

# HIVE: Feedback system for kids in museum

## What?

To design a feedback system for children in museum. It was named HIVE (Hybrid Integrated VoxBox Engine).

## Contributions

Stakeholder interviews

Observations

Literature study

Sketch

Brainstorming and ideation

Project development

Design principles

Ergonomic

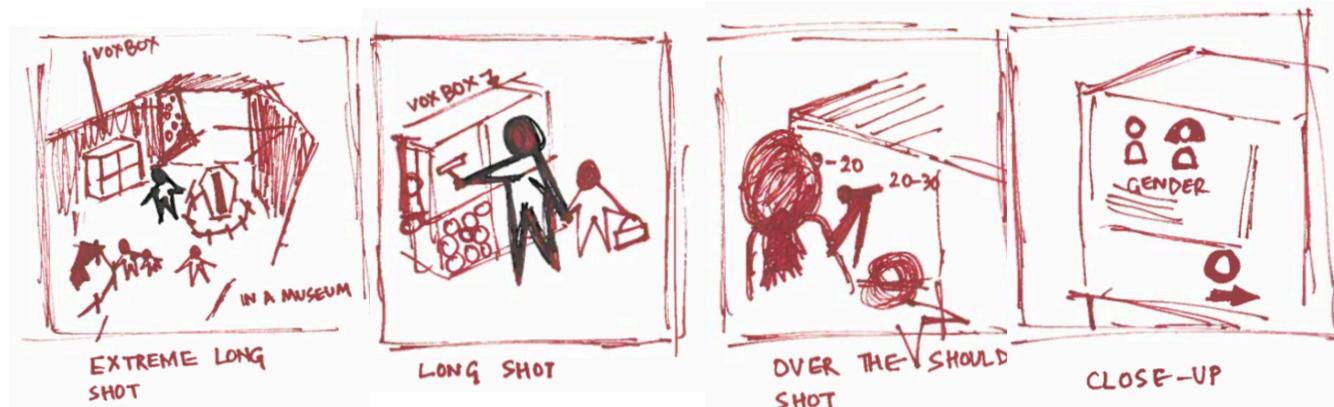
Prototyping

Usability evaluation

3D model

## Why?

Children are an important section of museum visitor. Curators often find it difficult to design for children due to lack of constructive feedback.



Project under:

# Process

Small kids spaces	leid playing with touch screen - didn't get interface too crowded.	kids playing with touch screen. didn't get, interface too crowded
She put hand	don't see many kids in 3D print and technology now.	don't see many kids in "3D print" and "technology now" section
Talking about spaceships Just pressing the interface Not interested in the content.	Small kids spaces → too advanced My ① girl 5-6. all kind of sp. patterns looks very confusing She put hand ignored ran away	too advanced All kind of age, patterns looks very confusing ignored ran away
	Talking about spaceship just press the interface not interested in the content. They have 3D glass they are wearing & enjoying opening it.	They have 3D glass, they are wearing & enjoying opening it.

Observation notes from the museum visit

## secondary research

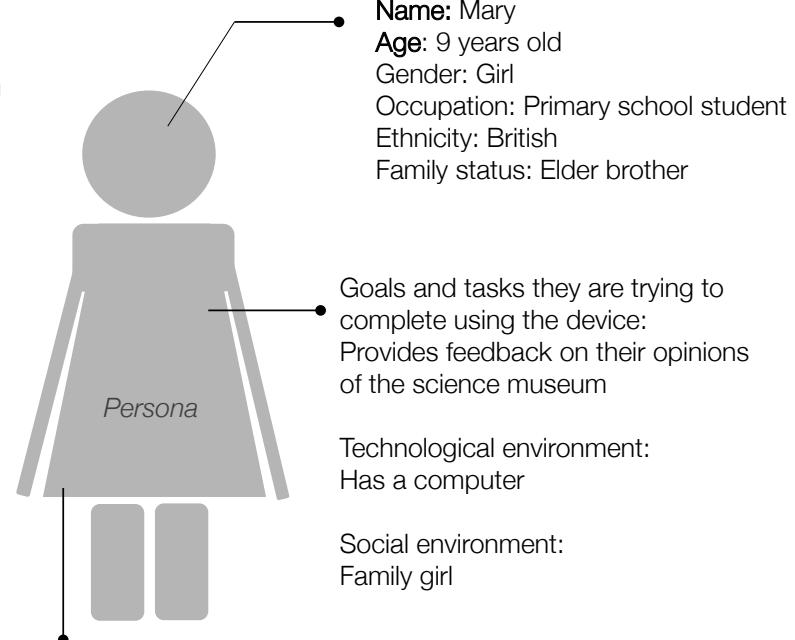
For additional understanding about the user group **literature study** was carried out. We found out that 7-10 age is the most curious group, hence our target users<sup>1</sup>.

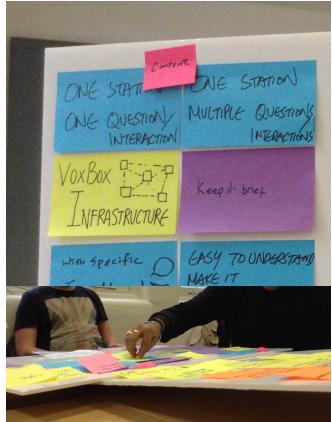
Based on research persona was created for the brainstorming session.

1. A. Bruckman, A. Bandlow, and A. Forte. HCI for kids, 2002.

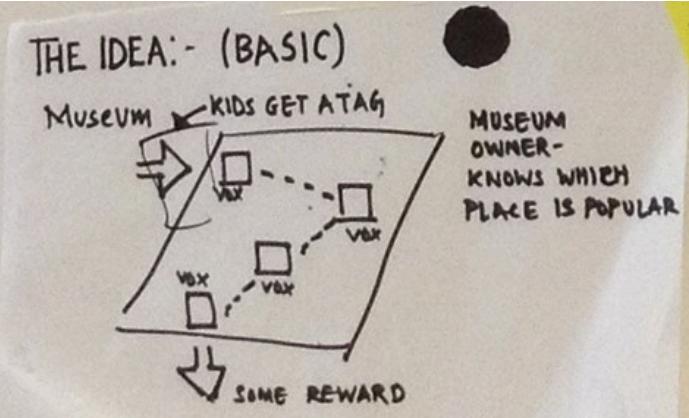
## primary research

**Observation** was carried out in the science museum to understand PACT (people, activity, context and technology) and how kids interact with the various things in the museum. It was facilitated by **unstructured interviews** with the staff and teachers.





Brainstorming



My idea of distributed boxes along with a RFID tag for identification

## user requirements

We visited five different museums around London to **interview** the curator and teachers. We tried to understand how the curators collect data and what kind of data would be useful for them. Whereas from teachers we were interested in knowing about their approach of collecting feedback from the children's. The hypothesis were proven right.

## brainstorming sessions

The data gathered from the research and the persona helped us during the **brainstorm and ideation** process. Each member came up with multiple ideas. We created hypothesis based on the ideas and decided to do semi-structured interview in the next museum visit along with observation.

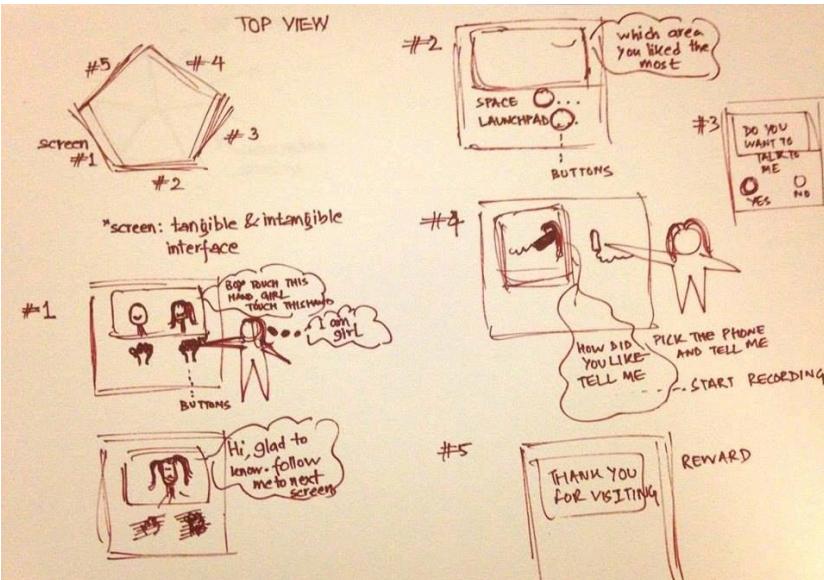


Children interaction in the science museum



## final design

Our final design was a hexagonal feedback box. This kind of design would be easy for movement, support multiple users at a single time, simplified and playful.

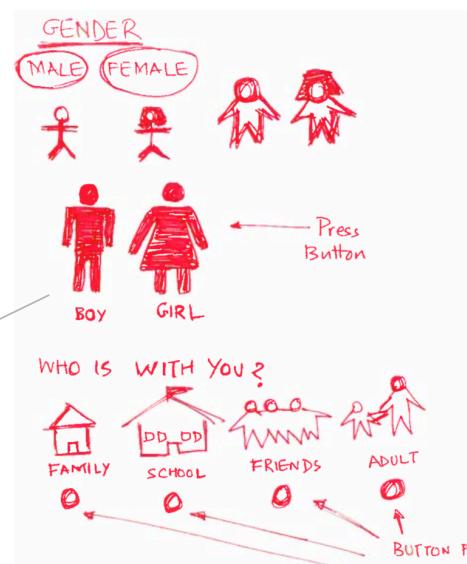


Storyboard of the final idea

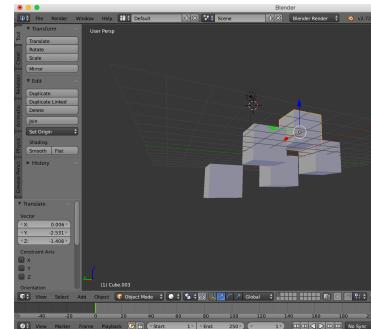
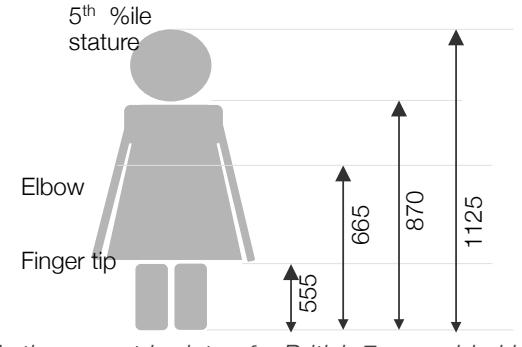
## user interfaces

There are 5 interfaces that would collect various data. **Design principle** such as **affordance** and **cultural stereotypes** are used heavily along with ergonomic recommendation.

Example of cultural stereotypes could be seen in the icon which is similar to toilets in schools.



Sketches of the interfaces



3D model development



*Development of the lo-fi prototype*

## prototyping

After sketches, storyboard and mockups, we built the **lo-fi prototype** of HIVE.

## evaluation

Due to time constraints and limited user access, **usability evaluation** was carried among the team members with multiple scenarios.

## conclusion

We were successful in designing the system along the lines of the problem statement and with limited time and resources. This project helped me develop additional skills such as time management, project management, team work and presentation skills.

### Project under:

# Usability evaluation of Yammer website

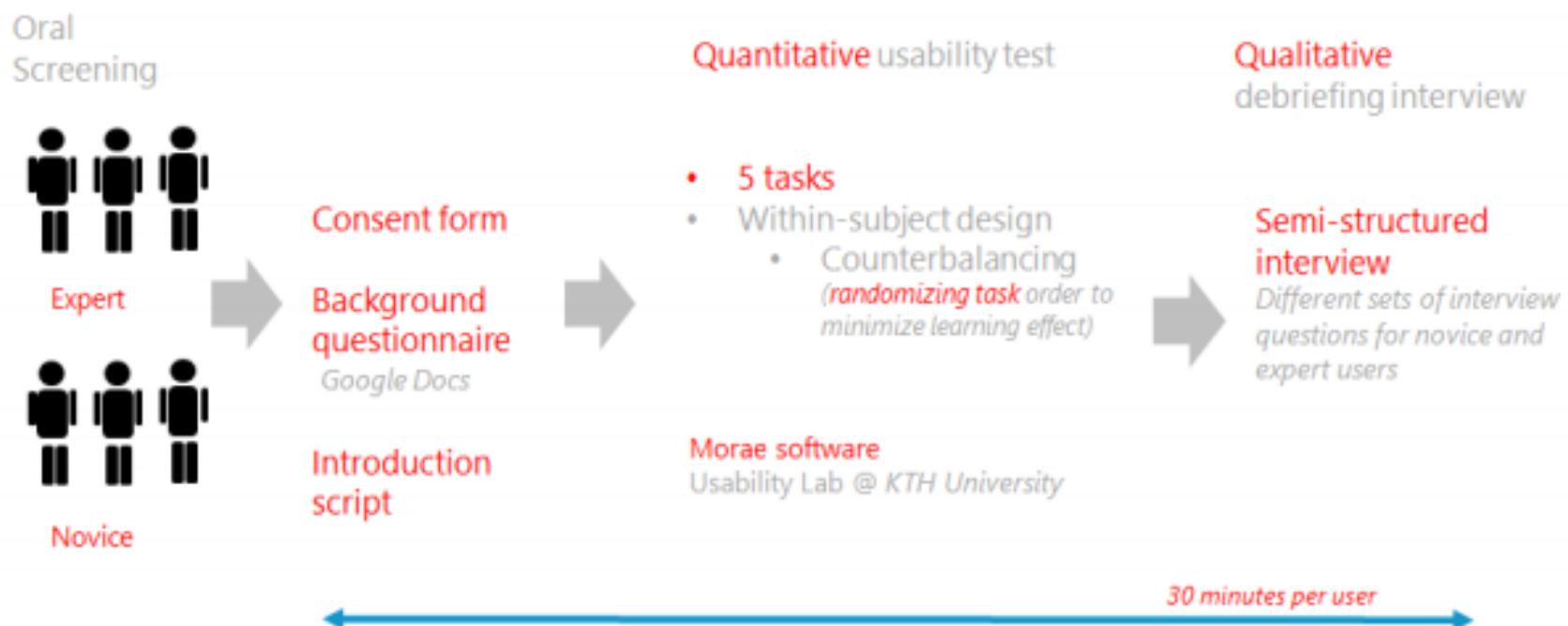
## What?

Yammer is a enterprise social network.  
Our task was to evaluate this website  
and to suggest improvements.

## Why?

As a part of my organization we were bound  
to use this network to get the important  
information. But it was not user friendly.

## How?



# Usability evaluation of Yammer website (cont.)

## Conclusion

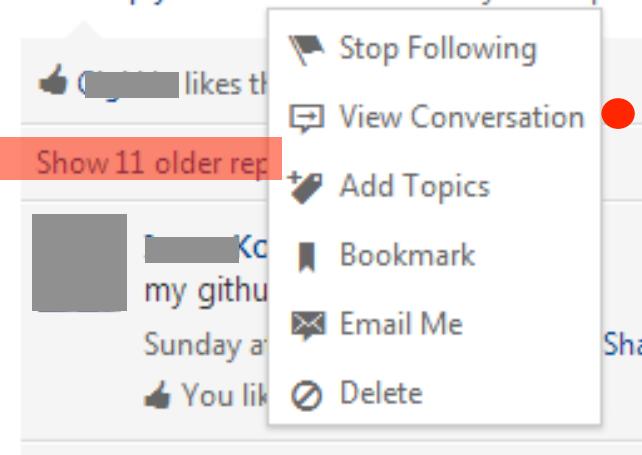
We came up with the recommendations of relabeling, increasing visibility, avoiding creeping featurism and reorganizing the information structure.

## Role in project

Experimental setup, Moderator and observer, Morae software operator, data analysis and data visualization

processing. <http://www.openni.org/openr>  
And create a github account. <https://github.com/>  
and please share your github username

Like · Reply · Share · More · Saturday at 8:17pm



*E.g. creeping featurism*

# Network service business game

## What?

This multi-player business simulation game places students into a variety of roles that explore the chaos and excitement of building an ecosystem. It is part of a Aalto University course. Successfully played every year by 100+ students in a period of 3 weeks.

## Why?

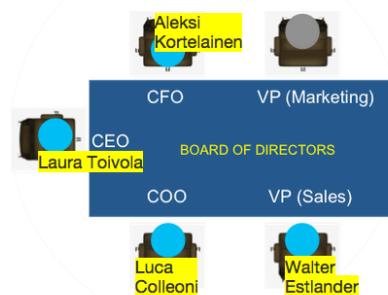
Learning through gaming have created a need to transform traditional business course into interactive games.

## Company details and administration

### Management



### Board members:



### Company summary

Current year	
Company type	Ground operations
Revenue generated last year (\$)	0
Profit earned last fiscal year (\$)	0
Total profit earned during game (\$)	0
Max Capacity	0
Launches made last year:	0
Owner:	Group 11

### Game status

Business Model Canvas status : Completed

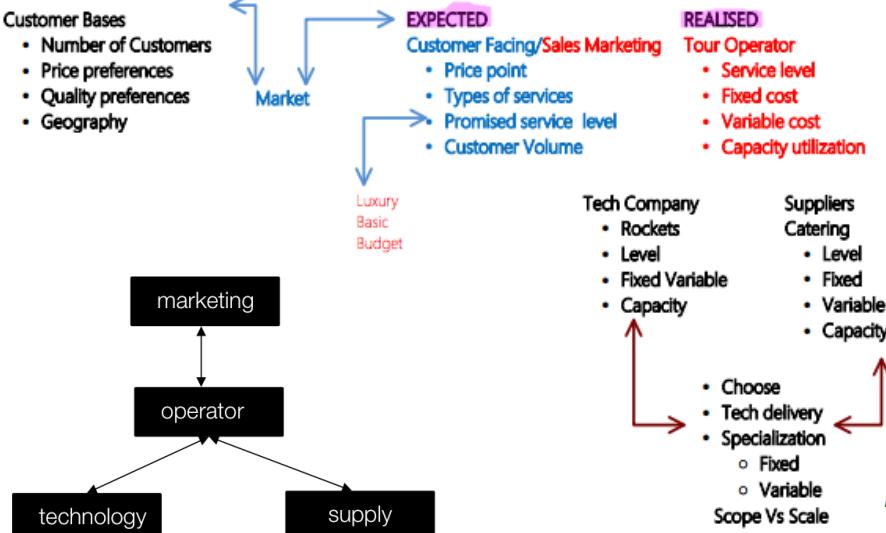
Name	BMC	Negotiation status
Laura Toivola	<input checked="" type="checkbox"/>	Buying from Quantum Quality Tuomas Laakso
Walter Estlander	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Aleksi Kortelainen	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Luca Colleoni	<input checked="" type="checkbox"/>	Buying from Galactus Ilari Immonen

# Network service business game (cont.)

## Conclusion

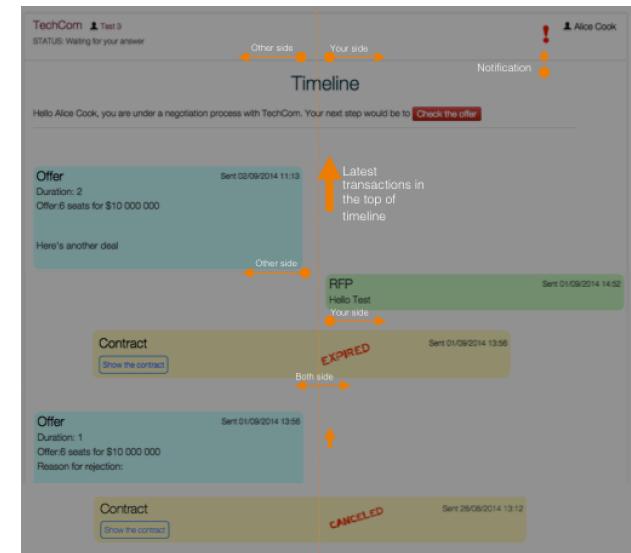
This game provided students with unique learning experience. The feedback was overwhelming and talks are going to launch it in universities across various business schools in Europe.

20 June 2012  
15:25



## Role in project

Information architect, front-end development, visual design, digital game guide



Information flow diagram

Sample screenshot of digital guide

Project under:



# Network service business game

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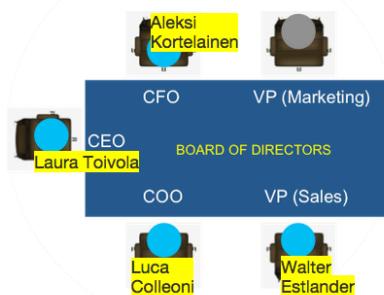
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# Packaging

## What?

Premium packaging for Nokia Lumia 800  
An ergonomically and aesthetically designed  
packaging for high-end mobile phone with  
sustainable material (UPM Grada) that can be  
reused as a charging dock.



## Why?

Make creative use of mobile  
packaging



Project under:

# Packaging

## Conclusion

The package was liked by the people. But during the process we found out that it has a high production costs. UPM grada material allows for infinite possibilities for creating a sustainable and premium package .

## Role in project

Sustainability, system thinking, technology and material understanding, user testing, origami

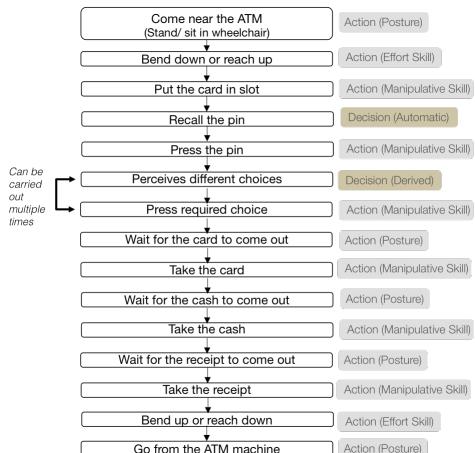


### Project under:

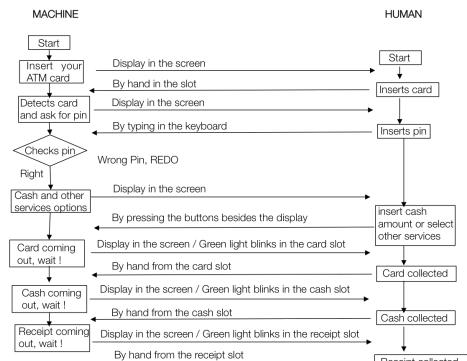
# Ergonomic recommendations for ATM design

## Responsibilities/skills

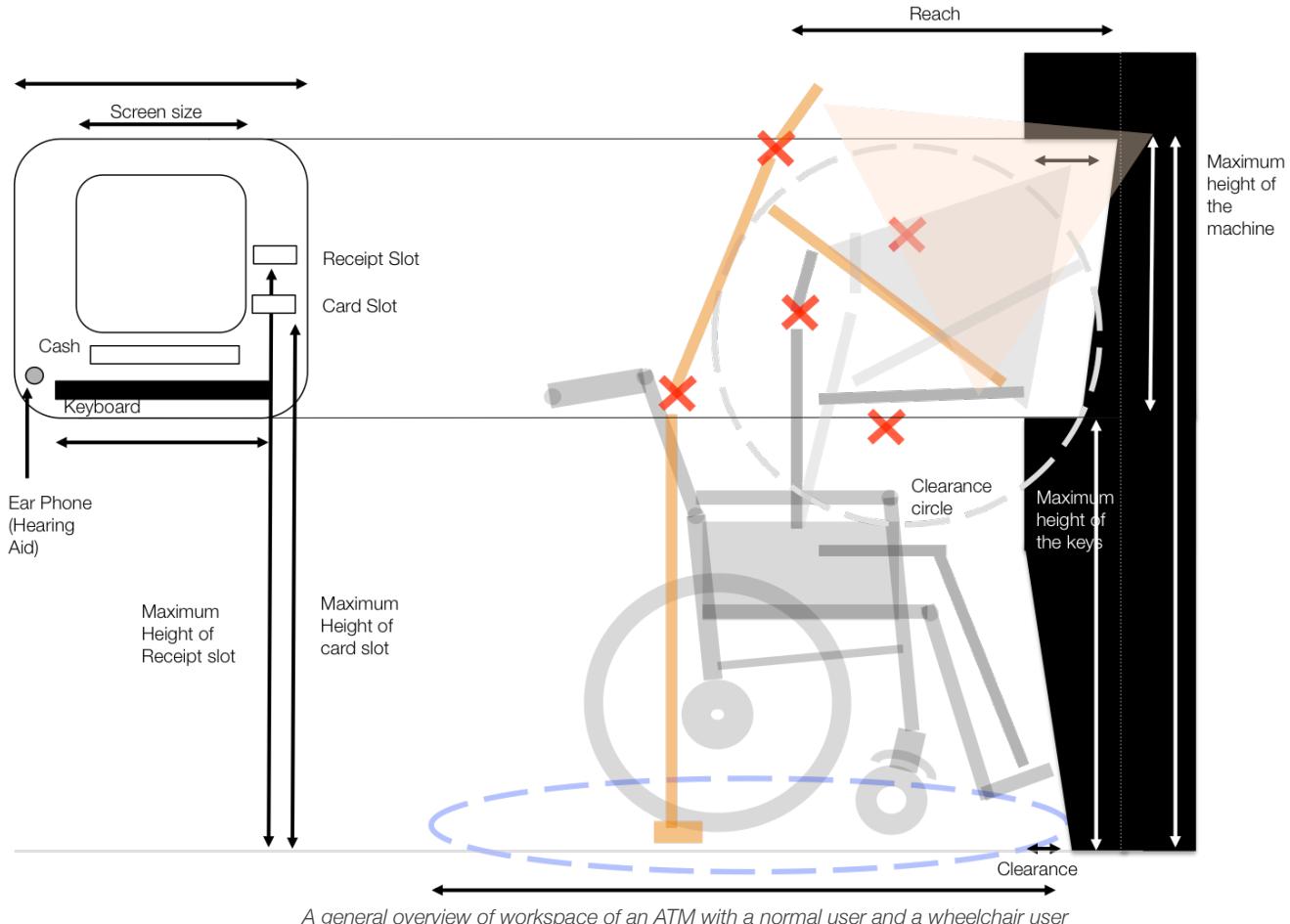
Workspace design, human-machine interface, Anthropometry, Ergonomics, British standards



Task description of withdrawing cash from ATM



Partial Operational sequence diagram of cash withdrawal from ATM



A general overview of workspace of an ATM with a normal user and a wheelchair user

Act as an ergonomic specialist as part of an individual coursework to provide ergonomic input on different spheres of an ATM design while considering people, activity, context and technology.

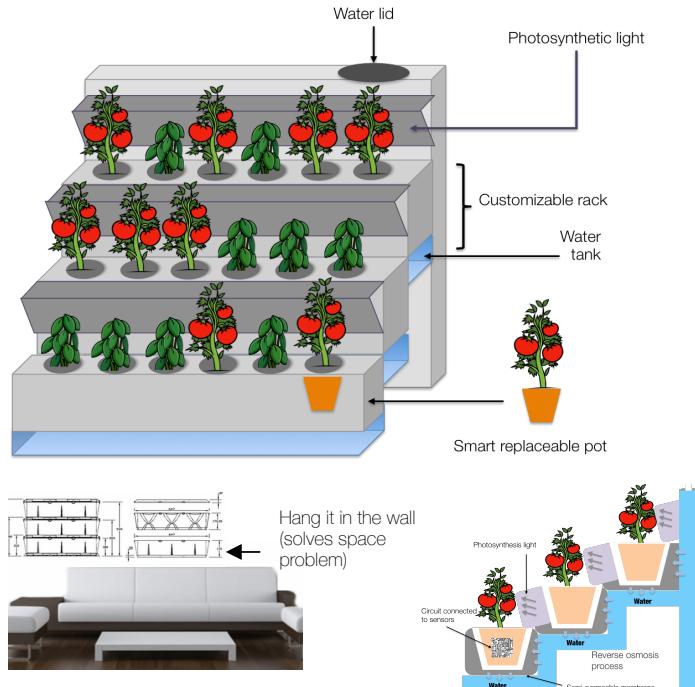
Project under:



# Greenrack: grow organic food hassle-free in your home

## Responsibilities/skills

Product design, business model, logo, lean startup methodology



CONCEPT



BUSINESS MODEL

An entrepreneurial idea to encourage organic indoor farming.

It tackles the problem of space, time, maintenance and motivation, by creating an innovative business model along with our product.

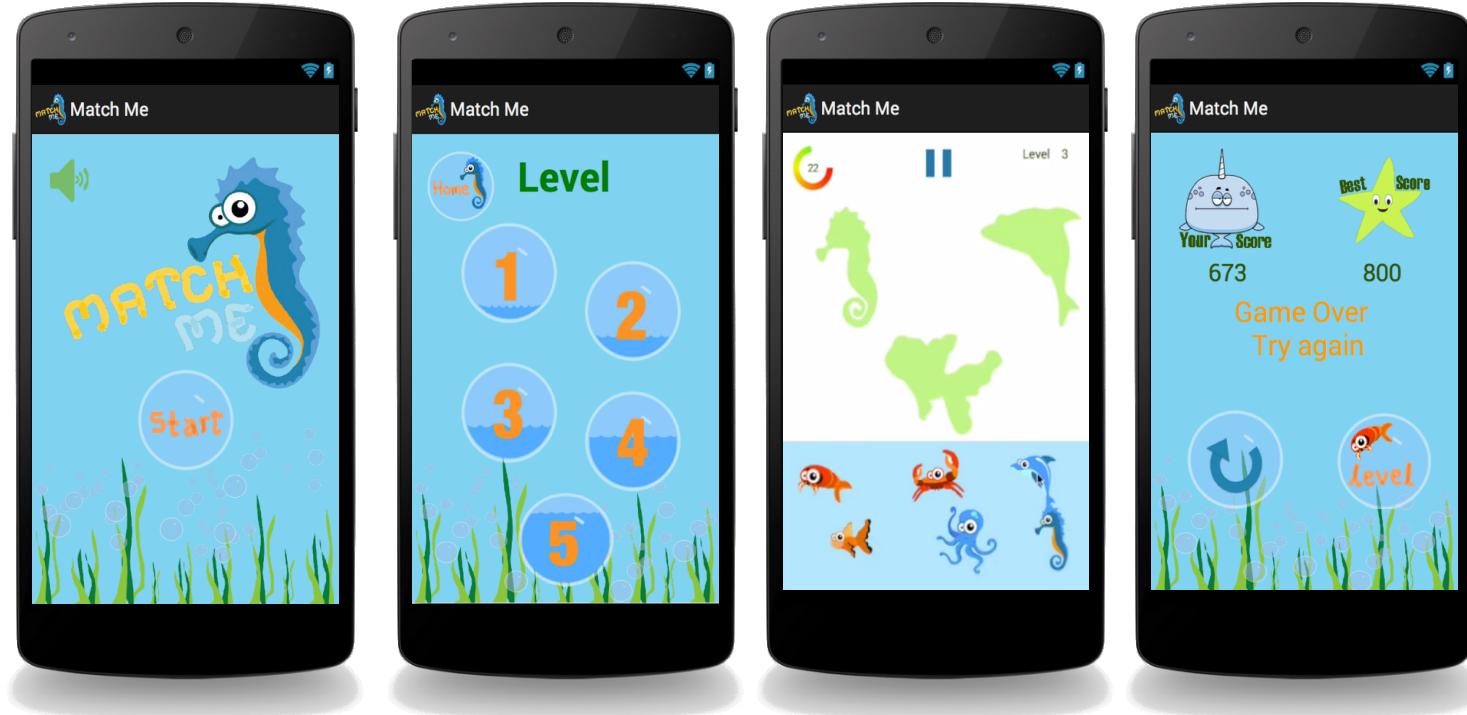
Project under:



# Match Me: interactive kids game

## Responsibilities/skills

Ethnographic studies, concept, User interface, logo design, front-end coding

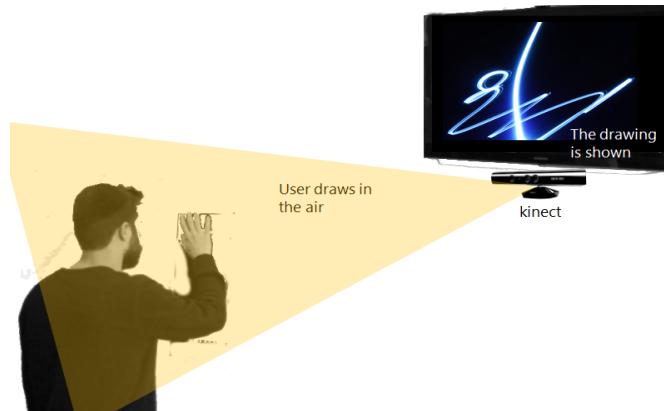
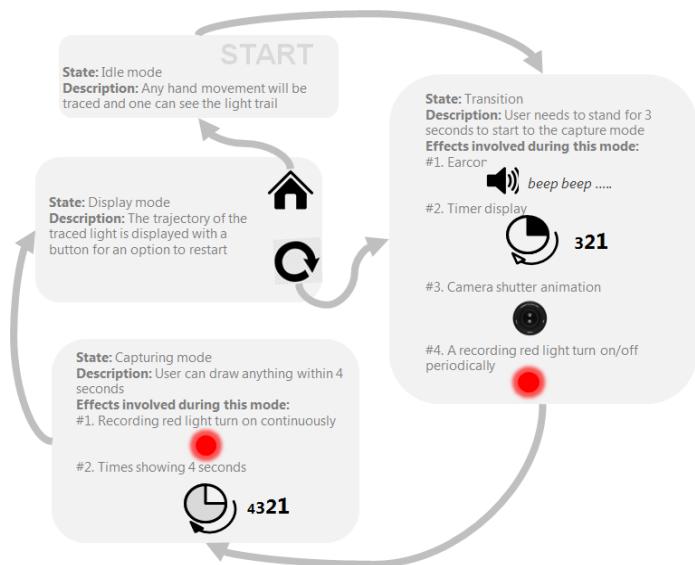


MatchMe is a game for kids between 3 to 7 years old in android platform  
Kids need to match the images to their corresponding shadows within 30 seconds to unlock the next level

# Kinect light painting

## Responsibilities/skills

Interaction, information architect, coding, evaluation



Simulate the effect of Light Painting with the aid of Microsoft Kinect

The aim was to resemble as best as possible features that can be met during photo capture, and imitate the effects of capturing light during long exposure settings. The project was developed in the Processing environment and was evaluated using participatory observation method.

Project under:



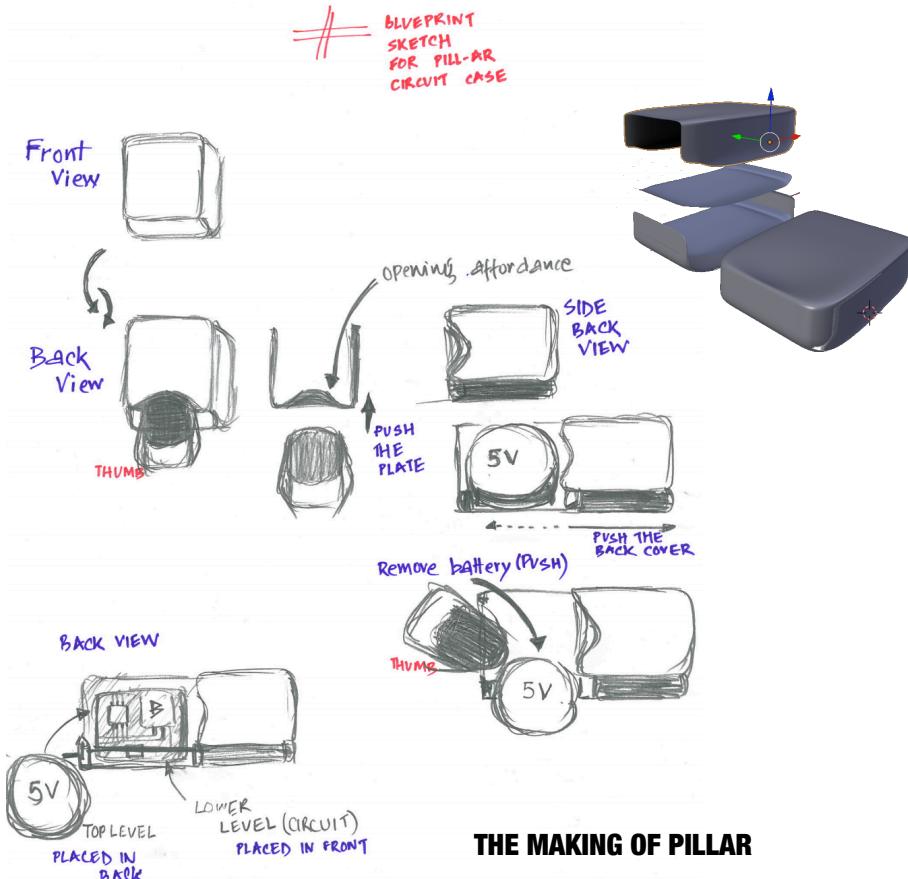
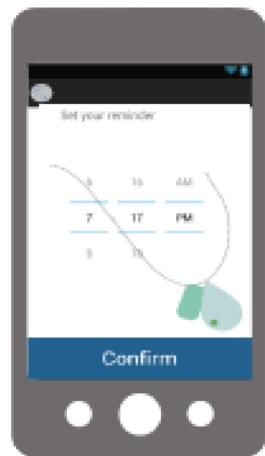
# Pillar: wearable medication reminder

## Responsibilities/skills

Product design, User interviews, front-end android developer, 3D rendering, sketching and concept



**PRODUCT**



Pillar is a wearable tech that acts as a storage and reminder for your daily medication. We developed series of accessories both for men and women (as necklace or bracelet) that easily allow you to set the reminder through a mobile device and can carry up to three pills

**Project under:**

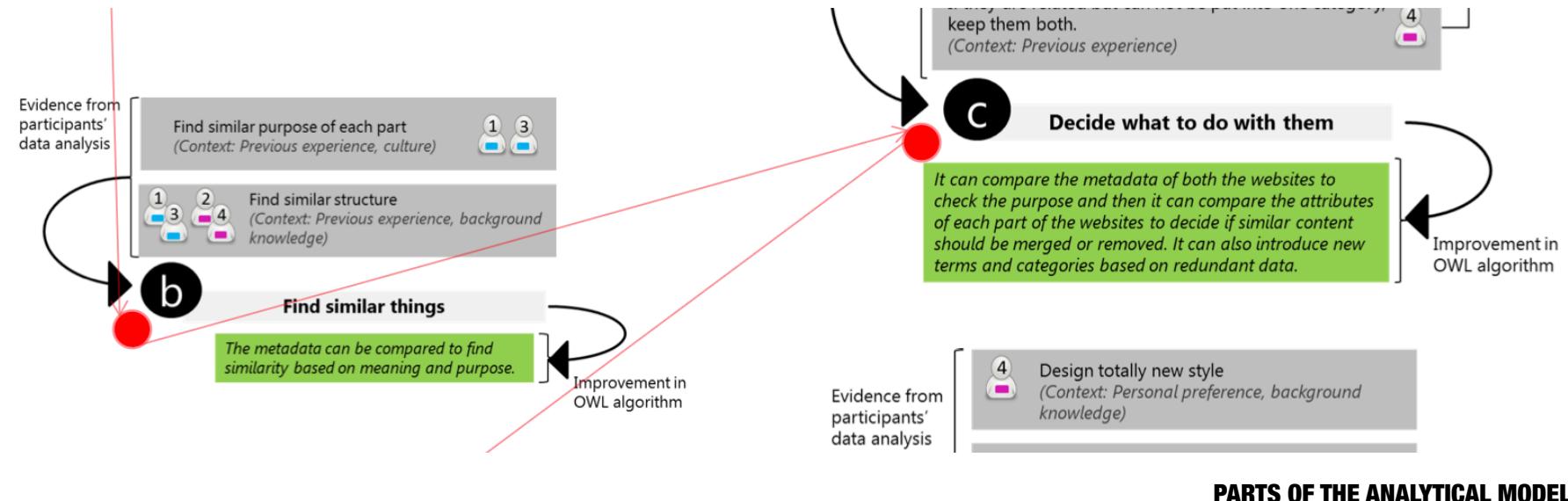


ent  
for Engineers

# Contribution towards development of the OWL algorithm

## Responsibilities/skills

Experimental setup, observation and semi-structured interview, Narrative analysis, scientific writing



Human perception of comparing and merging two websites

A step-wise analytical model based on seven context discovered i.e. background knowledge, previous experience, first glance, culture, personal preference, pattern and meaning. To improve the algorithms behind Semantic Web.

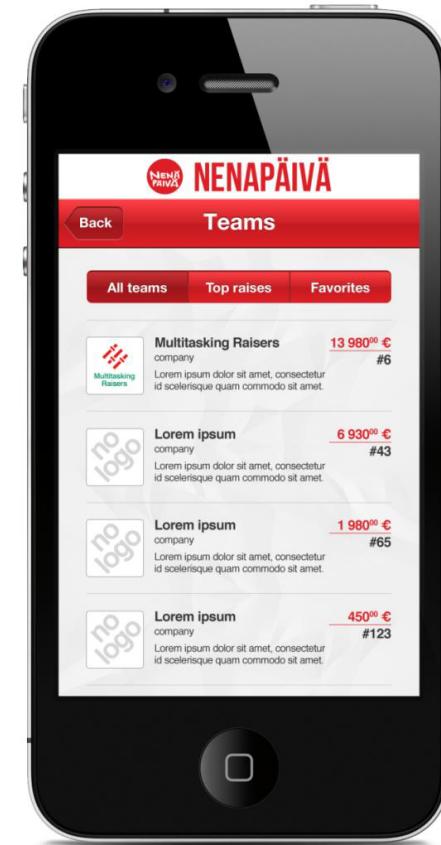
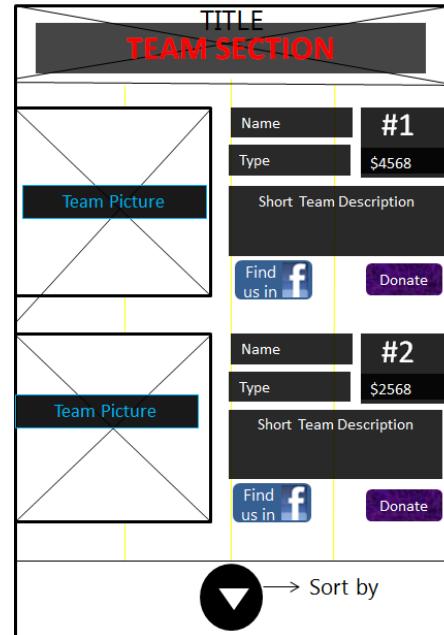
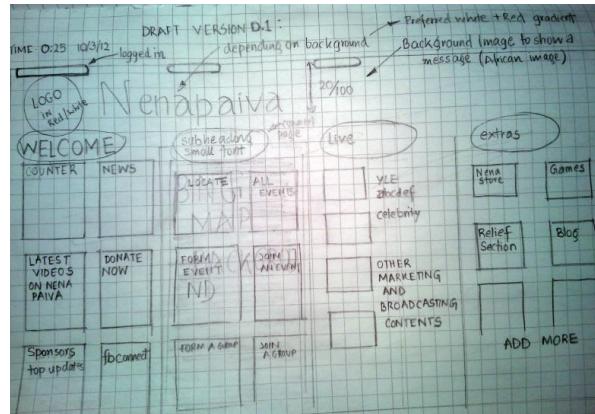
Project under:



# Nenäpäivä app: Finnish red nose day

## Responsibilities/skills

User experience, Scrum, technical writer



Mobile application for non profit charity campaign.

Through the app like minded people can form team and raise money during the campaign period

## Project under:

# User validation of an integrated fitness product and app

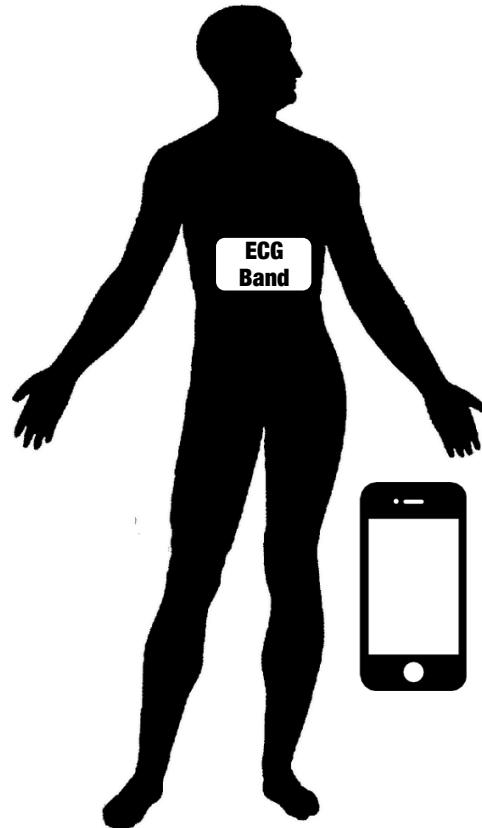
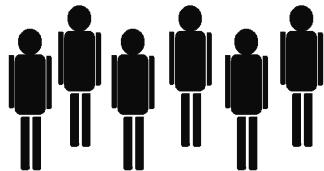
## Responsibilities/skills

Contextual inquiry (interviews), User experience and concept

Interviews with

**6**

Professionals (physiotherapist, personal trainer and lecturer), and Individuals



Results shows the need of a customer



\*\* The circumference of the circle shows the most immediate improvements

We analyze the users needs for our client Omegawave, a fitness start-up in Finland

We validated the existing personas and investigated the motivations and interests of users about well-being through interviews and surveys. Further conceptualized and proposed new ideas related with user experience of the product based on our observations and findings.

Project under:

# ABBdroid: interactive sales tool

## Responsibilities/skills

Human factors, Design probes, Rapid prototyping, Sketching, Concept



ABBdroid is a sales tool designed for ABB on Android platform

It enhances the communication of sales information of HVAC products between the ABB's salespeople and the clients through various features and storytelling mechanism.

## Project under:



# ManageMe

## Responsibilities/skills

Concept, User experience design and front-end programming



ManageMe is a personal fund management windows phone app.  
It assist in managing an individuals financial process efficiently. The app complies to Windows metro guidelines

## Project under:

# Thank you

" Design is not just what it looks like and feels like. Design is how it works"

— Steve Jobs, 2003



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