

App Development for Smart Devices

CS 441/541

Assignment #1: TO-DO LIST

Published: Thursday, Jan 25 2018
Deadline: 11:59 PM, Sunday, Feb 4, 2018

All projects are required to be submitted with up to a one-page report that specifies what was implemented, and until what point. 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)
- For each task, there should be a task title and a short task description. (5 points)
- There should be two lines of EditText boxes to input the "task title" and the "task description". (5 points)
 - A hint should be displayed 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 shows the "task title" and "task description" as task 1, task 2, etc. (10 points).
 - Help might be found:
<https://developer.android.com/guide/topics/ui/layout/listview.html>
- 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)

The diagram shows a mobile app interface for a 'To Do List'. It consists of a main container with a title 'To Do List' at the top. Below the title are two input fields: 'Input task title' and 'Input task description'. Underneath these are two task items, each represented by a box containing a title and a description field. The first task item has 'Task 1 title' and 'Task 1 description'. The second task item has 'Task 2 title' and 'Task 2 description'. At the bottom right of the container is an 'Add' button.

2. 60 points maximum

Add a function on each task item in the listView: When the user holds an item for a long time, 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 yourlastname_yourfirstname.

ALL SUBMISSIONS ARE TIMESTAMPED, YOU WILL RECEIVE AN IMMEDIATE 20 POINT PENALTY IF YOUR SUBMISSION IS AFTER 11:59 PM.