

Documentation – ShoppingSheep

Description:

The ShoppingSheep is spendings organizer application using an SQLite database. Allows for arranging shoppings in categories, generate daily, weekly, monthly reports and import/export data.

System requirements:

- Android 2.2

Permissions

- read external storage
- write external storage

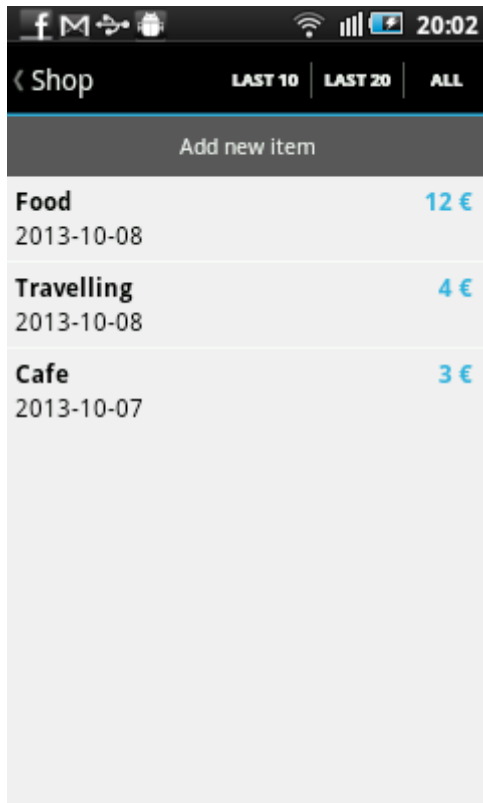
User Interface

SplashScreen



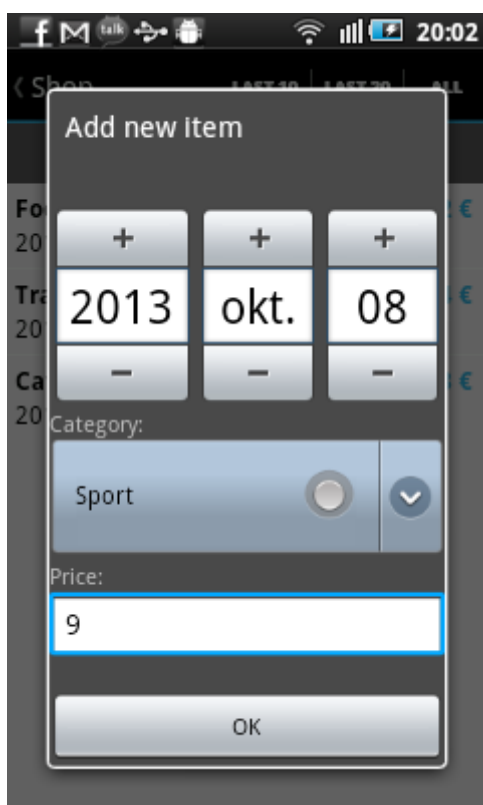
- After the application starts this loading screen appears for 2 seconds

FragmentShopping



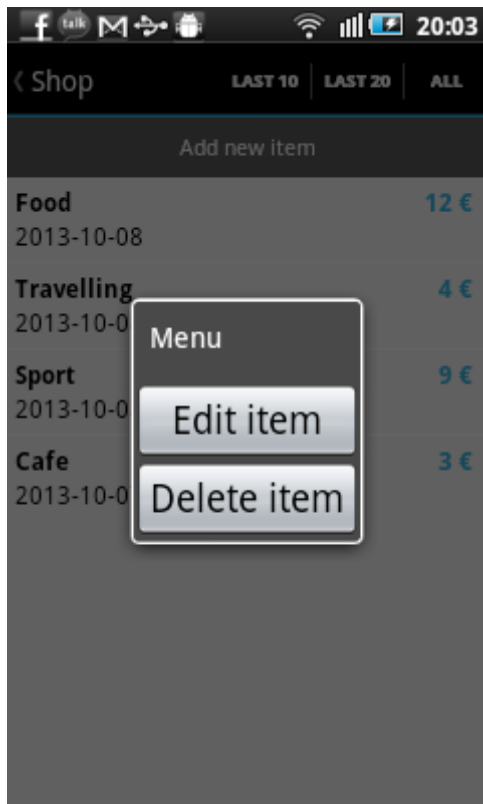
○ This fragment displays all the shopping items that the user added. It's ordered by date, and there is an option to limit the number of the displayed items.

- Last 10
- Last 20
- All (default)



○ „Add item dialog”
○ This dialog box appears by clicking on the „Add item” button. In this box the user can set the date of the shopping, the price of it and choose a category which belong to the current item.

- The price can be a natural number that bigger than zero.
- By clicking on the „OK” button the current item will be added to the database and to the listview too.



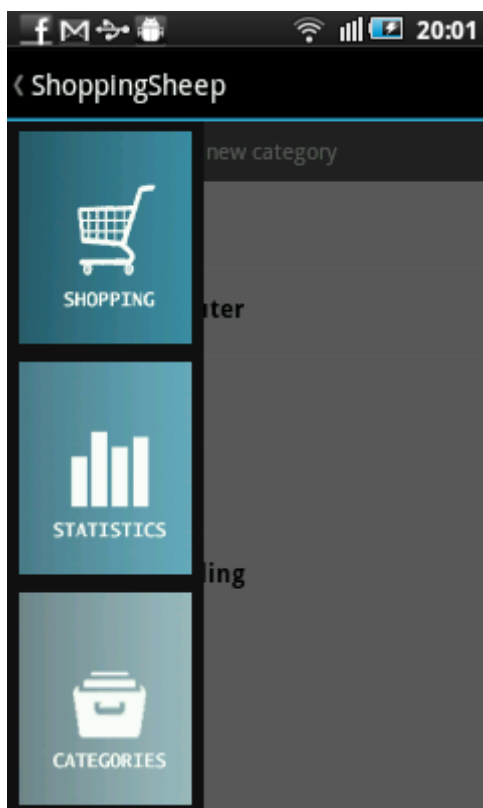
○ This menu appears by long clicking on the item. When the user chooses the „Edit item” then the previous dialog box will appear where the user can modify the dates. By clicking on the „OK” the current item will be updated in the database.

○ The “Delete” option will delete the item from the database after that the user clicked on the confirmation button.



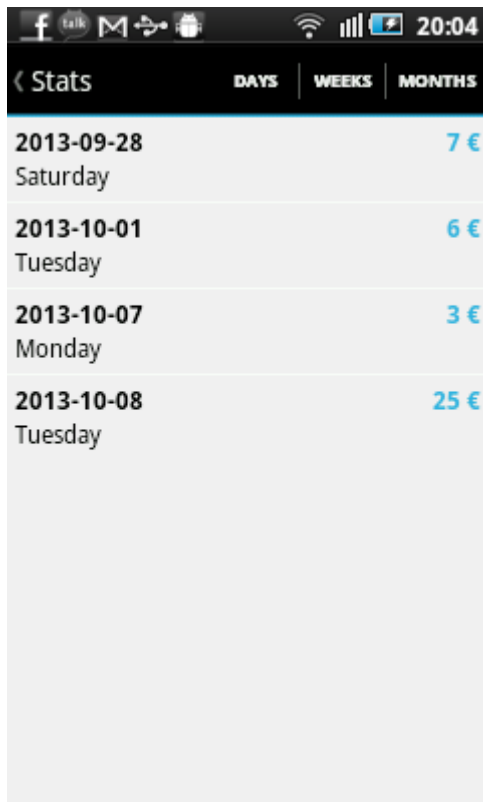
Other options (Menu button)

- Change background:
 - The user can choose between light and dark background. The program will remember the current settings when the program starts next time.
- Export database:
 - This menu exports the current database to the external storage. It's practical when the program will be uninstalled then installed again, because the user can simply just import the previously exported database back to the application-
- Import database:
 - It imports the last exported database to the program. It overwrites the current database.




The user can access to the side navigation bar by clicking on the title or by pulling it from left to right. Here the user can choose between the tabs.

FragmentStat

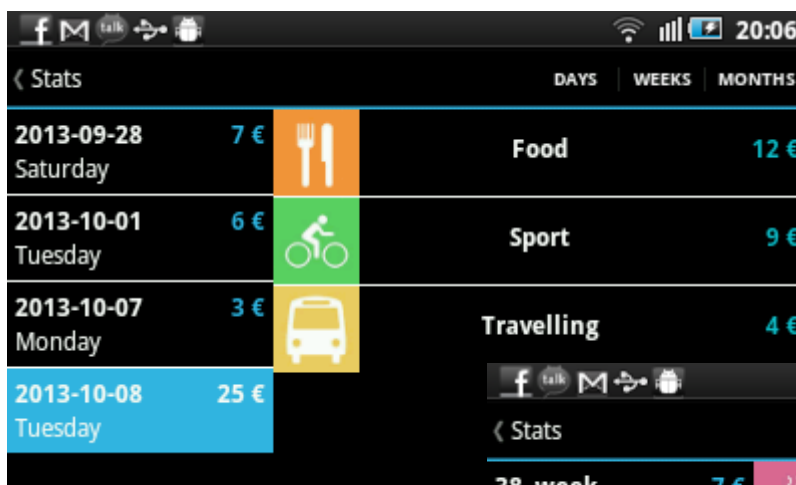


< Stats	DAYS	WEEKS	MONTHS
2013-09-28 Saturday	7 €		
2013-10-01 Tuesday	6 €		
2013-10-07 Monday	3 €		
2013-10-08 Tuesday	25 €		

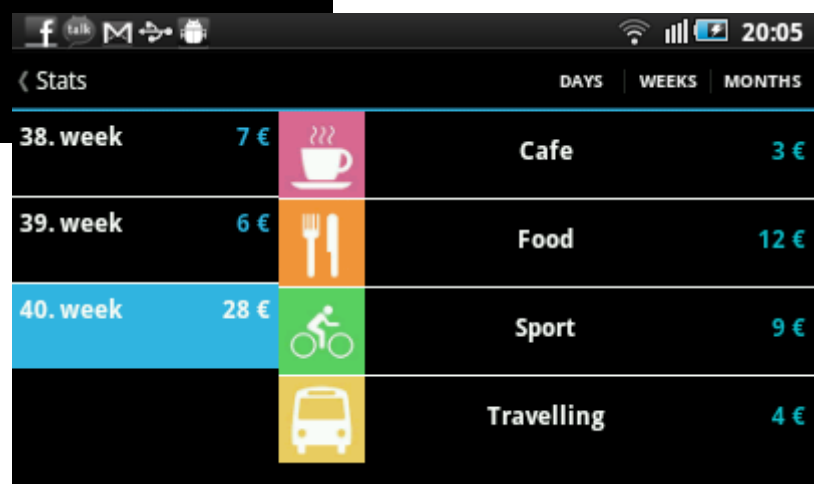


< Stats	DAYS	WEEKS	MONTHS
38. week	7 €		
39. week	6 €		
40. week	28 €		

- On the Statistics tab the user can see the previous shopping. At the default view the shoppings are group by days. The items in the same category will be summarizing. In the menu at the actionbar the user can select the type of the sorting. There is daily, weekly and monthly.
- In portrait mode the details of a day/week/month will appear in another screen anyway in landscape mode it will be next to the other.

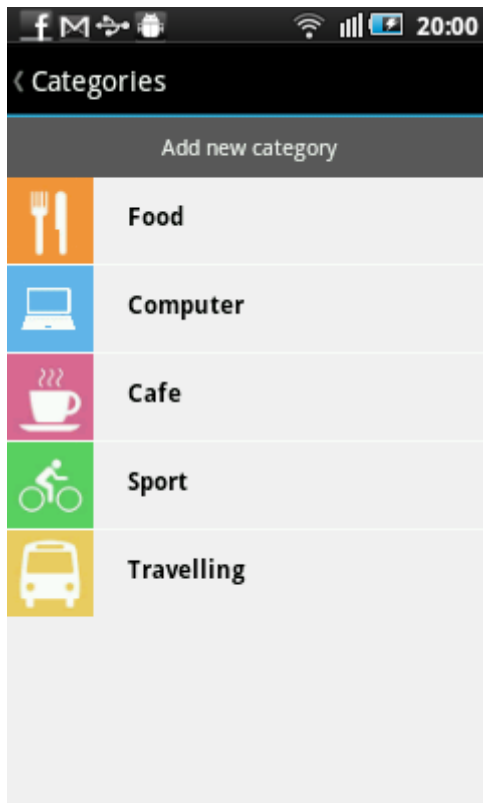


< Stats	DAYS	WEEKS	MONTHS
2013-09-28 Saturday	7 €	Food	12 €
2013-10-01 Tuesday	6 €	Sport	9 €
2013-10-07 Monday	3 €	Travelling	4 €
2013-10-08 Tuesday	25 €		



< Stats	DAYS	WEEKS	MONTHS
38. week	7 €	Cafe	3 €
39. week	6 €	Food	12 €
40. week	28 €	Sport	9 €
		Travelling	4 €

FragmentCategories

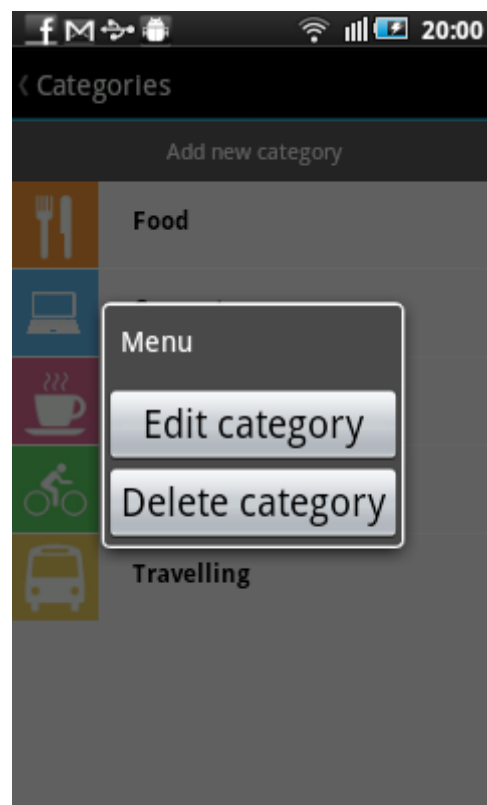
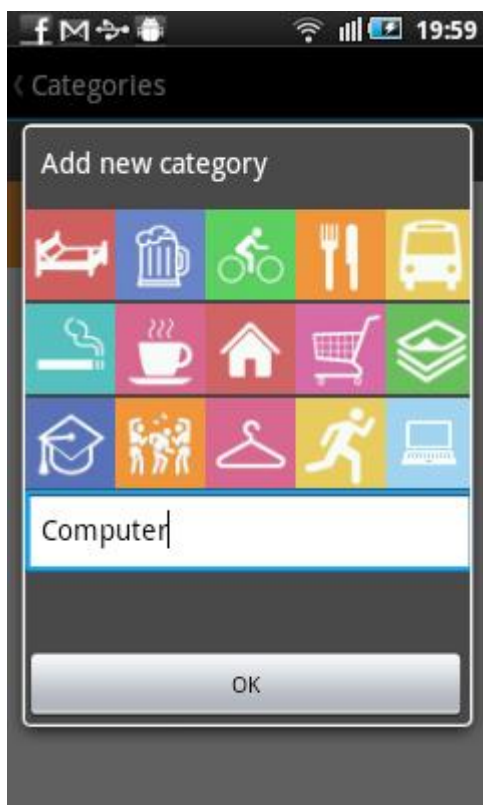


- It contains the user defined categories. By clicking on the "Add new category" button the user can add new categories, choose from the predefined icons and give a name of it. The icons are reusable but the name of the category should be unique.

- With a long click on an item the menu appears, that gives options to edit or delete a category.

- Edit: In the displayed dialog box the user can modify the icon or the name of the category that will be updated in the database

- Delete: When the user deletes a category then all the items that belong to this category will be removed from the database. Before the deleting an alert dialog appears that warns the user about it.



Structure of the application – classes:

DatabaseHandler

- implements all the required **CRUD** methods for both of the tables. This class implements also the *import()* and *export()* DB functions.

Categories

- implements a row type for the *Categories* table in the database with the corresponding *Set()* and *Get()* methods.

ShopList

- such as the *Categories* class, it implements a row type for the *ShopList* table in the database with the *Set()* and *Get()* methods.

MainActivity

- is the base of the application, it sets the actionbar, the side navigation bar and the main layout, that contains a *FrameLayout* to display the different fragments

FragmentShopping

- contains the shopping items with the date and the spent money. There are options to add new item, edit or delete existing items and it also provides opportunity to import and export the database.

FragmentCategories

- implements a *ListView* for the different categories. There are options to add new category, delete or edit them.

FragmentStat and FragmentDetail

- contains a view to organize the history. It's possible to organize the items daily, weekly or monthly. In landscape mode the *FragmentDetail*, which contains the corresponding items appears next to the *FragmentStat*, otherwise on a new screen.

LabelListAdapter, LabelCostAdapter, ShopListAdapter

- those different adapters for the different *ListView*s on the fragments. Through these special adapters it's possible to inflate unique list rows.

TODO:

- *Option to choose language and currency*
- *Graphs and plots to show the statistics*