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Submission Instructions

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GitHub Username: rube-de

Fridge Organizer

Description

Fridge Organizer helps you to organize your fridges at home or at work.
Never ask yourself again what products you have in your fridges, track all expiring products and

Problem:
The user has problems to manage his food products in his fridge and has often too many expired products which use space for fresh food. Also users who are shopping groceries and don't remember what they have in their fridge and buy too much or less for the meal the want to cook later.

Solution:
The app helps the user to organize has fridge and keep it clean from expired products. While this helps him to save space in the fridge or freezer, it also saves him from throwing away products which always laying around expiring. Is the fridge organized the user also has the benefit to always have access to what is left in the fridge and saves him from buying too less or too much food while doing grocery shopping.

Intended User

Families, Singles and all people who want to have a clean fridge.

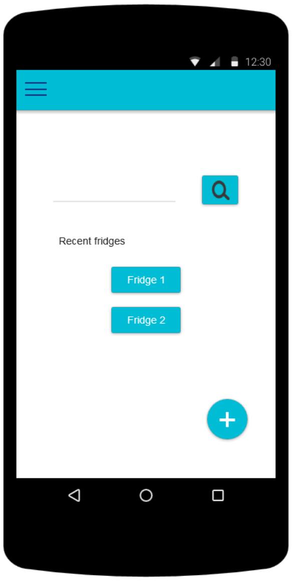
Features

- Save products with information as expiry date
- Scan products to populate information
- Search products in your fridges
- List products of a fridge
- Show all expired products
- Send notification when product expires
- Widget to show fridge content

User Interface Mocks

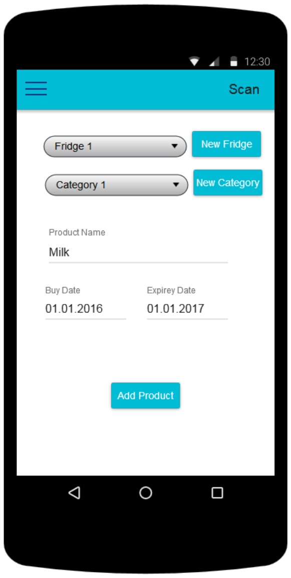
These can be created by hand (take a photo of your drawings and insert them in this flow), or using a program like Photoshop or Balsamiq.

Screen 1



Start screen which the user sees starting the app.

Screen 2



Fridge 1

Category 1

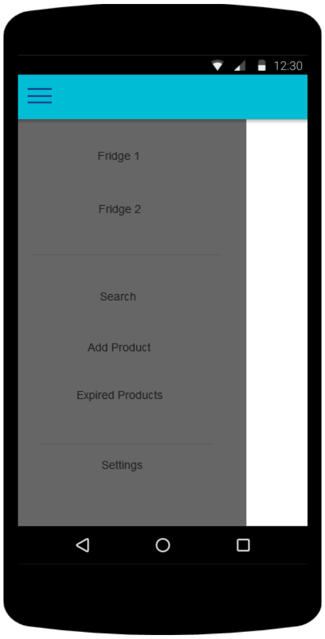
Product Name
Milk

Buy Date
01.01.2016

Expirey Date
01.01.2017

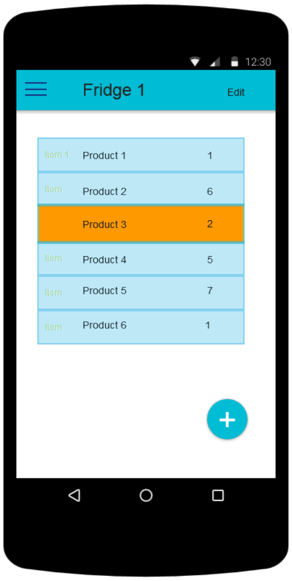
Screen to add a product to a fridge

Screen 3



Screen of the menu when clicking on the hamburger icon

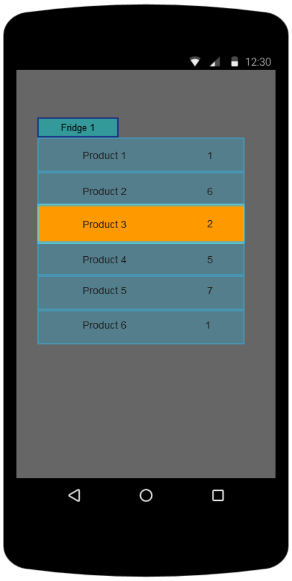
Screen 4



Item 1	Product 1	1
Item	Product 2	6
	Product 3	2
Item	Product 4	5
Item	Product 5	7
Item	Product 6	1

Screen which shows the content of a fridge, expiring products are marked.

Screen 5



Fridge 1

Product 1	1
Product 2	6
Product 3	2
Product 4	5
Product 5	7
Product 6	1

Screen which shows the a widget of a fridge content.

Key Considerations

How will your app handle data persistence?

The data will be handle in an own Content Provider.

Describe any corner cases in the UX.

The user will have sidebar to use for all important tasks, like switching fridges, start a search, adding products or go to settings. Additional a floating action button will be used to common actions like adding products to an opened fridge.

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

ZXing, barcode scanning library for scanning the product codes.

Describe how you will implement Google Play Services.

The app will use Google Analytics to measure the activity of the used screens and features. Also the app will use Google Ads to display ads in the app.

Next Steps: Required Tasks

This is the section where you can take the main features of your app (declared above) and decompose them into tangible technical tasks that you can complete incrementally until you have a finished app.

Task 1: Project Setup

Create new project in the studio and and try to create first packages to get a structure in the project. After that set up the android manifest and gradle to be able to build the project. Finally configure the project for the git repository and make the first commit.

- Create new project
- Create structure
- Set up manifest and gradle
- Configure libraries
- Make first commit

Task 2: Implement UI for Each Activity and Fragment

- Build UI for MainActivity
- Build UI for Adding Screen
- Build UI for Fridge Screen
- Build UI for Expiry Screen
- Build UI for Settings
- Build UI for Sidebar menu
- Build UI for detailed search

Task 3: Implement Content Provider

Implement the content provider to save the data for all the products

- Implement Provider
- Implement Contract
- Implement DBHelper

- Implement Unit tests

Task 4: Implement Activities

Implement all basic activities for using the app:

- Implement adding activity
- Implement adapter for fridges
- Implement search activity
- Implement sidebar functionality
- Implement settings activity
- Testing
- Cleaning up (Strings etc.)

Task 5: Implement Scan Library

Implement scan library ZXing:

- Import library
- Integrate library into adding activity

Task 6: Implement Google Analytics

- Set up project
- Integrate configuration file
- Add screen tracking
- Send events

Task 7: Implement Google Ads

- Integrate Firebase and the Mobile Ads SDK
- Place AdViews in activities
- Initialize the Google Mobile Ads SDK
- Load adds in the activities

Task 8: Adjust App for tablet use

- Make sidebar always visible
- Adjust screen content to bigger screen

Task 9: Implement Notification

- Create notification layout
- Implement notification logic
- Implement notification settigs

Task 10: Implement Widget

- Create widget layout
- Implement widget logic

Task 11: Handle Error Cases

Design Error cases and implement error handling:

- Design error cases
- Implement error handling for db access
- Implement error handling for barcode scanning
- Implement error handling for analytics
- Implement error handling for ads

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