Business Requirements Document

Healthy Belly

Mohammad-Murtuza Bharoocha

Josue Rodriquez

Hassan Ishmam

Mateo Perez

Nisal Gamage

Priyanshi Vaishnav

Introduction:

We, as a group, have had people in our lives who were, or are pregnant. Those people could be family members or friends. And occasionally we are asked to buy them groceries or foods, foods like granola bars or cereal. But in the modern world, there are many selections to choose from, and each item needs to be checked for safety since there are certain ingredients and additives that are not healthy for either the baby, the mother, or both! So how do we make this process simpler and efficient for everyday humans who do not have the knowledge of such ingredients or the time to go through multiple items? Hence the idea of Healthy Belly was formed.

Healthy Belly will use the barcode technology to scan an item and inform the user whether the item scanned is healthy or not! It is simple, it is efficient, and it reduces the long process of reading every ingredient from both the health list AND the nutritional labels! In the current world, such an app does not exist! The only closest apps are Pregnancy Food Guide on iOS or MummyTummy on Android. But these apps are only good for explaining what is good to eat INGREDIENT wise. Our app will not only tell users what is good and what is not, it will be able to scan the food items so our users would not have to read any labels.

Persona:

NAME

Emily Wilkerson

TYPE

Rational

Goals: Being able to have a healthy baby, being able to pick food that is healthy as fast and easy as possible.

Quote: I just want something to tell me what i can and " cant eat without having to read long paragraphs.

"

Background: Emily is a future mom. She works as an accountant in a busy firm. Due to this she needs to rush through her lunch break so finding time to do research on what to eat can be difficult due to time constraints. Also being a first time mom she has very little knowledge on what she needs to eat in order to have a healthy baby.

Demographic

Female   32   years

Los Angeles

Married

accountant

50.000 a year

Technology

Browsers

Channels

Motivations

-Easy feedback on what i can eat
-All the information i need to know about pregnancy diet all in one place
-quick way to check if can eat this food.

Frustrations:

- wasting time reading labels,
-wasting time looking up information about ingredients,
-Not having all the information needed about diet in one place

NAME

Alan Grant

TYPE

Rational

Goals: To help patients have the healthiest babies possible and to help guide them to a healthy diet.

Quote: Its hard to explain to patients why they can or cant eat something and i don't want to give them a giant list of things they can and cant eat.

Demographic

♂ Male   56   years

◉ Los Angeles

Doctor

150,000 a year

Background: Alan Grant is a Doctor at a very popular hospital. He works with pregnant women and helps them through their pregnancy by teaching them about nutrition.He spends every day explaining to patients why they cant eat something, what foods should they avoid, what food is recommended. He gives out pamphlets and pages of nutritional information for expecting mothers hoping that they will read it and follow the guide he gave them.

Technology

Browsers

Channels

Motivations

-I want something i can recommend to my pregnant patients to help them with their nutritional needs
-I want something that wont overwhelm my patients with information and can give them the information they need quick and easy
-I want something that they can access anytime if they have questions about what they can and cant eat

Frustrations:

- It takes alot of time to go through each list of things a patient can and cant eat.
-He cant be there to answer every question a patient has about diet
-Patients can feel overwhelmed by the amount of papers that are given to them with nutritional information

NAME

Kevin Smith

TYPE

Rational

Goals: To provide support for his wife in order to make her pregnancy a little easier and to have a healthy baby

Quote: You know since im so busy bringing my dream all together i dont have time to google what's okay for my wife to eat

Demographic

♂ Male — 28 years

📍 Los Angeles

Married

chef

45,000 a year

Background: Kevin is a chef at a restaurant that knows how to make good food but doesn't know what food is good for his pregnant wife. Since hes a chef his wife sends him grocery shopping. Kevin always has trouble shopping for groceries due to his lack of knowledge on what food is good for his wife. He spends a lot of time googling ingredients and communicating with his wife trying to figure out if she is able to eat certain foods or not.

Technology

Browsers

Channels

Motivations

-All the information he needs in one place
-Doesnt want to bother his wife by asking question
-Wont have to worry about what his wife can and cant eat.

Frustrations:

- wasting time reading labels,
-wasting time looking up information about ingredients,
-Not having all the information needed about his wife diet in one place
-Has to constantly ask his wife what she can and cant eat

A Mini Business Plan:

Strategy:

Strategy				
Problem	**Solution**	**Value proposition**	**Unfair advantage**	**Customer segments**
Having to read the nutritional label Knowing what is healthy/unhealthy explaining to friends/ families your needs	Scan and go system that requires no reading Information in system that filters (un)healthy Having profiles for easy access for everyone	An App that prioritizes simplicity and efficiency for its user while making the app as informant and accurate as possible, with the backing of Medical Professionals	Being able to combine both the ingredients that are safe/unsafe with the dietary restrictions of people who follow certain diets	Pregnant women, family of pregnant women, friends of pregnant women.
	Key metrics		**Channels**	
	How often a user scans an item, how often a user inputs data into database, what item is most scanned		Social Media as well as direct Doctor recommendations	

Cost structure	Revenue streams
As it is an app that requires no monetization to run successfully, as well as a database that is open source, we have no need for a cost structure	The primary revenue generator would be advertisements, but we will have an option for customers to pay to end advertisements.

SWOT:

SWOT	
Strengths	**Weaknesses**

Your advantages:
  First of its kind
  Customer Focused
  Backed by Pediatricians and Family Doctors prior to the creation of the App itself
  Using a Database that is constantly growing due to Users from multiple different backgrounds
  Considering dietary restrictions of people from different backgrounds
  Designed to be as simple and easy to use
	Areas for improvement
	  Can be imitated by larger companies
	  Very little profit gain
	  Most information is for US products since majority of input is by US natives
	  Relying on information by the people
	  Database might not have complete information on the ingredients

Opportunities	**Threats**

Situations to apply your advantages
  Everyone is more health conscious
  Always a supply of pregnant people so the market is always there
  Can expand to other countries since every country uses barcodes
	Where you are at risk
	  Database is open source so information could be altered
	  People inputting false information in the database since its open source

Market Segments:

Segment Profile			
Geographic	**Demographic**	**Behavioral**	**Psychographic**
Primarily United States with Potential to go worldwide	Younger to Middle aged group with a good knowledge of using a phone, having a relationship of sorts with a pregnant	What typical actions can be observed?	Priorities are being nutritionally aware, tend to be quite time-poor,
Size		**Growth potential**	
Estimated at around 123 Million SUCCESSFUL pregnancies per year in the United States alone		Life always finds a way, and a need for an app that will assist in pre-natal nutritions is not only helpful, but vital for the health of both the baby and the mommy	
Competitive activity		**Risk**	
There is not a single app which does this. Majority of the app simply tell the users what to eat. Not what they cannot eat when they are at the grocery store. EX: There are many ranch options, but only a few have no raw eggs.		As discussed with 3 Doctors, two being pediatricians and one being a nutritionalist, The success of the app depends entirely on its accuracy and simplicity	
Approach			
The approach is simple, we connect with users via Social media, going to nutritionists, and connecting with Doctors who specialize in pre-natal nutritions			

Primary Market Research:

Questions that we could not find through our Secondary Market Research were redirected to our Primary Market Research. We used two methods of said research; Direct Interview with Doctors and Surveying our potential users. We created two sets of questions for the two methods. They are as follow;

- For Doctors:
    - Are you willing to use/test our App to see if it meets standards and if the information is accurate?

- o How many mothers/families contact you regarding nutrition?

- o What are some great sources to use to gain a better understanding of what is considered healthy, what is not considered healthy, and what is something that is considered in between?

- o How are malnutrition and miscarriages connected? In other words, how important is nutrition for pregnancy?

- o Different needs during different trimesters?

- o What do you think should be on the app?

- o What do you think would be the most important feature for this app?

- o Based on the information that is given do you believe that you would be okay with recommending this app to a patient.

- o Are there diet and food suppliers focusing on pregnant women?

- For Users:

  - o We posted a survey:

    - · https://www.poll-maker.com/Surveys#QP-449116x07d78c7A-5

Interviews will be conducted frequently throughout the entire process. We will conduct at least 10 interviews with Doctors and Nutritionists to gain the most accurate information. We will also keep our Survey up until we get about 150+ responses to get the most insight of our potential users. So far, the Survey has about 73 responses.

Secondary Market Research:

Here are the questions we focused on during our Secondary Market Research to gain an insight of our Market:

- Does poor diet during pregnancy have long term impact on a child's health?
  - o It does, mothers who eat an unhealthy diet during pregnancy may be putting their children at risk of developing long term, irreversible health issues including obesity, raised levels of cholesterol and blood sugar,

according to new research. The study, carried out in rats, suggests that the effect is even more pronounced in female offspring.

- o Source-*https://www.sciencedaily.com/releases/2008/06/080630200951.htm*

- Does malnutrition cause miscarriage?
  - o Our research suggests that pre pregnancy adherence to several dietary patterns was not associated with risk of pregnancy loss.
  - o Source-*https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4163795/*
- What are the statistics related to pregnancy in the United States per year?
  - o Around 3,855,500 people get pregnant per year. The data we collected suggests that 8.3% babies are low birthweight while 9.9% are preterm.
  - o Source-*https://www.cdc.gov/nchs/fastats/births.htm*
- Data related to the number of people reading the nutritional information
  - o According to our data 16% said they always read the nutritional information.18% said that they don't think food labels are important. While 54% said that they buy what their family likes 49% said they are satisfied with their diet or health. Another 8% said that they get product information from sources other than nutrition facts label and 18% said they don't think food labels are important.
  - o Source-*https://www.agri-pulse.com/articles/6952-most-people-read-nutrition-facts-label-at-least-some-of-the-time*
  - o *http://healthland.time.com/2011/10/24/study-why-people-dont-read-nutrition-labels/*
- Do customers trust information on labels or online information about the same products?
  - o Customers wanted transparency in the products that they eat since they believe the labels are not always true.
  - o Source-*https://nypost.com/2018/06/07/most-people-think-food-labels-are-misleading/*

- What percentage of pregnant women are concerned about what they eat? And to what level is that concern?
  - o Our data suggests that 8 out of 10 women eat things that they know are off limits
  - o Source-*https://www.parents.com/pregnancy/my-body/nutrition/what-pregnant-women-really-eat/*
- How often do pregnant women use the Internet to search for health-related information?
  - o Pregnant women use the internet to search for health-related information at least once per month according to our sources
  - o Source-*https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-016-0856-5*

Commercialization Strategy:

One of the main strategies is that since there is a lack of an application that is anything like Healthy Belly, when someone looks up an application for solving the problem of figuring out if a certain product will be hazardous for a pregnant individual Healthy Belly will show up. It is the idea of the app being One-of-a-kind. Another solution is social media. Having multiple connections in the Pediatrician world, as well as having a strong media influence will aid us in spreading the word of Healthy Belly.

Monetization Strategy:

One of our main plans for monetizing Healthy Belly will be advertisements that are built into the app. These would be as unobtrusive to the use of the app as possible,

however we would also offer an option to pay to remove the apps completely from the application.

Our Total Solution:

Solution:

The primary objective of our app is to make life easier for pregnant women and their family members and friends. Using our app, they will be able to determine if they can eat a certain food or not. They will scan the barcode on a product using their smartphones and the app will tell them if it's safe for them. We will research online and interview doctors (specifically Pediatricians and nutritionists) for the ingredients and additives that are unsafe for our users. The app will look up the scanned products online from a database and it will search for those specific ingredients/additives harmful for them. If it finds a match, it will alert the user with a red screen followed by why it was so. If it finds an item that should be consumed in limited amounts, it will alert the user by displaying a yellow screen followed by why it was so. Otherwise, it will show a green light and let them know it's safe to eat.

We have done our secondary market research and we were not able to find anything exactly like our app. It will spare the users the trouble of memorizing the long list of items or carrying the list every time they go to do grocery.

Moreover, they will be able to create their own profiles and add certain items they are allergic to and our app will look for those ingredients in the scanned product as well. The profile will also allow the user to input their respective dietary preferences (such as

vegan, halal, vegetarian, etc.). As there are not any Apps like this out there in the market now, we believe it will benefit the users a lot.

Alternate Solutions:

An alternate solution for the problem we are trying to address would be just an application that lists ingredients or products that are dangerous or need to be consumed in moderation through a menu. This would simply allow the user to manually search through a database of ingredients or products to find the product they wish to purchase and see whether it is safe to eat or not. For this solution the tradeoff would be that we would not use a camera-barcode system which could impact the convenience of just grabbing an item and scanning it. Instead the user only has the option of manually searching for the product. However, although that feature may be implemented into our product, it should not be the only way for the user to interact with the product. Also, by using the barcode functionality on our app we ensure that the product that is being analyzed is the correct one, unlike with a search which may return similar products that aren't the one intended to be looked up.

Why This Solution Was Picked:

As stated before, the primary objective of our app is to make life easier for pregnant women. We believe that using the barcode scanning feature is pivotal to ease of access and ease of use in day to day life of any pregnant woman or anyone that must assist them. In addition, we believe our product cannot just ease the task of figuring out which foods to buy, but possibly also suggest alternative solutions to the foods they

cannot eat. We believe this is the best approach to solve this problem. One of the biggest concerns in the technological world is security. And with our system, we plan on making an application that will not store any information that could potentially identify our users, information such as Names, Phone Numbers, or Emails.