Lab 2 – Android budget app (1,5 hp)

In this assignment you are going to make an Android app where you can keep track of your expenses. The app consists of several activities. Figure 1-4 shows an example of what such an app can look like.

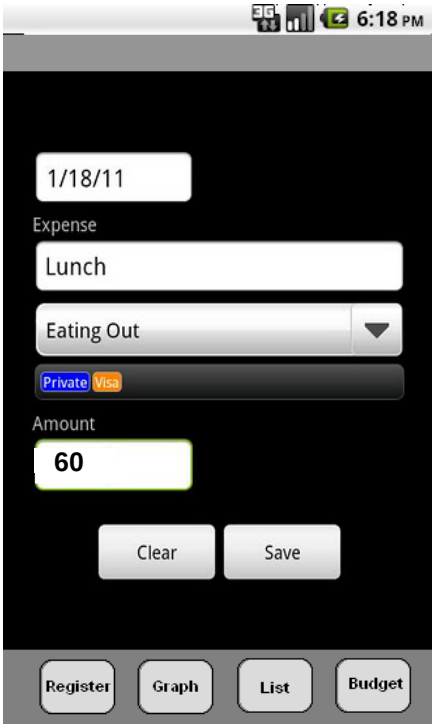


Figure 1: Register

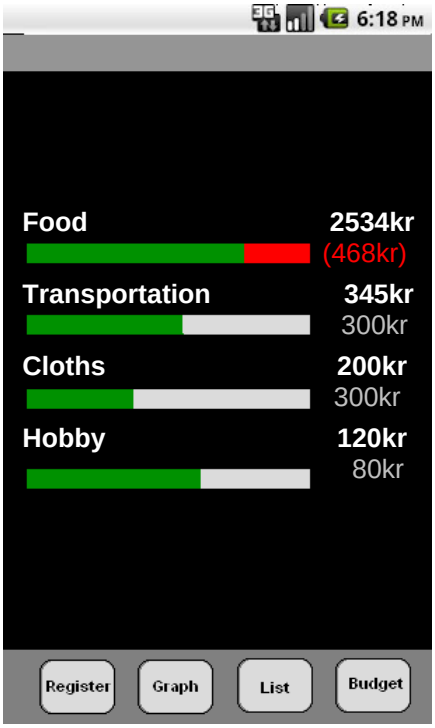


Figure 2: Budget

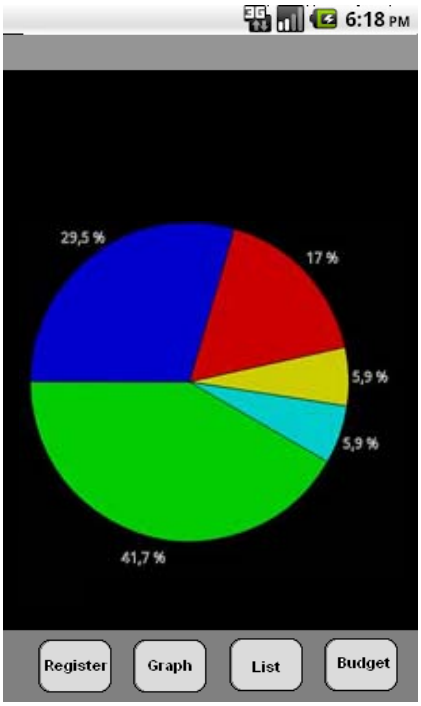
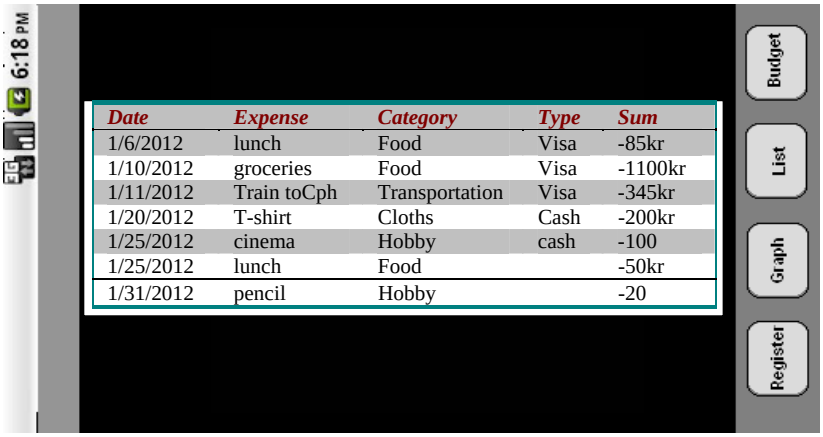


Figure 3: Graph



Date	Expense	Category	Type	Sum
1/6/2012	lunch	Food	Visa	-85kr
1/10/2012	groceries	Food	Visa	-1100kr
1/11/2012	Train toCph	Transportation	Visa	-345kr
1/20/2012	T-shirt	Cloths	Cash	-200kr
1/25/2012	cinema	Hobby	cash	-100
1/25/2012	lunch	Food		-50kr
1/31/2012	pencil	Hobby		-20

Figure 4: Budget

The app contains a text field where you can put in the date, what expense you have and what category it is (for example food, transportation. You can choose your own categories.). See Figure 1. For the categories you should use a *spinner* to force the user to register the expenses in a specific set of categories. The registered expenses are saved in a database. The expenses are listed on a separate screen (see Figure 4). You also need a screen showing how much you have spent on the different categories. It is optional to register how

The purpose of this lab is to familiarize you with some more of the graphical components and how to use arrays to display different values. You will also use *canvas* for drawing and multiple activities.

You must work according to XP and all group members have a shared responsibility of the code. That means that all group members must be able to explain the code in detail.

You can get some inspiration here: https://market.android.com/search?q=budget&c=apps
And you can find some information about budgeting here:
http://publikationer.konsumentverket.se/sv/publikationer/kategorier/broschyrer/koll-pa-pengarna-2012.html

Criteria of the assignment

The code must be written in a nice and structured way, divided into methods and implement the minimum requirements bellow.

Minimum requirements:

- You must use at least four categories of expenses.
- You must be able to put in your income as well as your expenses.
- You must calculate and show your expenses per category
- You must list at least the five latest transactions.
- You must use pictures.
- You must provide a sketch of the interface and a description of the functionality and structure of the program. But remember the XP motto code before documentation.
- The LinarLayout is the layout automatically used when you make a new project. You must make use of another layout for this app.
- You must have your own customized style regarding title and button (title: text size, font and text colour, button: text size and padding).
- You must use a spinner.
- You must also have your own colour scheme.
- You must make use of SQLite.
- You must have at least three different screens.
- You must provide a chart summarizing one aspect of the expenses.
- You must have a customized icon.

Suggestion of work flow

- Decide what the app should do and what data to collect.
- Draw a picture of how you would like the app to look like.
- Make an Android project.

- Lay out the interface components of the register screen in the graphical editor.
- Create the resources you need.
- Run the project to verify everything looks like you expect it to do.
- Make your own customized styles.
- Model your database.
- Create the tables you need.
- Save the data to the database.
- Make a second screen where you can list the data.
- Link your register screen to the list screen.
- List the saved data.
- Test the app.
- Make a third screen.
- Draw a chart (e.g. picture)
- Connect the chart with the data in the database.
- Link the screens together. You should be able to go back and forth between the different screens.
- Test often!
- Continue to add screens.

Good luck!