Prof. Dr. Peter Thiemann

Matthias Keil

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Android Smartphone Programming

http://proglang.informatik.uni-freiburg.de/teaching/androidpracticum/2014/

Exercise Sheet 4

1 Recurring Events and Calender Export (20 points)

In this exercise you will extend the *To-Do List Manager* from the previous exercise sheet.

First, you are required to implement the possibility to define (add, edit, delete) different *To-Do Lists*. Each *To-Do Item* will be element of exactly one list. Modify the List-View to switch between (or to see) different lists.
Hint: You may choose a similar data model as used for the *Calendar Provider*.

Additionally, implement an App Widget configuration that extends the App Widget from the previous exercise sheet to select an *To-Do List*. The App Widget should only show elements of the choosen list.

Second, you are required to add the possibility to define *Recurring Events*. Each *To-Do Item* should contain an optional *Recurring Rule*. Every time a *Recurring Event* gets marked as *done*, the next occurrence has to appear in the list.
The following features should be supported in your application.

- The ability to define a *To-Do Item* as a *Recurring Event*.

- The *Recurring Rule* has to include:

  - daily,
  - weekly,
  - monthly,
  - yearly.

- An end date for *Recurring Rule*.

- Reminder and Widget has to work with *Recurring Events*.

Further, you are required to implement an *Export* feature. This feature should enable a user to export a *To-Do Item* (including name and date) to one of the available calenders. A corresponding calender item should be added to the chosen calender.
The following features should be supported in your application.

- The ability to export an item to a calender.

- A list to chose one of the available calenders.

You are not required to update the calender entry every time the To-Do item changes.

Submission

Deadline   The submission deadline is **09.12.2014, 12:00 (noon)**. Late submissions will not be accepted.

Project   Create an *Eclipse Project* (**exercise4**) for each exercise. Use **androidlab.⟨user⟩.exercise4** as package name. Make sure that your project include all source files.

Report   Your solution will consist of a *pdf file* ⟨**user**⟩_**report4.pdf** with a description. The description must be limited to one page per exercise. Submitting more than one page will lead to reduction in points. The description may be either in German or in English. Clear and understandable style is required.

Submission   Submit your solution to the subversion repository. Your solution will consist of one *folder* (**exercise4**) for each exercise which include the eclipse project and the report.

You are strongly encouraged to test your solution. Provide your source code with comments to understand the intention. Clear and understandable style is required.