

MAD Android - Exercise 2

In this exercise, you will be extending the RSS Reader Application from Exercise 1.

INFO: The source code of both exercises will be judged separately! Hand in two archives (Exercise 1 / Exercise 2). Good idea: use branches!

DEADLINE: 21.10.2013

- 1) Make use of the ActionBar
 - a. Add an ActionBar navigation element (choice is yours) that opens the “Subscription Fragment” and another one that opens the feed overview **(1P)**
 - b. Add two ActionModes that get activated by long clicking an item
 - i. The first ActionMode is used to unsubscribe (“delete”) user feeds **(1P)**
 1. Allow multi select
 2. Delete button in ActionMode
 - ii. The second ActionMode is used to mark articles as read / unread / starred **(1P)**
 1. Allow multi select
 2. Provide buttons for all three actions in ActionMode
- 2) Persist data
 - a. Use a ContentProvider and SQLite to persist data. Implement all CRUD (Create, Read, Update, Delete) operations and use them accordingly **(2.5P)**
 - b. Make sure that all Lists are backed by a CursorAdapter and not an ArrayAdapter **(1P)**
 - c. Your database schema should consist of two tables. Make sure to set the relationships properly! Don’t forget to implement read / unread / starred **(1P)**
 - i. feeds
 - ii. articles
- 3) Update the import service
 - a. Use the service to download and persist articles **(1P)**
 - b. Use ContentObserver to receive data changed events and update the UI accordingly! **(0.5P)**
- 4) General Stuff
 - a. Be sure to code in a clean manner **(1P)**
 - i. Data Objects
 - ii. Neatly defined protocols for broadcasts (constants)
 - iii. SOLID (where possible) [http://en.wikipedia.org/wiki/SOLID_\(object-oriented_design\)](http://en.wikipedia.org/wiki/SOLID_(object-oriented_design))
 - iv. Use of appropriate design patterns (also: domain specific patterns like ViewHolder)