Aarhus universitet

Smartphone Applikationer

6. Semester

Fridge-i-nator

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Indhold

Figurer

1 App vision

Fridge-i-nator is an app that works together with you and your fridge. It will make it easier for you to make a shopping list and keep track of the items in your fridge especially if your share fridge with others. You can create an essential item list, which is items you never want to run out of. That way if the item comes under a minimum quantity Fridge-i-nator will automatically add that item to your shopping list. Fridge-i-nator will minimize the risk of you forgetting to buy items you need, and make sure you never have to check your fridge before going to the supermarket.

2 Personal visions

2.1 Mathias Friss

While building the app, i wish to become better at designing system architecture, with well defined segregation of layers. I wish to create an app with clear seperation between UI and back-end. Furthermore i wish to learn more about using fragments in android.
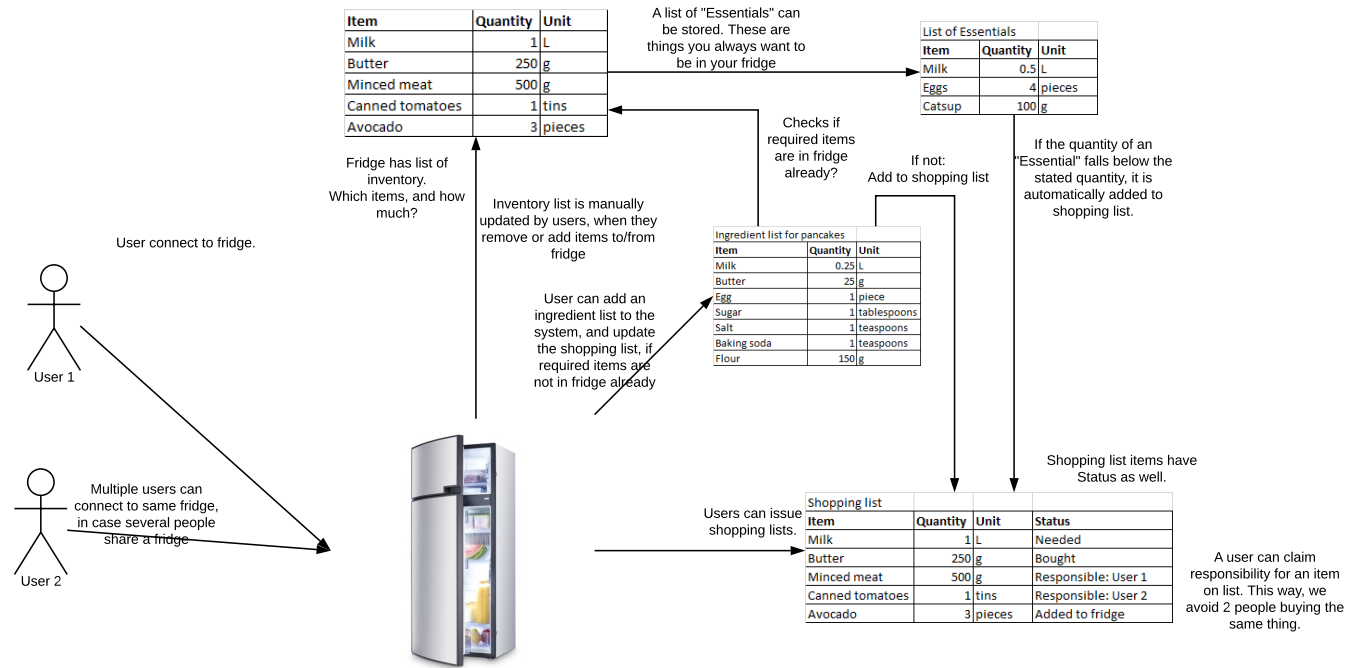
2.2 Stinus Skovgaard

I wish to become a firebase god!

2.3 Philip Schmidt

2.4 Daniel Tøttrup

3 Rich picture

Below is a rich picture which shows how the Fridge-i-nator app works.

Inventory table:

Item	Quantity	Unit
Milk	1	L
Butter	250	g
Minced meat	500	g
Canned tomatoes	1	tins
Avocado	3	pieces

A list of "Essentials" can be stored. These are things you always want to be in your fridge

List of Essentials

Item	Quantity	Unit
Milk	0.5	L
Eggs	4	pieces
Catsup	100	g

Fridge has list of inventory. Which items, and how much?

Inventory list is manually updated by users, when they remove or add items to/from fridge

Checks if required items are in fridge already?

If not: Add to shopping list

If the quantity of an "Essential" falls below the stated quantity, it is automatically added to shopping list.

User connect to fridge.

User 1

Ingredient list for pancakes

Item	Quantity	Unit
Milk	0.25	L
Butter	25	g
Egg	1	piece
Sugar	1	tablespoons
Salt	1	teaspoons
Baking soda	1	teaspoons
Flour	150	g

User can add an ingredient list to the system, and update the shopping list, if required items are not in fridge already

Multiple users can connect to same fridge, in case several people share a fridge

User 2

Shopping list items have Status as well.

Users can issue shopping lists.

Shopping list

Item	Quantity	Unit	Status
Milk	1	L	Needed
Butter	250	g	Bought
Minced meat	500	g	Responsible: User 1
Canned tomatoes	1	tins	Responsible: User 2
Avocado	3	pieces	Added to fridge

A user can claim responsibility for an item on list. This way, we avoid 2 people buying the same thing.

Figur 1: Rich picture of Fridge-i-nator

4 User stories

CONNECTION
As a user, I can connect to a create a new fridge, so that i can acces connect to it.

As a user, I can connect to a fridge, so that I can access information about it.

As a user, I can add other people to a fridge I am connected to, so that they can access information about it.

As a user, I can leave a fridge, so that I cannot acces information about it anymore.

INVENTORY As a user, I can acces an inventory list of items which the fridges contain, so all users connected to the fridge can keep track of what is in the fridge.

As a user, I can add items to the inventory list, so that all connected users may know that the item is in the fridge.

SHOPPING LIST As a user, I can acces a shopping list of items, so all users connected to the fridge can keep track of what needs to be bought for the fridge.

As a user, I can add items to the shopping list, so that all connected users may know that the item needs to be bought.

ESSENTIALS LIST As a user, I can acces a list of essential items with a minimum quantity of each item, so when the quantity of at specific item comes below the minimum quantity fridge-i-nator automatically adds the item to the shopping list.
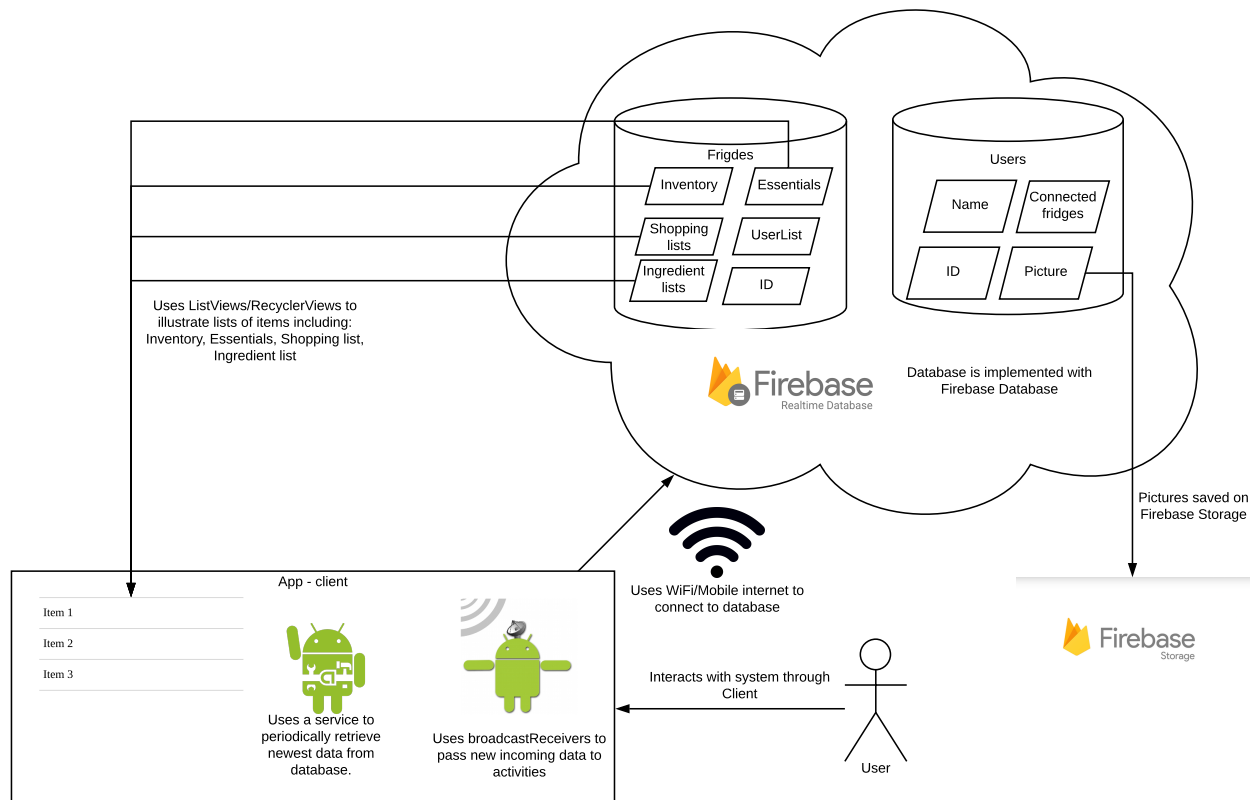
As a user, I can add items to the lsit of essential items, so that all the system automatically will add the item to the shopping list, if the quantity of the item falls below a specifiec quantity.

INGREDIENT LIST As a user, I can add an ingredient list of items, so that the system will add missing items to the shopping list.

USING THE SHOPPIN/INVENTORY LIST As a user, I can claim responsibility of an item on the shopping list, so that other useres will be notified about who has taken responsibility of the given item to avoid double shopping.

As a user, I can move an item from the shopping list to the inventory list, so that all users connected to the fridge will know that the item has been bought.

5   Early design

Figur 2: Early design diagram of Fridge-i-nator

6   Risks

- Not able to deliver a working app at deadline
- Working with firebase without any prior experience