

Submitted by Group 18

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DIS1 WS 19/20 - Project Milestone II  
Ideation - Phase I

# 1 The Problem #1: Shopping for Kitchen

**Problem Statement:** People spending too much time deciding on what to buy for their refrigerators & what to cook using the ingredients in the said refrigerator. Moreover, they get frustrated or bored because they spend so much time & got a little gain from their spent time and effort.

(go to the next page for the solutions)

## 1.1 Possible Six Solutions

### 1.1.1 Solution #1

#### Definition:

Informative screen in supermarkets that can be used for searching items with certain ingredients.

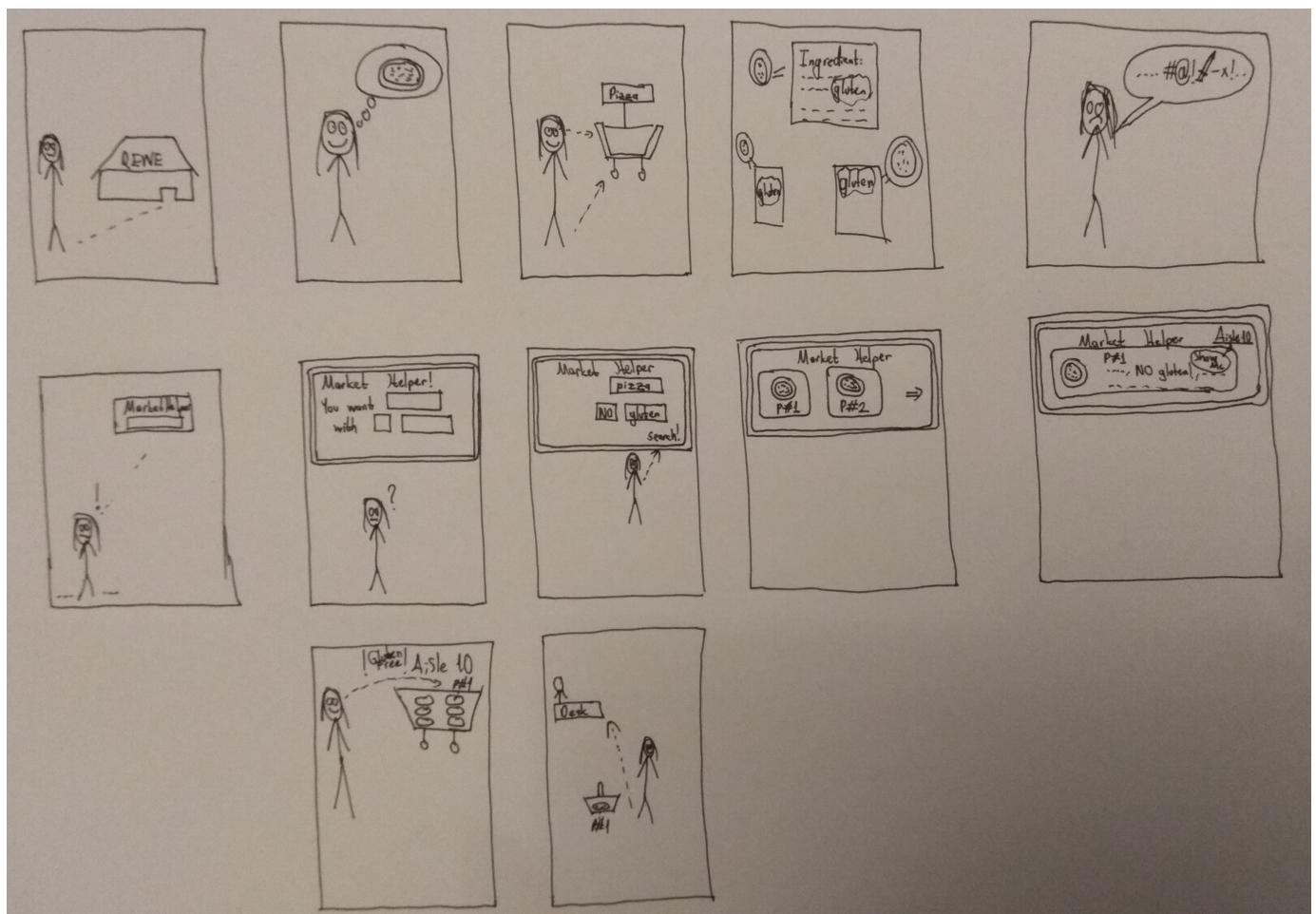
#### Use Case:

The persona *Helga Ratt* has a condition preventing her from eating gluten, and she cannot easily eat out as cheap places do not offer information about all the contents of a food, so she has to buy her products. If she wants to try something new that she did not eat before, she has to check the ingredients and read all the notifications on a packaging in order to see whether she can consume; and she dreads this as she lusts for some products but the time required is comparably abysmal to the pleasure of that food would bring.

Market Helper! comes into play here. She can search for ‘Pizza’ which contains ‘NO’ amount of ‘gluten’, and Market Helper! would inform her about the whereabouts of the products that fits the criteria, saving Frau Ratt time. The screens can be installed to the supermarkets in couples, as each user would assumably take 5 minutes on the screen at most.

The fun side of the MarketHelper! is that, via an optional VR glass, while traversing to grab the one pizza she wants to buy, she can smash other options of the said product(pizza) via a virtual mace in augmented reality, and she would be points that can be spent on the same brand of the pizza next time she wents shopping.

#### Storyboard:



## 1.1.2 Solution #2

### Definition:

shopping assistants for supermarkets, which is placed on the handle of a shopping cart in the form of a smart tablet

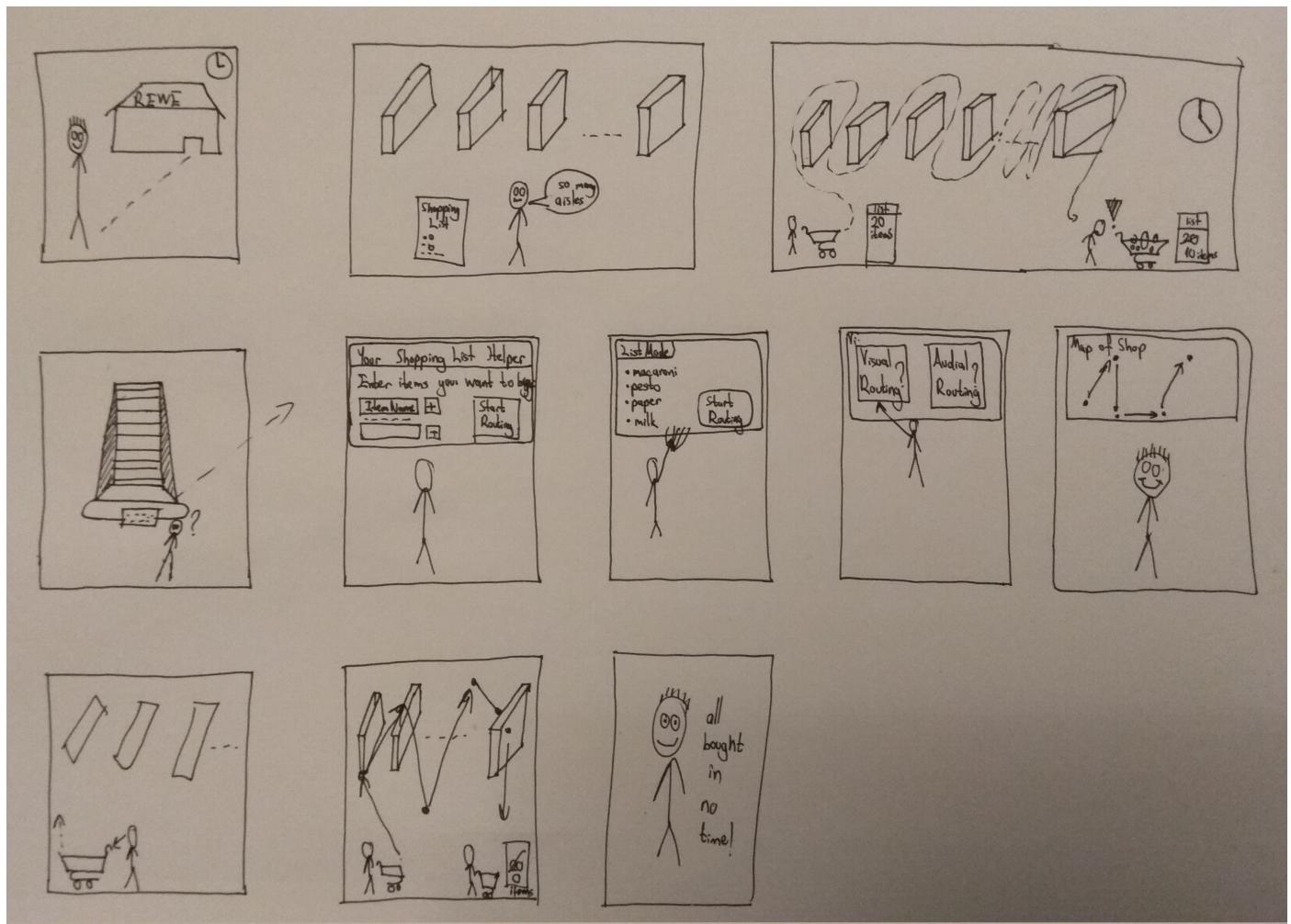
### Use Case:

Fulfilling a complete shopping list takes time, especially if users are not so aware of the layout a specific supermarket and whereabouts of the products that are needed. Asking to the employees not always help, as they are not always around or they just verbally inform once.

Shopping List Helper! comes into play here. One can create a shopping list on the said tablet on the spot, or one can synchronize their shopping list at their phone via NFC. Then, SLH would lead the user via the shortest path either using a map of the supermarket together with the marker for the user, or via audial cues that are continuously feeded to the headphones of the user.

The fun side of Shopping List Helper! is that the tablet screen involves a mascot that provides a countdown to the user, in the form of a time range (e.g. 10 minutes - 12 minutes) based on the products and the shortest path. If user manages to finish putting all the desired products in the cart and finally make the purchase, the user would be awarded with a small percentage of his purchase.

### Storyboard:



### 1.1.3 Solution #3

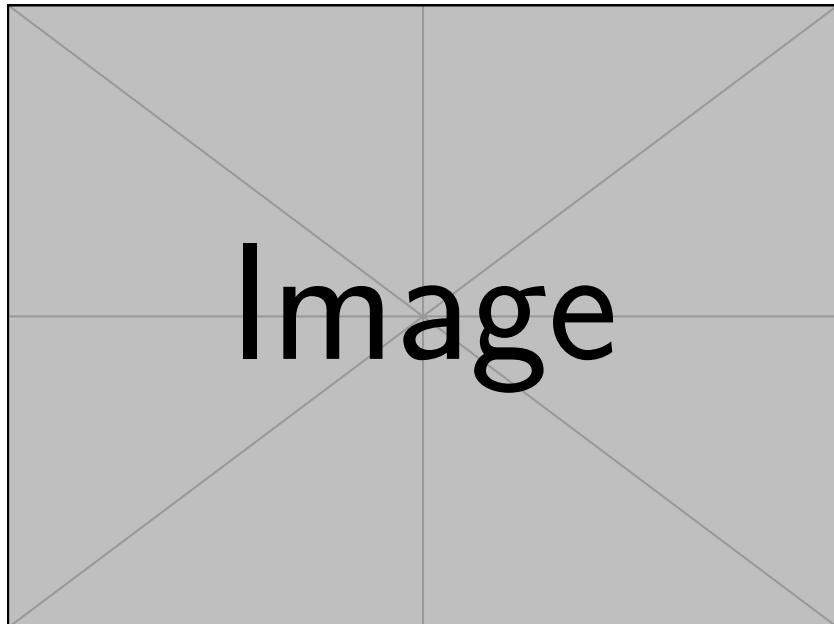
#### Definition:

Meals presentation in supermarkets - user can try dish and after deciding on specific meal can take a bag with all ingredients needed to prepare the dish and go straight to the cash.

#### Use Case:

The persona "Mother" always would like to prepare healthy food for her kids. She can't imagine buying fast food or already prepared dishes (put to microwave for 3 min). Once she enters to the supermarket, with our solution she will be able to get inspiration what to cook, she can try different dishes. After decision what to cook, she doesn't have to even look for ingredients, she can just take bag with all needs for specific meal.

#### Storyboard:



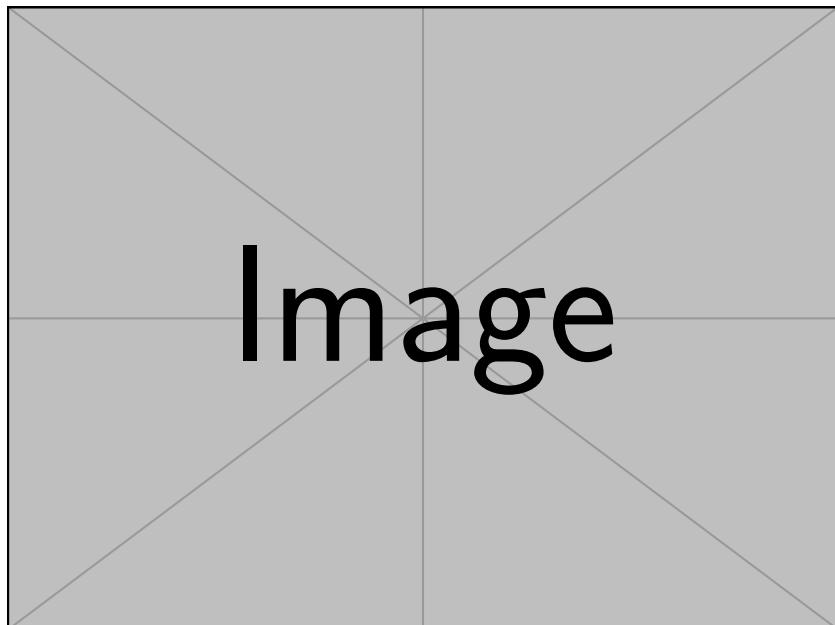
### 1.1.4 Solution #4

#### Definition:

Tablet display on refrigerator, that simply shows what ingredients do you have in the kitchen. Like self-service check-out in the market. You can simply increase number ingredient or decrease. Then once you are in supermarket, you can get notification what ingredients you have in the kitchen.

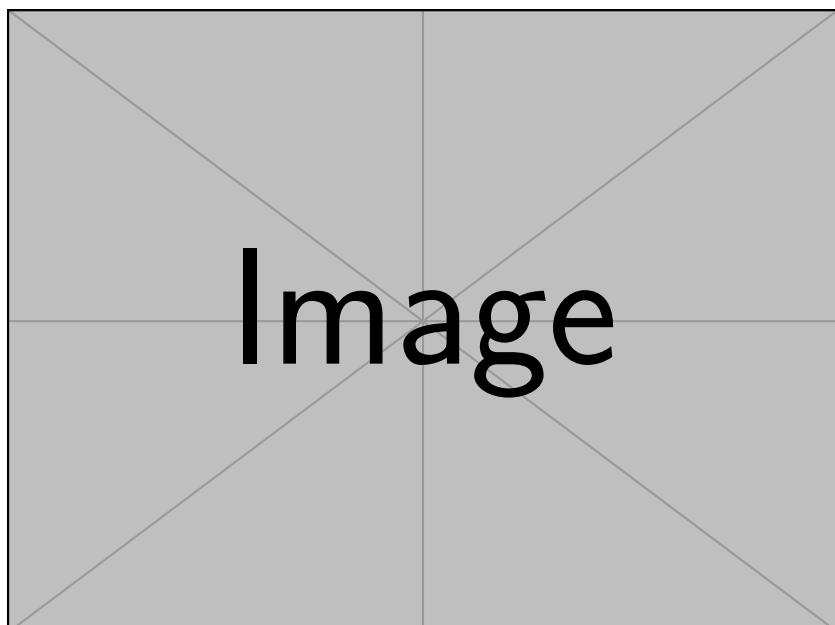
#### Use Case:

#### Storyboard:



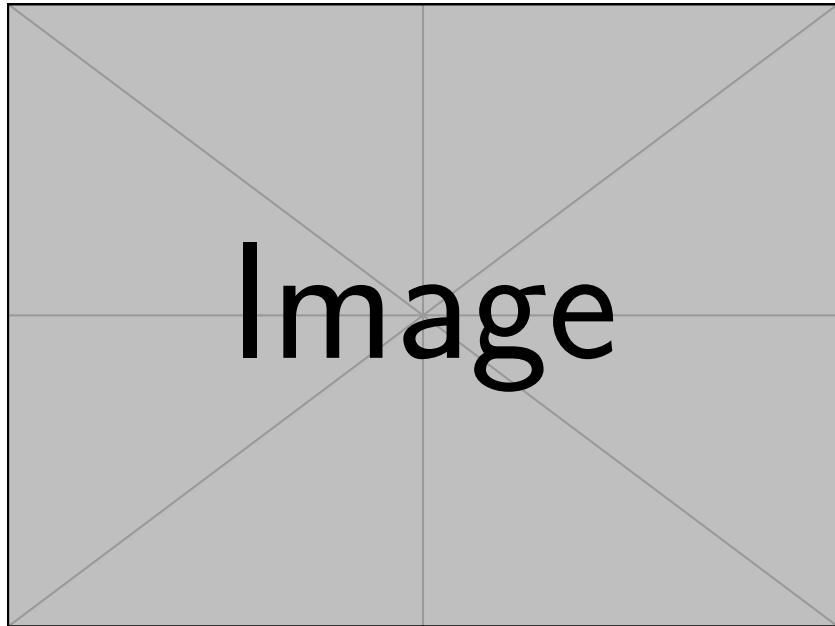
#### 1.1.5 Solution #5

Storyboard:



#### 1.1.6 Solution #6

Storyboard:



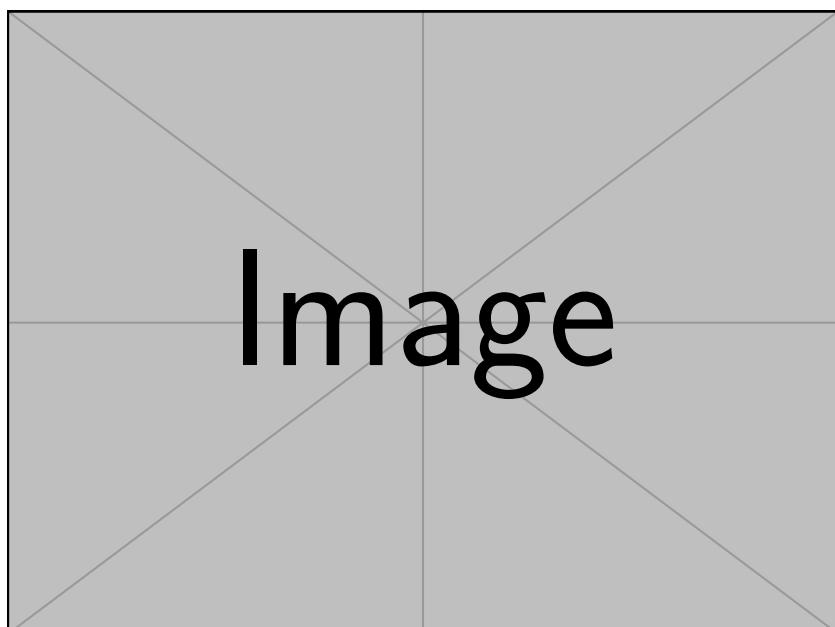
## 1.2 Six Storyboards

does not have to be in this order

## 1.3 Concept Map, Brainstorming Notes, Votes

have to include all the solutions

Concept Map:



## 1.4 Personas

### 1.4.1 Persona #1: Picky Eater Helga

Our extreme persona

**Demographics:**

35, female, single  
of Swedish and Canadian origin from the parents  
has M.Sc. in Gender Studies  
works in a Social Services in leading position, 40 hours/week  
novice user of technology  
has a condition which prohibits her from eating certain foods

**Background:**

Helga grew up in a poor household, and suffered the lack of money during her childhood. This led her to pick her profession where she can provide a helping hand to people in need. Outside her work, she spends her time reading books about mythology, and watching documentaries on various topics. She is an avid exerciser, and at her worst, she would go for a brisk walk for 2 hours.

**Frustrations:** not spending her time qualitatively  
not having trips abroad to observe other cultures  
having to keep working in a job that is taxing soul-wise

### 1.4.2 Persona #2: Mother

**Demographics:**

Sarah Johnson  
female  
age: 40  
graduated university in Germany  
married  
mother of three kids  
work from 9am to 5pm  
living with husband and kids in rented house  
annual household income: 50 000 euro

**Background:**

Sarah was born and grown in Germany. She was living with parents in small countryside in the middle Germany. She he moved out from parents house when she was 18. Then Sarah moved to Frankfurt, where she started studing. She met there her current husband. After graduation, while looking for the jobs they moved to Aachen.

**Behavior:**

Sarah is very busy housewife and mother  
she love spend time with her husband and kids at home  
once a year she's going for holidays with her family  
she always forget things to do after, 8 hours of work. She doesn't like buying grocery products

**Frustrations:**

She is frustrated when she has to stay after hours at work. Sarah prefer to have less stressful work, even when earning less

**Goals:**

Sarah would like to spent as much time with her kids and husband at home

### 1.4.3 Persona #3: David

**Background:**

20, male  
undergraduate student of RWTH  
studies Machine Engineering single  
heavy study workload(40+hours per week)

**Motivation:**

travel and experience other cultures  
healthy lifestyle(both regular daily routine and diet)  
coffee lover  
play video games  
hang out with a small group of friends at quiet coffee shops

**Frustrations:**

going out to bars at night  
not enough free time for gaming  
looks and fashion

David loves technical things. He is an advanced user of mobile and desktop devices and social media. He goes to supermarket once a week because as a student at RWTH university he does not have much time. But he still takes short trips at some weekends.

**Quote from David:**

"I wish I can combine work and travel in the future!"