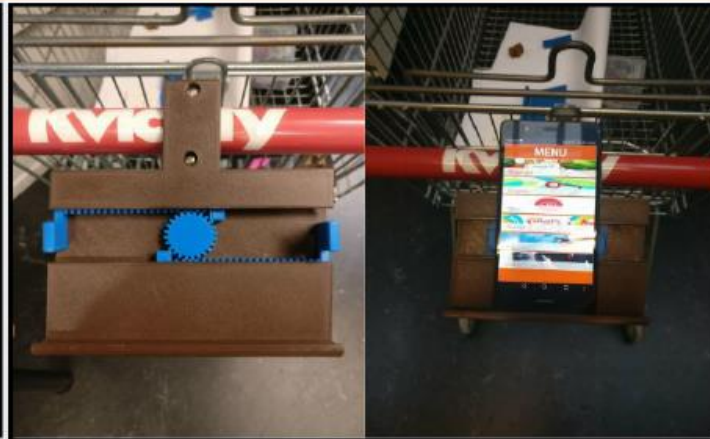
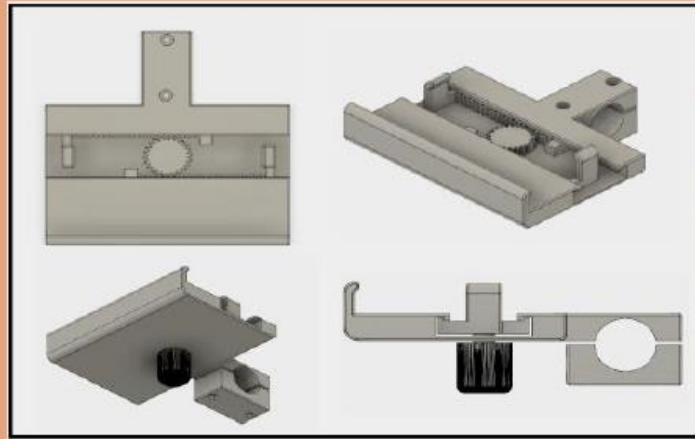


# Prototyping

# Mount



## FINAL VERSION



## INTRODUCTION

Time is a valuable asset and a lot of people are spending majority of their time shopping in supermarkets and DIY markets they do not know. This system gives the opportunity to save time and make shopping easier. By using your digital shopping partner application it is possible to navigate through the market by adding items to the shopping list incorporated in the application along with other features. Furthermore, this systems creates a valuable marketing platform for the shops allowing to push relevant offers to specific customers.

### Features

- Barcode scanner
- QR scanner
- Product scanner
- Navigation
- Shopping list
- Offers
- Whats HOT

## METHODS

This system was developed with the use of various design and innovation methods. Every process was approached theoretical, making it possible to develop the finished product. The entire process was broken down into three phases; research, planning and development. The methods used in the three different phases is displayed in the methods figure.

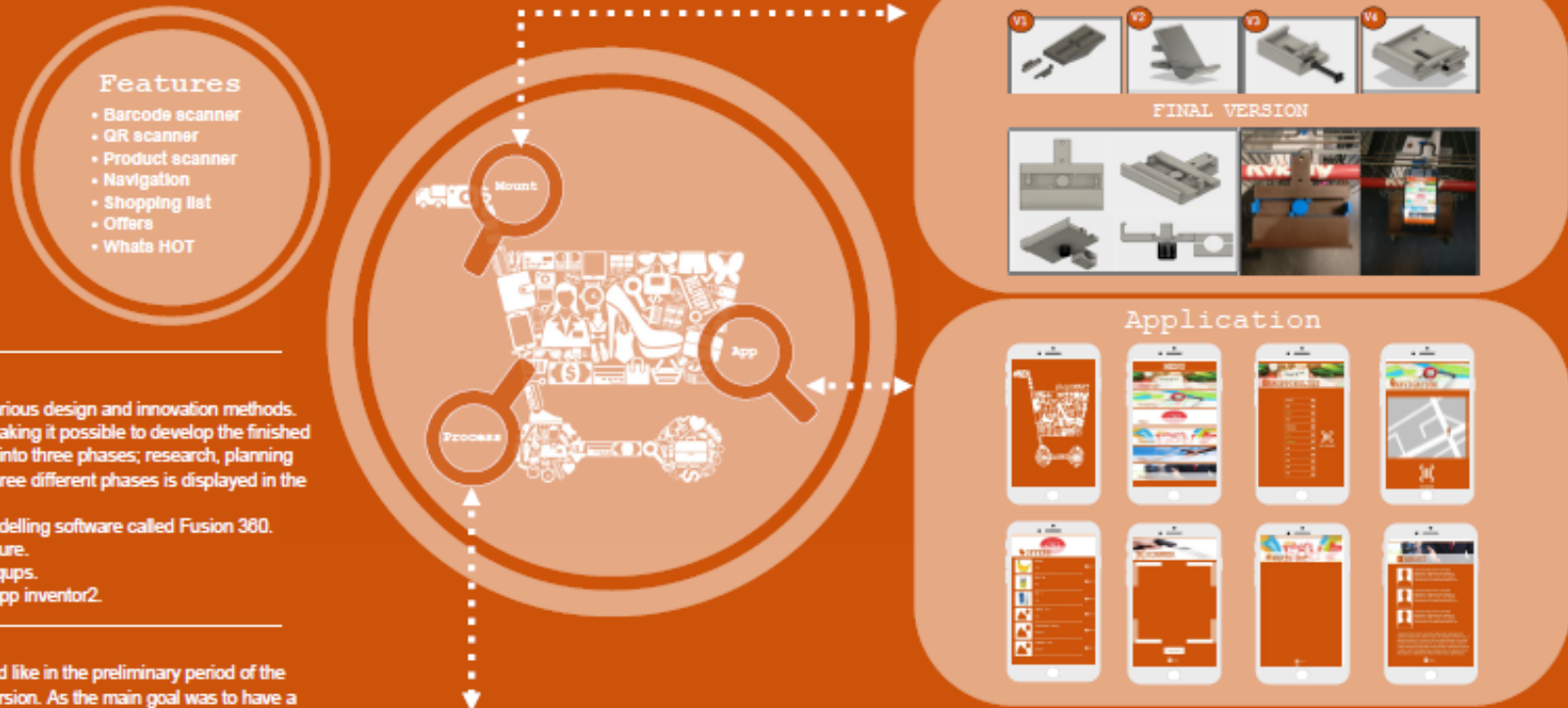
The phone mount was created using a 3D modelling software called Fusion 360. The database is built on a LAMP server structure. The application design was created using Moqups. The application itself was created using MIT app inventor2.

## RESULTS

The mount figure shows how the mount looked like in the preliminary period of the project and the evolution until the definitive version. As the main goal was to have a secure and a universal mount that everyone can use, gradual changes were made with each form. After some testing, the V5 mount met the requirements. The application figure shows different layers and the design of the application. The customer is able to add their shopping list, use the barcode scanner to add their products and see the best deals offered by the respective supermarket. The app can connect to the database with a script that has the connection details.

## DISCUSSION

To sum up, there is a working phone application that can work together with the database that was created to receive data such as (cost, location, name), and a phone mount for the shopping cart that tightly secures the device. The system has much room for further development. In house mapping is a huge part of the system itself and can possibly be done by using bluetooth modules. In this study there was not enough time to look further into that. Furthermore, the security of the integrated system should be assessed more in the future projects. For this application to function, each store needs a dedicated server, where the system is integrated to. This allows the created script to connect to the product database and thus showing the required data when scanning in the QR code. The application for the finished system also needs to send information about what the different customers are buying, so that the stores marketing can be targeted to specific customers.



METHODS			PRODUCT BACKLOG		
RESEARCH	PLANNING	DEVELOPMENT	As a customer I'm always bored when shopping.	As a customer, I think its hard to find my desired product from the supermarket.	As a manager, I want my customers to be happy and to revisit my shop in the future.
BRAINSTORMING	FRAME INSIGHTS	TRANSLATE RESEARCH INTO DESIGN	As a customer, I do not want to stand in long lines.	As a customer, I would like to know what my product contains.	As a manager I want to know which products are the most popular besides the 'normal stuff'.
POPULAR MEDIA RESEARCH	CONCEPT PROTOTYPE	MOCK UPS	As a customer I would like customized offers from supermarkets, so I can get exactly what I want.		As a manager I would like to know that people goes by the offers they have on that day.
REMOTE RESEARCH	PRODUCT BACKLOG	UX INTERFACE INTERACTION	As a customer I would like to save time when shopping, so I can spend my time on something else like family or work.		As a store manager, I would like a proper and up to date mapping of the products in the store.
6 THINKING HATS	SPRINT PLANNING	SPRINTS	As a customer, I find it annoying when I have to wait for the cashier to find a new product if mine is bad.		As a store manager, I want all of the systems in the store to be integrated.
THEORY U		RETROSPECTIVE MEETING			
RESEARCH PLANNING SURVEY		PRODUCT BACKLOG REFINEMENT			
SWOT ANALYSIS		PROTOTYPING			

## **KOMPETENCEMÅL**

Styrke evnen til kvalificering af ideer, idevisualisering og præsentation af ideer gennem tilegnet viden og færdigheder indenfor:

- Prototyping og iterative processer
- Metoder og værktøjer til visualisering af idéer
- Metoder til evaluering af prototyper

## **INDHOLD**

4 moduler a' 4 timer med forberedelse mellem hvert modul.

TEMA 1: Prototyping

TEMA 2: DIGITALE VÆRKTØJER

TEMA 3: 3D MODELLERING & PRINT

TEMA 4: PRÆSENTATION

## **ANBEFALING**

- Co-curriculært eller Ekstra-curriculært + Adgang til faciliteter.