

## Work plan for week 3

### Reading:

Read chapter 2, chapter 5 p. 87 – 97 and Chapter 9 p. 168 – 170 of the textbook carefully.

On [developer.android.com](http://developer.android.com) you can find help on all aspects of Android. The link below is a nice guide to layouts. Pay special attention to the last part explaining ListView and ArrayAdapter that you need to do TingleV2: <http://developer.android.com/guide/topics/ui/declaring-layout.html#AdapterViews>

The guide has lots of useful pieces of code, but no complete examples. However, there are lots of examples found on the internet. If you google for “listview adapter tutorial” you will probably get a result including this useful example (showing a complete app with a scrollable list based on ListView and ArrayAdapter):

Android ListView with Adapter Example: <https://www.codeofaninja.com/2013/09/android-listview-with-adapter-example.html>

### Individual assignment

1. Do chapter 2 in the book.  
Read the text and try to repeat all steps described in the book.

### Main assignments

2. Make an object diagram like Figure 2.4 for your TingleV1. Does it follow the Model-View-Controller pattern? If not, how would you modify it so it follows the pattern?
3. Extend Things with a second activity that shows a scrollable list of all things as described in TingleV2.pdf (available in learnIT).

### Java background

4. Give a short description of this Java concept and an example of its use
  - Singleton  
You may read about singletons here:  
[http://www.tutorialspoint.com/java/java\\_using\\_singleton.htm](http://www.tutorialspoint.com/java/java_using_singleton.htm)

You will get a chance to check your explanation at the class on Wednesday Feb. 17.

## Challenges

5. You are not required to do these exercises. They are an offer to students wish to go a bit deeper. Most weeks there will be two challenges, one with emphasis on *design* (GUI, graphics etc.) and one with emphasis on *technology* (coding, hardware resources etc.). You can choose which one you will do. Doing both is of course also ok.

### *Design challenge: Nicer layout for activity\_list*

Design a nicer layout of the list shown in ListActivity. This will probably require that you make changes to both activity\_list.xml and list\_item.xml

### *Technology challenge:*

Modify the list of things in ListActivity so each item becomes clickable, that is, when you click on the item some action is taken. This action could be to show the information about the thing in a large font with red letters.