Functional Specification Document Trainee Day

Dear applicant,

on the next pages you can find the funcational specification for the task on your Trainee Day.

With this specific task we want to get insights in different assets of your code style, your approach and your skills.

Please consider these remarks:

- You have 5 hours to finish this task
- We are aware that the specifications need more time than 5 hours. Be focused and try to finish as many as possible. (The avarage finishing qouta is round about 80%)
- If one part of the application is finished, test them thoroughly.
- The application has to be implementend object oriented and a clean and straight structure.
- If you have any problems or questions, don't hesitate to ask your Interviewer. The goal is to produce good, working code.
- Be aware not to create some kind of framework that's perfect in every corner. Focus on your goal to create a good app with as many features as possible an a very high techincal level.
- The App should be working on the Simulator, it's a plus when you test it on a real device.
- It's your choice to choose Swift or Objective-C

If you have any questions about this document, really don't hesitate to ask your Interviewer.

We wish you success and thanks for your time and interest.

CHECK24

1. Introduction

The code is documented inline (only document important parts, if you think the next lines should be better documented, do as you like)

Certain parts are marked as „**Enhancements**", start with them when you are finished with the normal function set. There is no specific order for the enhancements, do as you like. Focus on the basic function and don't try to fight many fires at the same time. The finished parts should be bug free and complete. If you finished with all enhancements you can create new ones on your own.

2. Functions

Create an app with two views.
- Product Overview
- Product Details

2.1 Product Overview

The overview displays the user a list of all available products.

The list should be loaded via a REST-API (JSON).

http://app.check24.de/products-test.json

Enhancement 1: *With a Pull-To-Refresh it's possible to reload the list.*

As long as the list is loading the user should be presented with a loading animation.

The list starts with title and subtitle.

Depending on the availability of a product the presentation fo a product is different. See the figure on the right.
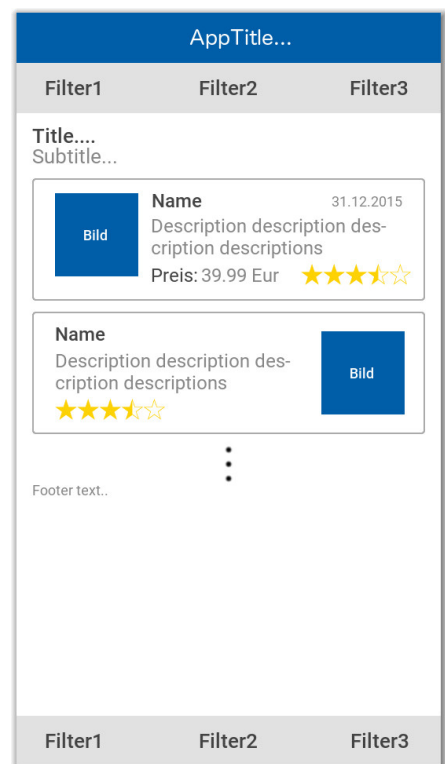- If the product is available the presentation of the product should be with picture on the left side
- Otherwise the picture should be on the right side.

The short description can be displayed one- or multilined.

The rating stars show the rating rounded down in 0.5 steps.

If a product is selected the product detail page should be opened (see Product Detail).

The list should always end with a footer with the static text „*© 2016 Check24*"

Enhancement 2: *If you click on the footer a specific WebPage should be load in a WebView. (new view)*
> *URL: http://m.check24.de/rechtliche-hinweise?deviceoutput=app*

It should be possible to filter the products for specific categories. You can attach the filter on the top or bottom (you should consider here the GUI gudelines from the specific OS).
- Alle (all)
- Verfügbar (available)
- Vorgemerkt (favorites)

Favorite products should be presented with a colored background color (#D1C4E9).
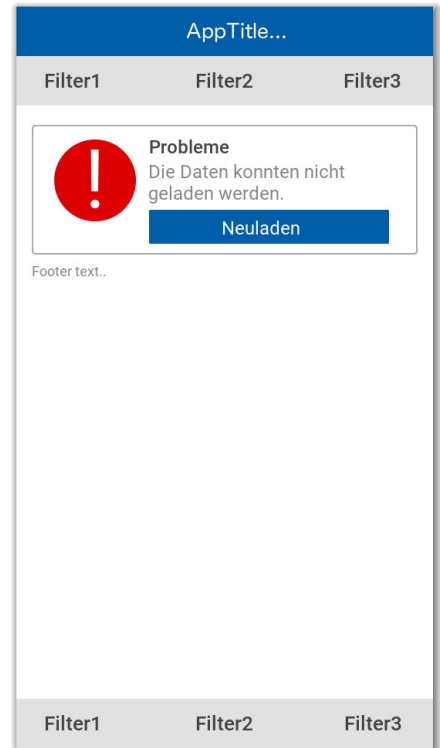
2.2 Enhancement 3: Product Overview Error

If you get an error while loading the data, the user should be presented an error.

To simulate an error, implement something to trigger this. Like every third request start with a broken url or something like that.

With the „Neuladen(reload)" Button the request should be started again

OPTIONAL: Implement the same behaviour in the pull to refresh gesture.

The filter options should be deactivated.

2.3 Product Details

The product detail page shows detailed informations about the product.

When necessary and the content is too big for the screen you should able to scroll to the hidden content.

The short and the long description should be displayed without being cut.

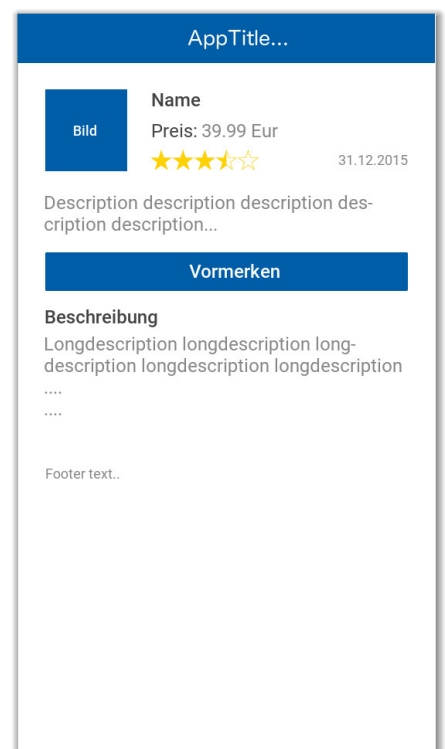The page should always end with a footer with the static text „© 2016 Check24"

Extension 4: If you click on the footer a specific WebPage should be load in a WebView. (new view)
    URL:http://m.check24.de/rechtliche-hinweise?deviceoutput=app

When you press the „Vormerken (favorite)" button the product is favorited.

If a product is favorited:
-    The button should change to „Vergessen (un-favorite)".
-    The product name should be blue.

3. Checklist

To get a quicker overview, you can use this checklist. If you are finished with an task you can check them here. If you are not completely finished with a part you can mark them as well.

Nr		partially	complete	remarks
1	**Product Overview**			
1.1	GUI (List)			
1.2	JSON Request and Parsing			
1.3	Filter (Alle / Verfügbar/ Vorgemerkt)			
2	**Detailpage**			
2.1	GUI			T
2.2	Favorite Product			
3	**Extension**			
3.1	„Pull to Refresh" to reload products.			
3.2	Link to C24 Webpage from the footer (WebView)			
3.3	Error View (Product Overviw)			
3.4	Link to C24 Webpage from the footer (WebView)			
4	**Your Extensions**			