a function on each task item in the listView: When the user holds a button click for a long time on the task item, that item is deleted from the list. Note: short click should do nothing.

3) 80 points maximum

Add a function to the “Add” button. By pressing the button, save the current contents of the listView to a text file on the phone.

4) 100 points maximum

When the user **TERMINATES AND REOPENS, NOT “CLOSES”** the app, the existing list should be loaded and shown in the listView.

Graduate students’ additional requirements (up to -30 for graduate students who do not complete this):

Add a checkbox to **each individual list element**. There should be a checkbox located at the right end of every list item. When user checks it, the corresponding task item will be deleted directly.

Upload your solution source code, apk package and report in the same zip or tar.gz file named as netid_yourname.

ALL SUBMISSIONS ARE TIMESTAMPED, YOU WILL RECEIVE AN IMMEDIATE 20 POINT PENALTY IF YOUR SUBMISSION IS AFTER 11:55PM.