



Business Plan

FINAL PROJECT

Submitted to

Marduk Pérez de Lara
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By

Karen Fontecha De la Torre
ID: 415092287
Group 2

Guardog

A local inventory solution



Business Plan by:
Karen Fontecha De la Torre

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1 Executive summary

The incredibly fast rising empire of the e-commerce industry is threatening retailers. Recent studies showing horror scenarios where every second retailer in Mexico is going to slowly disappear from the market in the next 10-15 years ¹. Especially those small retailers that are not able to jump on the train of digitization and online selling are sacrifices of this trend. A bridge connecting the online world with the offline store can be made, but small retailers lack of technical knowledge, money and time which is making it difficult to join this opportunity. Facebook shops and Google local inventory Ads are probably the two most popular examples for such opportunities. They give every stationary store the chance to advertise their products online. However, at second glance, it is complicated to meet all the requirements, for example keep track of your inventory or maintain the mandatory list of products (data feed), if you do not have a professional point of sales (POS) as most of the bigger retailers have. This is the point where "Guardog" is joining the game. We are offering a lean, simple and cheap mobile solution for small retailers to connect their store to the world of online selling with a minimum effort and therefore protect their store against the steadily growing e-commerce industry.

For interested readers please check our online presentation under the following link, you may find there a short video of how the app works: <http://bit.ly/2Z02XDL>

2 The idea

Problem

All small retailers with less than five employees are in a precarious situation due to high-rise of the e-commerce. Even if they are not big they are still a remarkable part of the economy of the Mexican retail industry. Thousands of jobs are threatened and many locations are in danger. One of the main reasons for this phenomenon is the rapidly growing e-commerce industry, which increased their volume of sales by more than 420% in the recent 10 years and keeps pushing the stationary stores from the consumer market ². The transition from solely stationary selling to online selling requires an advanced technical knowledge, manpower and a solid budget – all pretty tight resources if you're not one of the bigger players.

¹ Retail in Mexico Report: <https://www.euromonitor.com/retailing-in-mexico/report>

² Mexico e-commerce: <https://www.eshopworld.com/blog/mexico-ecommerce-insights/>

Solution: Our Product

Guardog developed a really simple and lean mobile inventory tool to help everyone who is lacking of the resources to connect their store to the online world. This application makes it easy for every smaller retailer to keep up with its bigger competitors and with other online retailers.

During the development phase, we've interviewed 16 small shops in Mexico City about the biggest threats of their business in order to optimize the product. The two major threats, detected were the e-commerce and big retails-chains. **Most of the small shops are locked out of the online world.**

If shops want to promote their products in such kind of service like Google local inventory Ads and Facebook shops, it is mandatory, to provide up-to-date product data lists with their current availability to the platforms. For big retail-chains, it is easy to provide these information, since they are having powerful POS-systems. The small shops from the interviewers, however, did not have any professional POS or other digital inventory tools. The stated reasons for that were on one hand, that professional POS-systems are too expensive and on the other hand e.g. simple excel tools are not handy enough and time consuming.

To help the small retailer out of their misery, Guardog is the most accurate solution for small shops to keep their inventory up to date on a mobile device (Pervasive Computing). The Guardog inventory tool has all three features, which small retailers need to gain sustainable success in an online and offline retail market. An easy to handle inventory management tool, the possibility to create specific lists of products and most important synchronize these lists with different online platforms, to promote their products.

Inventory management tool:

After logging into the tool retailers can easily add new products to their inventory by hitting the plus button, taking a photo and adding some attributes. In this example, some summer shorts. The bar on the right-hand sideshows, if the product is currently in stock. This tool makes it easy to change the status with one tab.

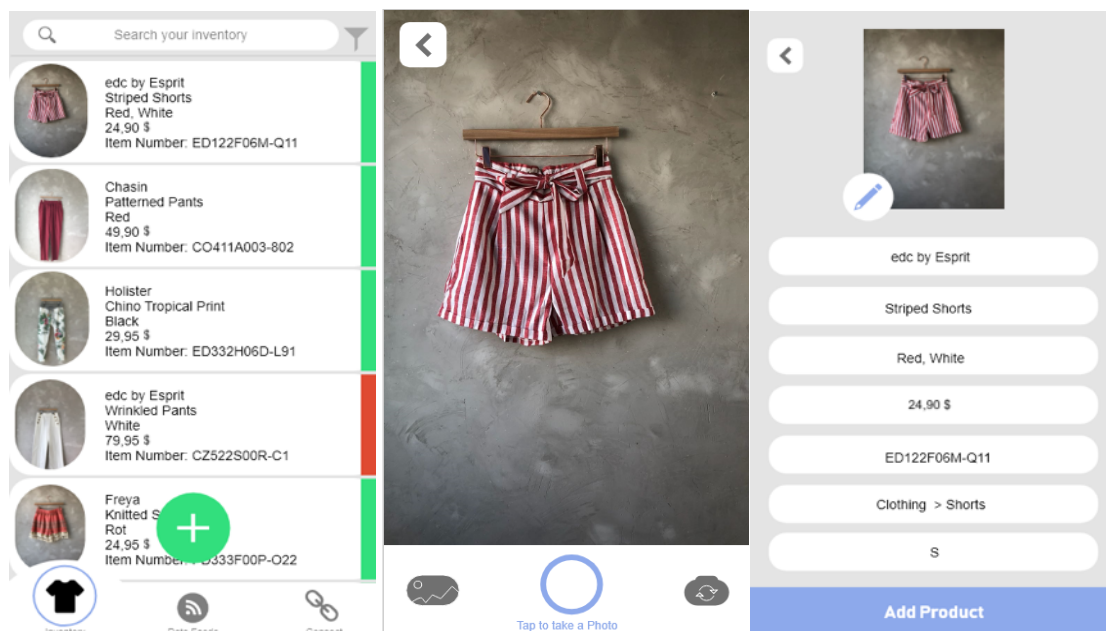


Figure 1: Process of adding new products and managing inventory

Create specific list of products:

The retailer can afterwards create so called data feeds, which is nothing else, but a specific list of products. To create a new data feed its necessary to click on the button on top, give the feed a name and add products. In this scenario, a feed for summer shorts is created. By choosing the category shorts, all shorts in the inventory are added to the list and the first data feed is ready to go.

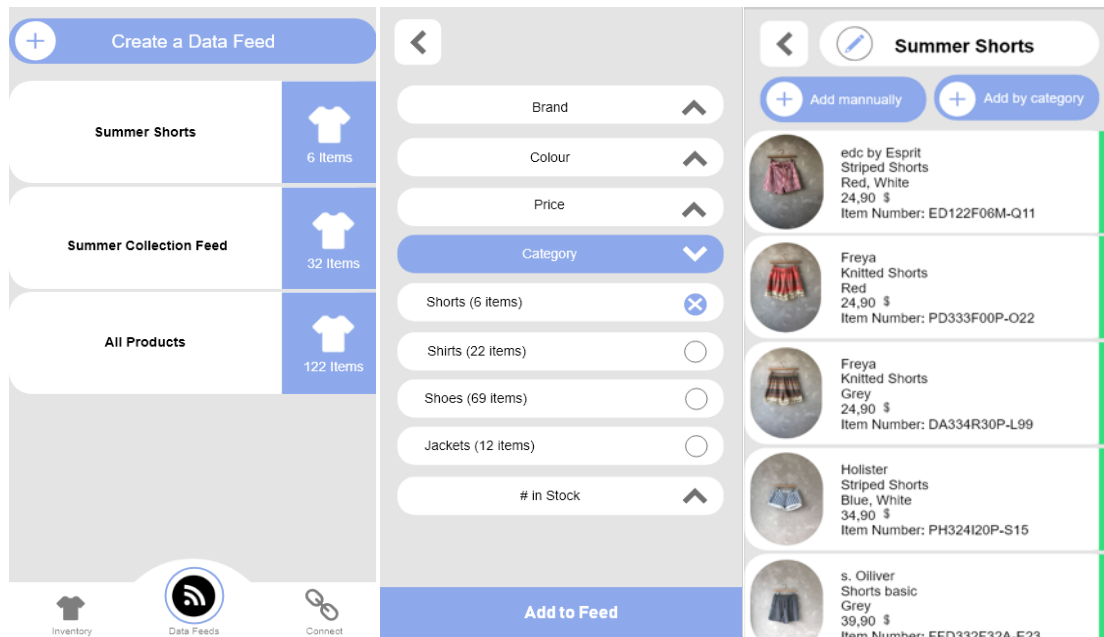


Figure2 :Process of creating and managing data feeds

Synchronize to online platforms:

The third step is to connect and synchronise the just created data feed to one of the online platforms. In this case, Google local inventory is selected. It is important to sign-in into the personal google account and confirm the payment for the Guardog service.

Finally the retailer has to choose which data feed he wants to synchronise with the google inventory. In this case are the summer shorts.

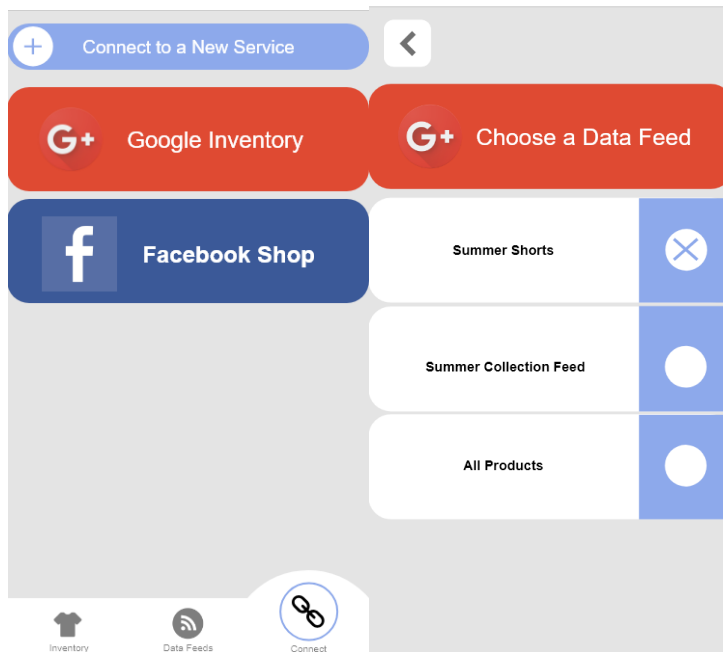


Figure 3: Process of choosing the data feed, which should be synchronized with a service

To give a quick impression, some screenshots are included below, to show how the final product listing looks like with our basic service platforms Google Local Inventory Ads and Facebook Shops.

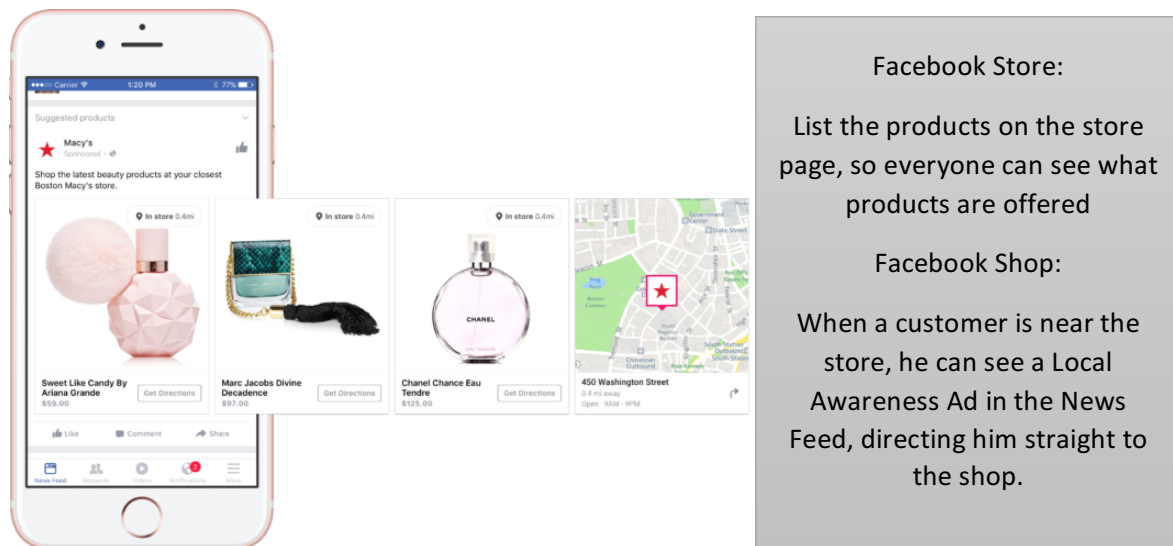


Figure 4: Facebook Shop

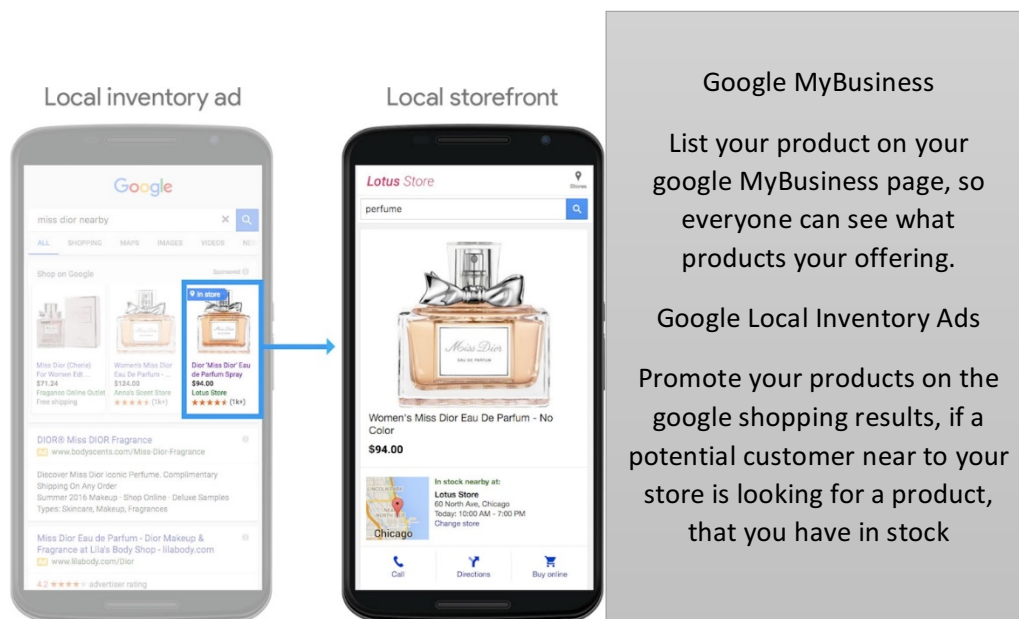


Figure 5: Google Local Inventory Ads

Technical background

This inventory tool is intended for mobile devices, a native iOS and Android application is needed. To store and manage the product data of the customers, a database is needed. Guarddog will work with an Enterprise-Resource-Planning-System (ERP-System) as a data base. This ERP-System is then connected and synchronized with the Google and Facebook account of our customer via the APIs^{3 4} of the platforms. The developer APIs to the Google and Facebook are open and well described, which makes it easy for us, to connect the software.

XML-Files will be generated with Guarddog, they will contain the product data of our customers that will be sent to the servers everytime the customer is making a change in the inventory. Paypal service will be used as the payment option in the app. This service can also be easily implemented via the PayPal Developer API⁵. The costs for that service are 1,9 percent of every transaction.

The system architecture below shows the necessary connections to link Guarddog with Online-Platforms, in this case Google Local Inventory Ads. The work package of the quote from our software company, shows the detailed timetable and exact deliverables of the development (**Appx. 1**).

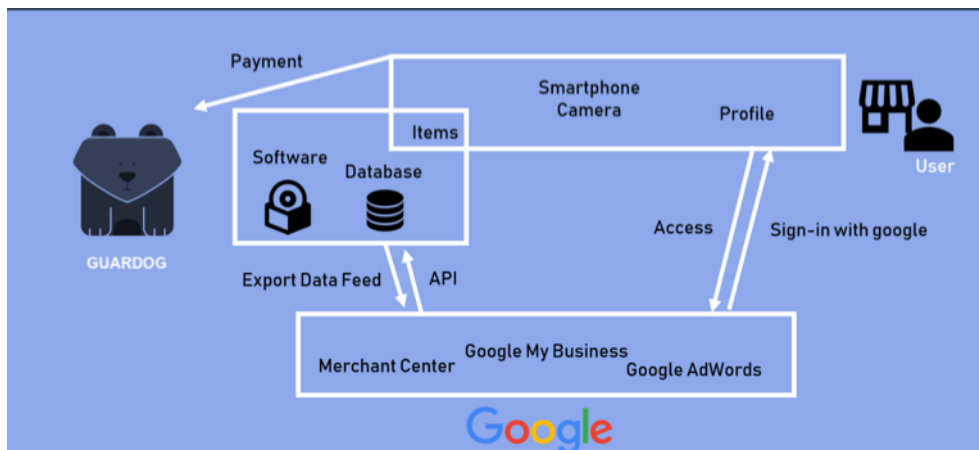


Figure 6: System architecture connecting the different parties

³ Facebook API Link: <https://developers.facebook.com/docs/marketing-api/dynamic-product-ads/product-catalog/>

⁴ Google API: <https://developers.google.com/shopping-content/v2/quickstart>

⁵ PayPal API: <https://developer.paypal.com/docs/api/payments/v1/>

Business model

The price of connecting the data feeds to the platforms is as simple as the product. The app will charge 100 MXN per month for every connected platform. Meaning that if a retailer is connecting his data feed to Google and Facebook he would pay 200 MXN per month. It is planned to add more platforms to the service, for example local platforms like MercadoLibre, Segunda Mano in order to open up more opportunities for retailers to promote their products. Adding more platforms would subsequently add more revenue stream for Guardog.

3 The company

Founder Team

The idea for "Guardog" is developed by the students from the highly recognized top Mexican university of UNIVERSIDAD NACIONAL AUTONOMA DE MÉXICO (UNAM). Starting with the leader of the team Karen Fontecha De la Torre, born in Mexico, and currently studying Computer engineering. She has all the backup from all the members of the well known "iOS lab" located inside the university. In this laboratory, you can find the most avid students with the best software developers skills.

Personal Planning

The main characteristics of our product are lean, intuitive and affordable - and so is our company. We are sure that we can handle the main tasks like technical maintenance, sales and marketing with our founder team during the pilot , especially because we have a support of our software development company (iOS Lab). Nevertheless this project will be uploaded to the main crowdfunding platforms in order to find more team members and funding. Platforms: Crowdfunding Mexico, KickStarter and Kubo Financiero.⁶

⁶ Crowdfunding in Mexico: <http://rogelioarellanes.com/crowdfunding-mexico/>

4 Market and competition

Competition

Guardog is not the first solution on the market for supporting retailers with their data feeds. Since Guardog aims small retailers, its main focus is an affordable and intuitive inventory solution. Main competitors like GoDataFeed, Lengow or Highstreet.io provide proper solutions as well, but none of them is as cheap and as intuitive as this solution because none of them has a mobile app. Excel sheets for example, that Google MyBusiness is using for Google local inventory Ads, are not easy to handle. The biggest competitor are the POS-systems, which can make life of retailers comfortable, nevertheless they are quite expensive, especially for small retailers. This is the main reason why Guardog is placed at the top-right corner, which means we have two big advantages for the app: affordable and intuitive.



Figure 7: Competition and market situation

5 Sales and marketing

Sales strategy

To get Guardog started we will run a pilot to give us the chance to provide a first proof of concept under limited risk for us and the investors. The pilot project will start run for four months, focusing on the retail area in Condesa, Roma Norte, Centro Histórico (all located in Mexico City), with the target of acquiring our first 150 customers. The benefit of investing in such an early stage in the pilot will give the investing person the pre-emption right for the actual roll-out. The starting strategy to sell our product is bottom-up planned, which means we are reaching out to retailers directly, visit them in their stores and explain our idea with the prototype. After reaching out to our first customers this way, we will change to a top-down

strategy by contacting associations and networks to reach more retailers in less time and speed up the whole sales process.

Marketing

To promote Guardog we will try to get to our customers via different channels. Such as Youtube, expos and conferences. Youtube will be used for uploading videos of easy how to use instructions, and in the future adding videos of client's testimonies. In addition we want to present our start-up at special retail expos and conferences where we can introduce our product to our target group. Especially for the beginning we planned quite a high marketing budget of 10,000 MXN per month, which also contains free trials and free months of service if a retailer can convince another retailer of to become our customer. In this way we can get the retailers to try out our product and spreading the word about this lean and easy mobile tool.



Figure 8: Competition and market situation

6 Financial planning and financing

Our financial planning is tied in two parts, the pilot phase and the actual roll out for the first three years. For the first 4 months, there is a pilot investment of 300,000 MXN needed. It includes the money needed for our software company iOS LAB for the development (**Appx. 1**). For the actual roll out there is another investment of 3,000,000 MXN needed, which will cover the costs for the first three years.

Starting with the pilot in September 2019, we are reaching the break-even point in September 2021. We calculated to convince two retailers per day with 2-3 sales persons at the beginning, which leads to an estimated amount of 40 new customers per month.

As said before it is also intended to get some finance from the top crowdfunding enterprises in this country.

7 Outlook

The overall goal of Guarddog is to make every retailer a lean selling machine. We want to be the center of local e-commerce for small retailers by helping them to increase their online marketing with an affordable, time-saving and tailored tool. To reach this goal, we want to penetrate the market of small retailers without a professional POS as far as possible. Further, we want to expand in other markets where retailers can use our service and connect their store online with local marketplaces. We see a big chance in the steadily growing business of e-commerce and platforms like Google local inventory Ads and Facebook Shop. To make our service more attractive, we are planning to open our own API for everyone, to synchronize their inventory list with our tool. Therefore, further versions of our application are going to have the chance to import and export data. As a next step, we think of connecting our retailers with on-demand delivery like Rappi in Mexico City for example. This means that you can search for a product online and order it via a local delivery service to receive your goods within less than an hour.

An alternative strategy would be to focus solely on inventory management of smaller retailers, in case the service is not accepted in a sufficient manner. In case of no return, if the services are not used at all, we are still prepared with our smart organizational structure to exit the market without causing too much damage.

We are highly motivated to help and save as much small retailers as possible and we are going to spend all of our energy in the Guarddog idea. We are deeply convinced of our product and concept. We are looking forward to find a partner who is enthusiastic about the idea and is not only supporting financially. Investing in us, is a good idea

8 Appendix

Working Plan

Guardog	Weeks							
Activities	W1	W2	W3	W4	W5	W6	W7	W8
Project Presentation - Start-up								
Compilation and Analysis of Requirements								
Presentation of the Work Plan								
Initial Design of Data Base								
Use Cases								
Prototype Design								
Deployment of Use Cases								
Test plan Development								
Test plan Users								
Implementation								
Technical documentation								
Apps Registration in Download Stores								
Deployment								
Training								
Release								

Commercial Terms

1. Deliverables

The development of the **Guardog** includes:

- a. Requirements analysis
- b. System design
- c. Prototype validated with users
- d. Entity Modeling / Relationship
- e. Software Architecture Hybrid App (IOS /Android)
- F. Cross-platform development (iPhone /Android)
- g. Technical documentation
- h. Video manuals for end user
- i. Training to **Guardog** users
- j. Installation and start-up on selected server

Estimated Total Time

The development of **Guardog** is estimated at 8 weeks, equivalent to 2 months

Invoice

Resources	Amount	Tax	Total in MXN
Guardog	\$ 240,000.00	\$ 38,400.00	\$ 278,400.00
Technical support per month	\$ 4,000.00	\$ 640.00	\$ 4,640.00
* The months required			

KAREN FONTECHA DE LA TORRE

Computer Engineering Student

✉ karen007fontecha@gmail.com 📍 Fuente de la Luna 129, ZIP Code 14140 📍 Mexico City, MX
🐦 @KrenVonTatscher 🌐 linkedin.com/in/karen-fontecha-a9811757/



EXPERIENCE

Public Relations and Technology Member

CETIEM

📅 Sep 2017 – present 📍 Mexico City, MX

Technical Support Scholar

UNAM

📅 Feb 2017 – Sep 2017 📍 Mexico City, MX

IT Project Manager

Quick Net Soft & Krökel

📅 Jan 2016 – Sep 2016 📍 Mexico City, MX

Mathematics, Chemistry & Physics Tutor

High School

📅 2007 – 2013 📍 Mexico City, MX

EDUCATION

International Exchange

Augsburg Universität

📅 Apr 18 – Sep 18 📍 Augsburg, GER

B.S. in Computer Engineering

UNAM

📅 Aug 2014 – present 📍 Mexico City, MX

High School Diploma

ITESM CCM

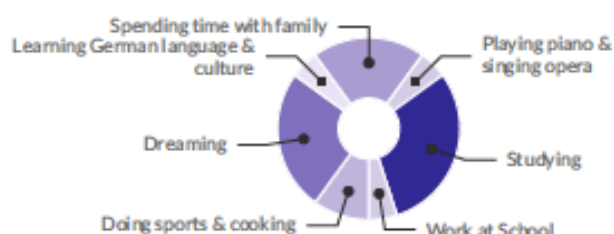
📅 2011 – 2013 📍 Mexico City, MX

Sophomore Year

Gymnasium Bad Nenndorf

📅 2010 – 2011 📍 Rodenberg, GER

A DAY OF MY LIFE



LIFE PHILOSOPHY

"To a great mind, nothing is little"

MOST PROUD OF



Courage I had

to study abroad in my sophomore year of High School in Germany



Persistence

I showed to learn German at B2 level in one year



Opera Concerts

I have performed 4 opera concerts



Building homes

helping poor families to have a home in Mexico

STRENGTHS

Hard-working Persuasive
Motivator & Leader Social Intuitive
Swift HTML Prezi MS Office
Arduino iMovie

LANGUAGES

Spanish
English
German



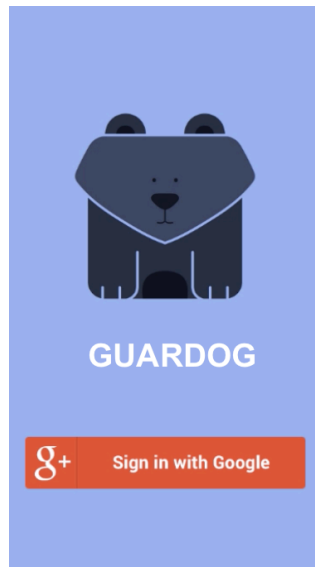
PASSIONS

- Piano
- Opera
- Dancing
- History

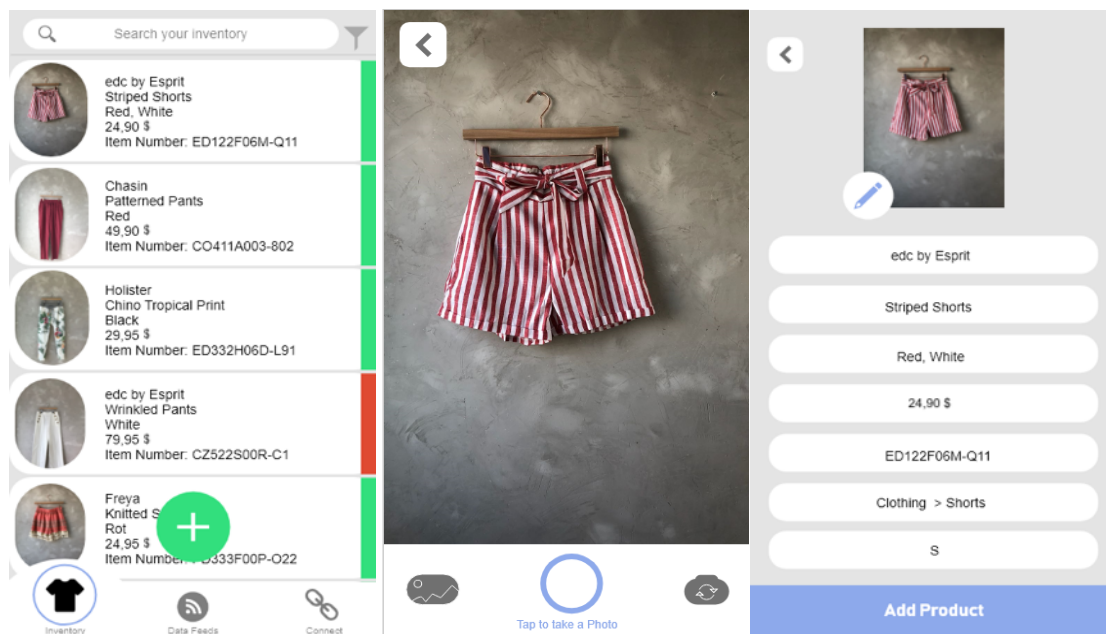
FAVORITE BOOKS

- Sherlock Holmes Series, Arthur C. Doyle
- Man's search for Meaning, Victor Frankl

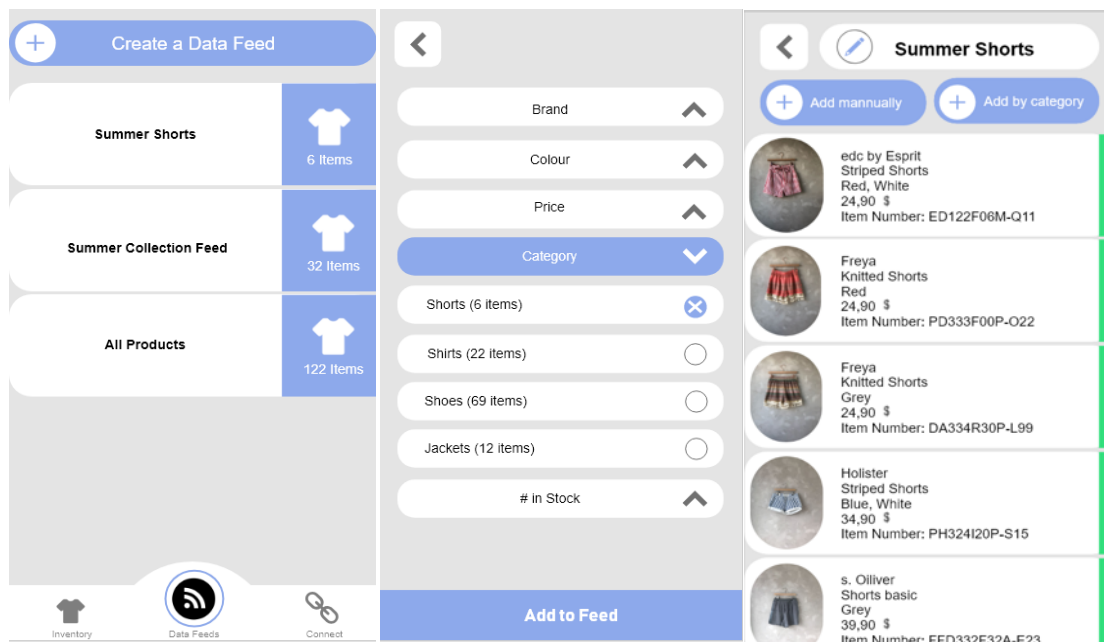
Login:



Inventory Tool:



Data Feed Tool:



Connect Tool:

