

# Grocerscan

#### "SCAN YOUR PLAN"

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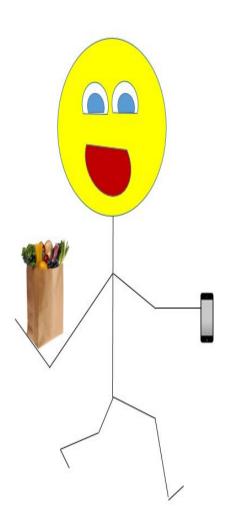
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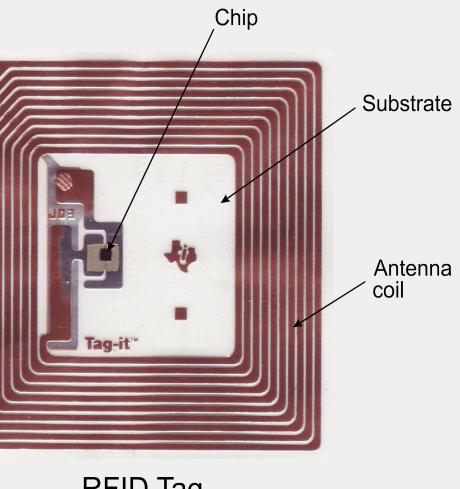




## THE Problem

- The average consumer is unable to keep track of their nutritional intake and their finances.
- This leads to an increase in obesity and poverty within the area.





# THE SOLUTION

RFID Technology

RFID Tag

## HOW IT WORKS

#### STEP 1

Buy Your groceries from the store and bring them home



#### STEP 2

Open up the app and let the RFID chips be read by phone and put in application



#### STEP 3

Enjoy the recipes as well as rewards for shopping for healthy foods





## **MILESTONES**



#### week 1

Come up with multiple ideas and have users give feedback

#### week 3

Create Mockups of App and begin preliminary usability testing

#### week 5

Finish Prototype and run further Usability Tests

#### week 2

Finalize Idea and start creating interview questions and finding subjects

#### week 4

Address problems that were uncovered in usability testing and begin prototype

## original design and solution...

## Original Design...

- Scanning each grocery item separately
- Manually inserting an inventory

## Solution...

- QR Codes
- RFID



### Inspiration phase Research

- We talked to professionals in the fields that applied as well as the prospective users
  - Nutritionist
  - Information Technology Professionals
  - Grocery Store Employees
  - Students
  - Middle Income Homeowners
- We looked at other applications that used gamification to see how this could be applied to ours
- We knew we wanted to use RFID so we looked into the tech behind this and its costs

### insights and hmw questions

"How can we make people want to purchase and consume more nutritious food?"

Solution: Make it fun.

How do you make something fun?: By making it into a game.

Insight: Most of the average consumers rarely observe the nutritional information on the items they purchase.

How might we create an interface which shows the most important nutritional information for each item?

## insights and hmw questions

Insight: Average consumers are not aware of the amount of money they spend on a weekly/monthly or yearly basis.

How might we create a program that adds up and displays an average amount of money spent?

Insight: People require motivation and a reward system to actually purchase these types of foods.

How might we create an incentive system that appeals to the average consumer?

## **STOTYBOATD**



#### personas

John is a twenty seven year old graduate student who studies computer science. He is up to date on the newest technology innovations, and likes to lift weights in his spare time. While lifting weights, John has found it useful to keep track of his lifting progress in his notebook. With his newest android purchase, John was looking for a way to keep track of his dietary intake. He tried using a notebook, but often forgot to record minor snacks.

Andrea is a twenty two year old vegan in culinary school, who has been involved in keep tracking of her health ever since her fatty liver diagnosis. She needs a way to keep track of her dietary intake to maintain her health; most of her diet comes from whole foods where she shops often. Andrea just bought a new iPhone recently and has "fallen in love" with the app store.

Chelsea is a 32 year old zoo keeper whose time is mostly preoccupied with rehabilitating injured penguins. Since Chelsea works eighty hour work weeks, she doesn't have time to keep track of her diet. She has noticed that her pathetic nutrition intake has led her to feel weak and make her lose focus. She is able to afford the iPhone 5 easily since it is cheap and shops primarily at wegmans.

Prototype: <a href="http://9vja89.axshare.com/#g=1&p=home">http://9vja89.axshare.com/#g=1&p=home</a>

## **User Testing**

#### We Performed both a cognitive walkthrough as well as user task analysis

#### Tasks:

- 1) Sign up for an account
- 2) After Signing up go back and log in as if it was not the first time you were using this.
- 3) Go to your Profile and try to view the information as well as edit it.
- 4) Go back to the home page so you are able to find more options
- 5) Find where to go to be able to chat with other users of the application and go there.
- 6) After, go back to the home screen and find where to view your Health Stats.
- 7) Once finished viewing your stats find who is doing the best in your area with the app.

Task	Expected Results	Actual Results	Fix	Severity (1-5)
Sign up for service	Be asked for login credentials as well as name and password	Was asked for name email as well as a password for my account	N/A	0
View your Health Stats	See information regarding to information that you have put in as well as, over time graphs	Page with multiple graphs no explanation, Not sure what "goals Met" does	Labels as well as further directions for the first time use	4
Go back to Home Screen	Clicking the Back Button sends back to home page	Clicking the Back Button sends back to home page	N/A	0
Going to Profile	View your profile as well as edit it and upload information or pictures	Can view profile information but gives no button to edit	Add edit button	3
Viewing Leaderboard	See whom in your friends or area are doing the best with the app	Allows you to see top 3 people who are in your "group"	Allow users to see more then top 3	2
Chat	Click on the Chat icon to chat with devs as well as others whom are using the app	Click on the Chat icon to chat with devs as well as others whom are using the app	Have different "Chat Rooms" for different types of users or reasons	1

### Task analysis results

Everyone that interacted with the prototype agreed that the application was easy to very easy to use.

One problem that was noticed by all was the need for a password/email confirmation.

Another noticeable issue was with the health statistics page, every user was unsure as what this page was for.

https://www.surveymonkey.com/results/SM-95ZXRM5S/

### **FUTURE ITERATIONS**

Continue looking into the infrastructure required for the implementation of RFID on a large scale

Create a Notifications system for users to let them know of healthy foods going on sale at their local supermarket

Have the app be personalized based on the preferences of the user and give suggestions based on them