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Android Smartphone Programming

http://proglang.informatik.uni-freiburg.de/teaching/androidpracticum/2013/

Exercise Sheet 2

1 Simple Calculator (15 points)

In this exercise you have to implement a simple calculator application for the Android Platform. Your calculator have to support features like addition, subtraction, multiplication and division. Note, that you have to compute the multiplication and division first, then addition and subtraction.

A simple calculator should include the following features:

- Buttons with numbers from 0-9 and the decimal point '.'

- Buttons for addition, subtraction, multiplication and division

- Buttons for equals and clean

- A display panel to output the typed values and the final result.

XML-Layout   Declare your application's default layouts in XML. The XML file hast to include the screen elements that will appear and their properties.

String Resources   Exclude all your string resources to the *strings.xml* file.

Intents   Use Intents to broadcast each time a button is clicked. Take use of BroadcastReceivers to receive Intents and perform operations. Use IntentFilter to specify which types of Intents the created BroadcastReceiver should respond to.

Submission

Deadline   The submission deadline is **5.11.2013, 12:00 (noon)**. Late submissions will not be accepted.

Project   Create an *Eclipse Project* **exercise2_⟨number⟩** for each exercise. Use **androidlab.exercise2_⟨number⟩** as package name. Make sure that your project include all source files.

Report   Your solution will consist of a *pdf file* **report2_⟨number⟩.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* **exercise2_⟨number⟩** 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.