Description

Intended User

Features

User Interface Mocks

Key Considerations

- How will your app handle data persistence?
- Describe any corner cases in the UX.
- Describe any libraries you'll be using and share your reasoning for including them.
- Describe how you will implement Google Play Services.

Next Steps: Required Tasks

- Task 1: Project Setup
- Task 2: Implement the HomeScreen
- Task 3: Implement the "Create new entry screen"
- Task 4: Implement the database layer
- Task 5: Implment the "Show diary screen"
- Task 6: Implement the export feature
- Task 7: Implement the preferences

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DiabetesDiary

Description

The DiabetesDiary app will be useful for people with Diabetes. Every single person with Diabetes must measure some value in their blood before eating carbohydrates. To track these values, it's good to write it down in a diary. When someone visit the doctor, he has to bring this diary, so the doctor can check the values and decide what to do in the future. To make this a lot easier to handle, I will program an app to save this values and export them in a readable format. Because everyone in nowadays life has a smartphone, there is no need to carry a pen and a paper diary anymore. With the export function, it's easy to print the diary and bring it to the doctor. The user interface will be very simple, because often the elderly has this kind of disease and need support. Also the app recommends how many units of Insulin you have to put, to keep your healthiness.

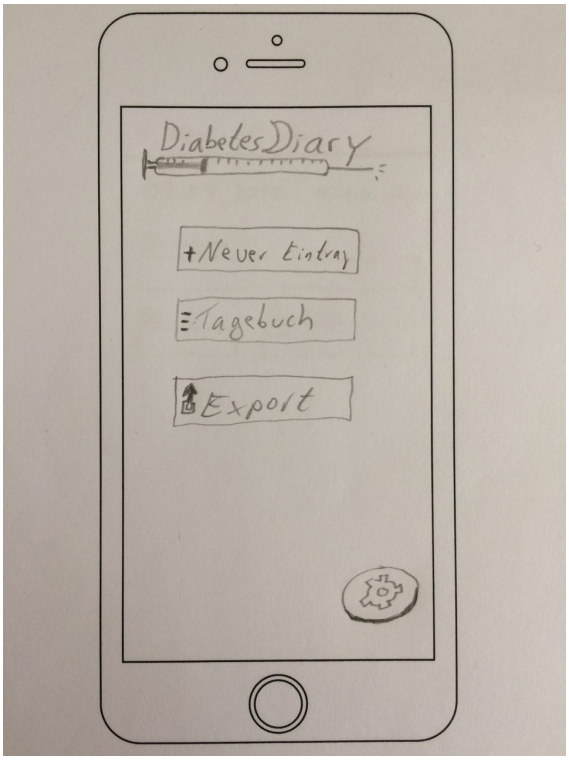
Intended User

The intended users are people with Diabetes. The range lasts from very young people to very old people. But in general, more old people have this disease.

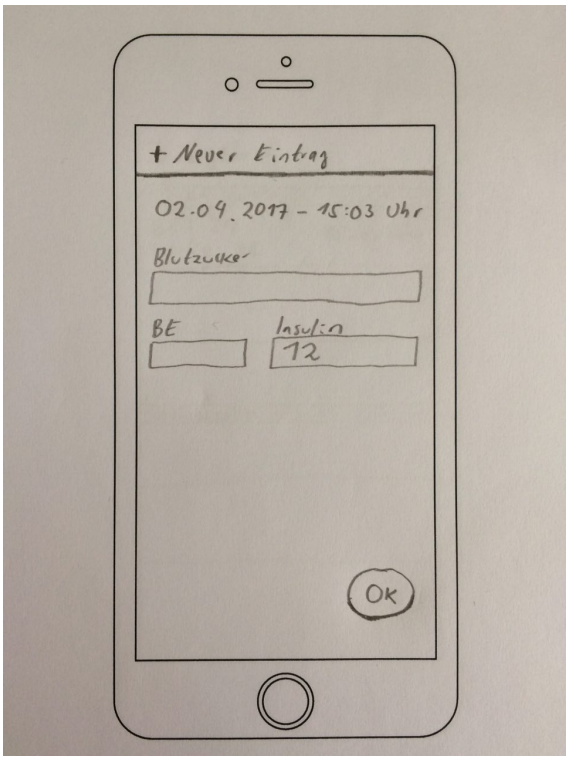
Features

- Save your blood measurements
- export the diary in human readable format to print
- Gives recommendation how many insulin to put

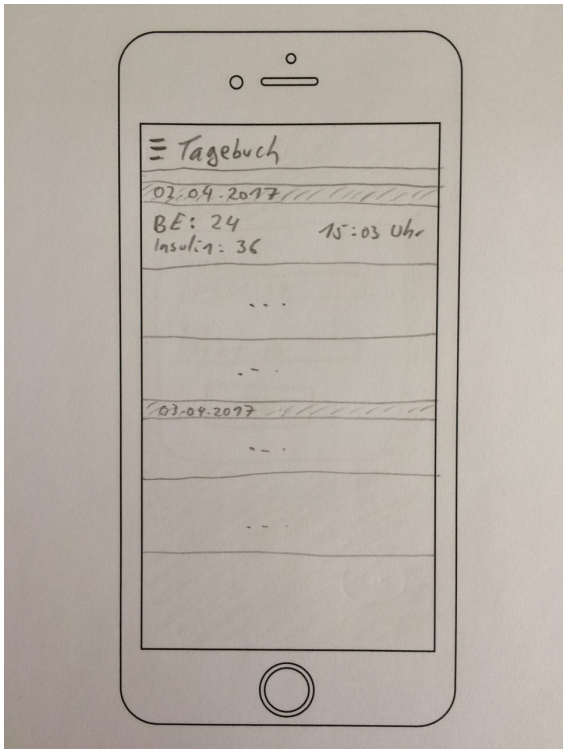
User Interface Mocks



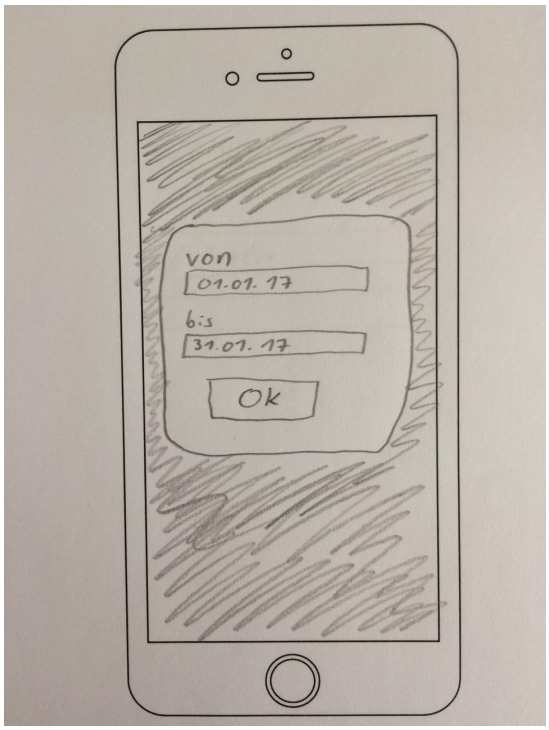
This is the entry point into the app. Every option is listed here and you get back to this screen form any screen by pushing the back – button of the device.



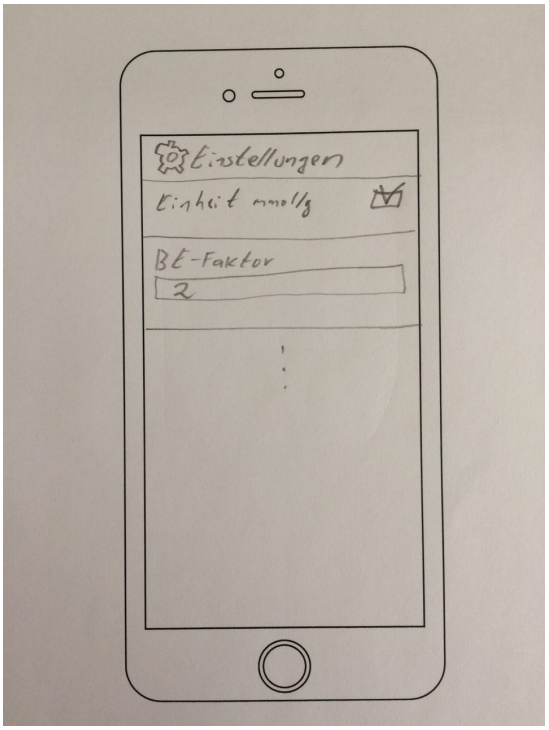
This is the screen for creating a new diary entry. It takes your measured value, the units (BE) you are going to eat and calculates the potion of Insulin you should put.



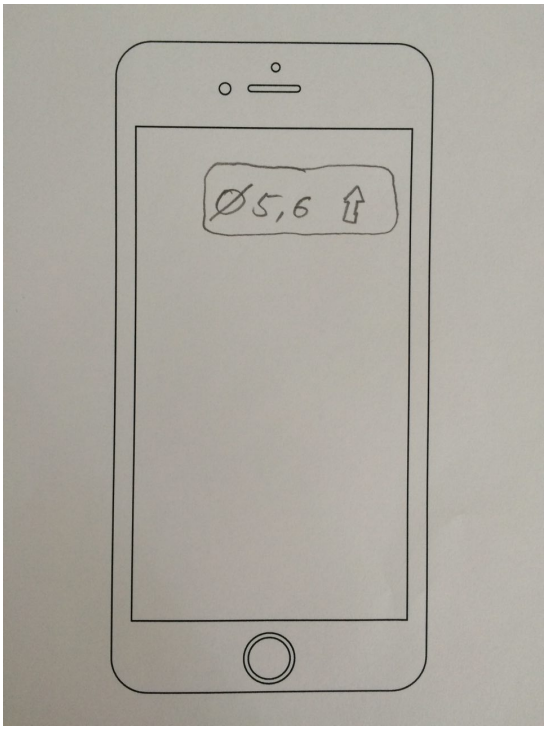
This screen shows the diary. It shows a grouped ListView, separated by day.



This screen show the dialog for export your diary. You can select the range (from and to a specific date).



This screen shows the preferences fragment. The user can setup some values here to get a correct calculation of the potion of insulin.



This will be the widget. It shows the average value of your blood. And the arrow indicates, if this is a good one or not.

Key Considerations

How will your app handle data persistence?

The app will save all data in a SQLite database. Only user preferences, which belongs to the app itself will be stored in SharedPreferences. With ContentProvider, I will access these data properly.

Describe any corner cases in the UX.

The user can create a new diary entry and show them in a table. There will be a main interface with these options. Each option shows a different screen and with the back key, the user will go back to the main interface. Also the user will have some kind of preference screen to put the individual values for the calculation of the amount of Insulin to put before eating.

Describe any libraries you'll be using and share your reasoning for including them.

I will use iTextPdf to create a nice pdf file for printing. As I told, the users can export their diary to bring it to the doctor.

Describe how you will implement Google Play Services.

I will use Google Analytics to see how the users uses this app and get nice statistics. Also I will include AdMob and show one Banner to get some money, even if it's not much. With AdMob, I could show only ads of pharmacy and medical care, because my users should be interested in that.

Next Steps: Required Tasks

Task 1: Project Setup

I have to setup a new Android blank project and connect this to a git repository, for example with github. Also I will include the dependencies like iTextPDF library.

Task 2: Implement the HomeScreen

I will build a simple layout for phones and tablets, supporting every orientation. The screen may contain some buttons for the different features of the app like "create a new diary entry", "show the preferences", "show the diary" and "export the diary".

Task 3: Implement the "Create new entry screen"

I will build a simple formular to create a new diary entry. The formular contains a button to save it to the SQLite database and do some validation of the data before inserting. If any error occurs or the data is not valid, a Toast will be used to display the error.

Task 4: Implement the database layer

I will create a nice class for the database handling, using content providers. When this is finished, I can connect the Screen from Task 3 and save my data.

Task 5: Implment the “Show diary screen”

I will create a grouped ListView, which shows the data of the diary in a selected range. So the user can filter this ListView with some kind of range picker, e.g. 01.01.2017 – 01.02.2017.

Task 6: Implement the export feature

I will create a simple dialog for exporting the diary in a selected range to pdf format. The client can then use this file to send via mail for example.

Task 7: Implement the preferences

I will create a PreferenceFragment, so the customer can set several values for the calculation of the recommended potion of Insulin. These values are completely individual per user, so will be saved in the SharedPreferences.

Task 8: Implement the widget

I will create a small widget, which will show the average value of the blood. See the mockups above.