

Assignment 02

Shopping List

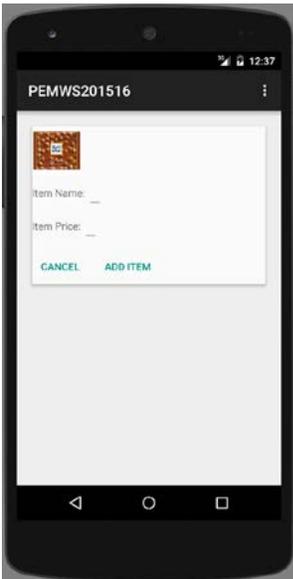
In this Assignment we will add to the shopping list of Assignment 01.

1.) Add a button to the list view



- Add a button with a "+" to the action bar. Alternatively, if you want to use Material Design you can add a Floating Action Button.
- The purpose of this button is to add items to the list.

2.) Create a new fragment



- The new Fragment, which we are going to call AddItemFragment, should contain an ImageView, two EditTexts and two Buttons.
- When the Fragment is created, the ImageView should show one of five images you chose in advance. The source of these images must be online (do not load local images!).
- Add captions to the EditTexts so the user knows what to type in.
- The buttons are "Add Item" and "Cancel"

To download images you can either use the android resources e.g. with AsyncTask

(<http://developer.android.com/reference/android/os/AsyncTask.html>) or a library. We suggest Picasso (<http://square.github.io/picasso/>) but you can use any library you like.

- 3.) Make the button from task 1 call the AddItemFragment
 - When the button is pressed the new fragment should be shown.

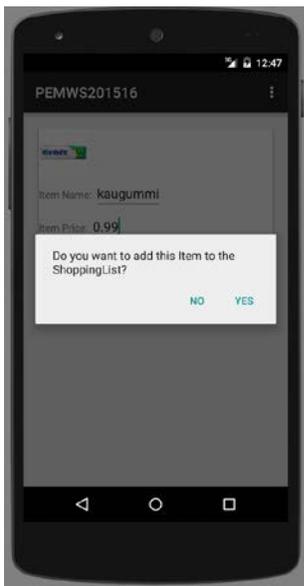
Create an Interface in the ListFragment to call the AddItemFragment (or extend the existing interface, if you did the Master task on Assignment 01):

- 1.) Create an Interface in the ListFragment
- 2.) In this Interface, define a method that contains the parameters you need (e.g. createNewItem()).
- 3.) Make sure that every Activity that uses the fragment implements the interface by overriding the onAttach() method.
- 4.) Implement the Interface in the Activity. To do this, create the method the Interface calls for (in our case createNewItem()).
- 5.) In this method, change the fragment to the AddItemFragment after you added the data the AddItemFragment needs.

This procedure is also described with example code here:

<http://developer.android.com/training/basics/fragments/communicating.html>

- 4.) Add functionality to the fragment



- When the user presses the cancel button a dialog pops up and asks if they want to cancel. If the user presses "yes" the view returns to the ListView.
- When the user presses the "add item" button a dialog pops up and asks if he/she is ok with this item. If the user presses "yes" the data is saved and the view returns to the ListView, where the new item is shown on the list. If the user presses "no" the dialog closes.
- Make sure only valid entries are saved!

Your Fragment should extend DialogFragment. Then use the AlertDialog to build the Dialog (<http://developer.android.com/guide/topics/ui/dialogs.html>).

When the entry is saved, we send it to the ListView

(<http://developer.android.com/training/basics/fragments/communicating.html>).

Master Students: Make the data persistent by using a SQLite database

This applies to master students only!

- Save the data in a SQLite database to make it persistent.

(<http://developer.android.com/training/basics/data-storage/databases.html>)

Submission

Please zip (rar is not zip!) up your complete Android project and a text file, that contains your name and if you are a Master or Bachelor Student, and hand it in via Uniworx. Projects that do not compile due to errors will not be accepted.