For this assignment I implemented three classes (MainActivity, ToDoList and ToDoListAdapter) and two view layouts (activity_main and todolist_item). The MainActivity holds all user interface functionality, input task, input description and click button. ToDoList class defines a structured data type to hold information about a task and description of a particular item in the "to do list". The ToDoListAdapter is a customized adapter class that extends the BaseAdapter abstract class and it is needed to inflate a view layout that will help display.

The toDoList Android application implements the basic idea of how the hierarchy of main activity may be. In this assignment we used two view layers, main activity and customized adapter layer. The main activity view layer is composed of a vertical LinearLayout widget as root. Inside the root LinearLayout widget, there are two more LinearLayout children of the root. The first LinearLayout child contains three widgets. One is a TextView for the title and the other two are EditText to prompt the user to enter desire data (task and description). The second LinearLayout child contains a ListView and a Button widget. The Button widget will add items to the to do list data structure and will also display all "to do items" on the screen. I created a ToDoList class to define a specific variable type. Instance of ToDoList class will contain fields for task and description. All this information can then be stored in an Array of ToDoList objects to easily display it in the ListView.

The second view layer is used for a customized adapter. We need this in order to satisfied the requirement of displaying the data centered in the screen. The customized adapter contains one vertical LinearLayout and two EditText that will display the task and description respectively. This view layer will be inflated by the ToDoListAdapter class as it gets invoked by a press button activity in the main activity class. The ListView adds the customized adapter instance and then the second view layer gets embedded into the main activity view displaying any incoming data.

In conclusion, by implementing this simple android application, I got to learn some of the data components and their use. How widgets and view files get (xml files) inflated by activity files (Java files) and how everything gets set up on the "onCreate()" method.





