

Bevásárló lista – házi feladat (angol)

The goal of the assignment is to create a Shopping List application. During the development you can practice the following techniques in Android:

- Multiple Activities
- Lists (RecyclerView)
- Dialogs
- Animations
- Persistence data storage (Room)

Assignment Details

The task is to implement a basic Shopping list application where users can see the items that they want to buy in a shop and they can mark which item has been bought.

Requirements:

- The application should start with a *Splash Activity* that displays a custom logo and jumps to the *Shopping List* after 3 seconds.
- An Item should have at least the following attributes:
 - o category:
 - food, electronic, book, etc. (use at least 3),
 - the icon of the item in the list depends on it's category,
 - o name,
 - o description,
 - o estimated price,
 - o status: true/false weather it has been bought yet or not.
- The Shopping List should display:
 - o icon for the item (an *ImageView* based on the Category),
 - checkbox weather it has been bought or not (user can change it during shopping),
 - o name of the item,
 - additional attributes can also be displayed of course!
- The Shopping List should have a "New Item" menu in the Toolbar that navigates to a New Item Dialog or Activity, where the user can pick up new items that appear on the Shopping List Activity.
- The *Shopping List* should support removing items in two ways: one-by one and all items at the same time ("Delete all" menu in the *Toolbar*).
- The Shopping List Activity should support editing Items.
- Include at least one *Animation* somewhere in the application.
- Use database/persistence data storage for storing the items, you can use Room:
 - https://developer.android.com/training/data-storage/room/index.html
- Custom requirement: extend the application with an extra function, with anything that you think is useful in a Shopping List application. For example a "View Item Details" button that shows the item with all details on a Dialog or new Activity.
- Set the name and the icon of the application properly.
- Recommended architecture:
 - SplashActivity (simple Activity that starts the main Activity after 3 seconds)
 - MainActivity (with ScrollingActivity template)
 - CoordinatorLayout, AppBarLayout, ...
 - o RecyclerView
 - ViewHolder

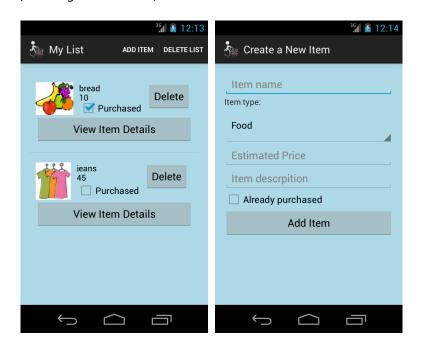


- Adapter class
- o DialogFragment for adding and editing items

Related to the code, please follow the conventions bellow:

- Keep the methods shorts (max 6-10).
- Use only lowercase letters in Java package names.
- Group your classes into packages.
- Comments are not required.
- Extract all strings into strings.xml.

Sample skeleton layout for the application (the "View Item Details" button is a possible custom feature), but feel free to implement/use other user interface / Material Design elements like CoordinatorLayout/FloatingActionButton, etc.:



Here is a link for several <u>nice UI libraries</u>, feel free to use them: <u>https://github.com/wasabeef/awesome-android-ui</u>

Tips and Advises

- User RecyclerView for the list!
- Do not forget about using persistence data storage like Room with SQLite (https://developer.android.com/training/data-storage/room/index.html) for storing the items.
- It is highly recommended to use OnClickListener for the CheckBoxes in the RecyclerView instead of the OnCheckChangedListener!
 - It is because OnCheckChanged is always called when the check status is set by the list during initial rendering, while OnClick will be called only one time when you click on the checkbox.