

## Assignment 1: To Do List

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In this assignment, I implemented a to-do list app. This app contains a constraint layout for the main activity and a custom layout for the list item of the ListView.

This project mainly contains one java source file (*MainActivity.java*) and two layout files (*activity\_main.xml* and *listitem.xml*).

In this project, I implemented all the requirements for both undergraduates and graduates. Here is some details and design for the project.

Constraint layout was used for implementing the UI design. The details can be checked in *activity\_main.xml*. Linear layout and grid layout were used for the list item which was defined in *listitem.xml*.

A textView is used as a title for this app. Two EditText boxes are used for input the task information. A ListView is used for showing current tasks and a Button called *ADD* for users to add a new task to the ListView. Every time adding a new task, a txt file called "*Todo\_list.txt*" will be updated with current task information using function *writefile()*.

To achieve a long-click deletion, *setOnItemLongClickListener()* for the ListView is used for listening the user's activity to remove a task. After removing the task, the text file will be updated.

When the user clicks the button "ADD", the function *addClick()* will be called to transform the data from input to String and add them into the ListView. The EditText boxes for input will be cleared, then the text file will be updated.

When a user terminates this app and reopen, a function called *getData()* will be called to read the data from the text file and shows them in the ListView.

Users can check the checkbox to delete a task. I write the function *getView()* for the adapter, and use *setOnCheckedChangeListener()* for the checkbox the listen the user's activity to remove a task and update the text file.