

A Web Application By: Michael Lopez

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# **Version History**

- Version 0.1 Created Document 07/20/2021
- Version 0.2 Added Strategy & Features 07/21/2021
- Version 0.3 Added Technologies Used 07/22/2021
- Version 0.4 **Updated Formatting** 07/27/2021
- Version 0.5 **Updated Scope of Project** 07/28/2021
- Version 0.6 Added Prototype 07/29/2021
- Version 0.7 Received Feedback on Document 08/10/2021
- Version 0.75 **Refined the Prototype Pages** 08/10/2021
- Version 0.8 Added Multiple Sections to Better Document 08/11/2021
- Version 0.9 **Updated User Personas and Design Choices** 08/12/2021
- Version 0.92 **Updated Feedback Section** 08/12/2021

## **Strategy**

### What is it?

This website will allow farmers to keep track of their inventory of crops for possible sale to partnered organizations such as Government Assistance programs and smaller businesses who choose to partner with Cropventory. The website won't host a transaction system, it will just allow the farmer to see what their options are in terms of partnerships with local businesses and organizations. From there, the farmer will have to work with them to see what fits with them.

This is personal for me as I work with farmers on all scales of class and color, some have a fair time selling and some do not. Being able to have a fair ground to make sales and maybe even encourage unique crops to grow in the area. This will also open up local consumers to shop local and support small businesses.

## Why am I making this?

Living sustainably has always been something I've dreamed of. While I don't have the means or resources to do that right now, supporting local farmers is the next best thing. As stated above, there is a personal connection with this project as I work with all sorts of farmers within Farm Fresh RI where the main goal is to have 30% of the food we eat in this region be grown in this region. Supporting farmers, being able to directly connect the average consumer to these farmers and educating the benefits of farming and sustainable living is something I would love to see grow throughout the world.

## Who is it for?

This website will be mainly for bigger farmers who have a large amount of crops to keep in check and who also want to partner with local organizations or businesses to sell to. While the website won't have a generating transaction system, Cropventory will allow access to said organizations or businesses that allow for a partnership between each other.

## **Features**

## **Farmers Content Management**

- Secure Login and Logout
- Add, Edit, Delete Crops to their inventory
- Displaying important information per specific page (Login Screen, Crops on Hand, Crops Sell Price, Crops Cost)
- Allowing farmers to sort their information in different ways (Alphabetical, Time Planted, Harvest Yield)
- Cropventory will also alert the farmer if their inventory of a specific crop is running low, they will be encouraged to grow more of that crop to follow crop trends.
- Allowing farmers to have information about local food access programs or businesses for potential partnerships.

## **Customer Direct Sale/Buy**

- Create an account
- Secure Login and Logout
- Buy products from specific Farmers, some may carry unique products such as honey or other special products.
- Customers can also see their purchase history, when they made a purchase and have their card information stored
- Customers will be given the option to purchase individual products or subscribe
   to a monthly Farmer's Basket from a farmer of their choice.

# **Technologies Used**

This website is primarily made with use only on Desktop.

## Languages

- HTML
- JavaScript
- CSS
- PHP

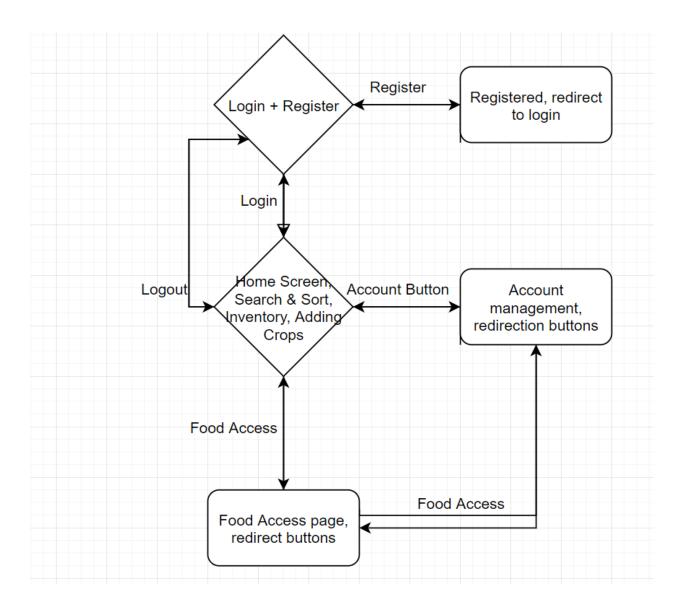
## **Technologies**

- Visual Studio Code IDE
- Github Used for progression and version history management.
- MySQL Used as the Database Management.
- Heroku Used to host the Website.

## Miscellaneous

- Adobe Spark Used to create Cropventory Logo
- MarvelApp Used to create a Wireframe for the project to determine flow and design.

# **Flow Chart**



## **User Personas**

These are people who are likely to use the website for their farming needs.

## **The Experienced Farmer**

- 1. Likely older, 50s+
- 2. Need to be able to clearly see what buttons are where and what's currently on the web-page
- 3. Not an avid web user
- 4. Adding crops, searching and sorting through their inventory, and managing their account should be easy to do.

## **The Backyard Farmer**

- 1. Likely Younger, 20s-30s
- 2. Experienced with the Internet
- 3. Navigates websites with ease
- 4. Always on the internet at home

# **Prototype & Interactivity**

Cropventory			
	Welcome! Please Log In.		
		Email	
	Username	Username	
	Password	Password	
	Let's Get a Plantin'	Create Account	
Menu 💔 Handoff 🌘 No comments			Made with Marved

## **Login and Register**

Basic login screen with a register feature. Feedback I received over the first four weeks was to make the website a compact design, so this is what I decided on.

Users will be able to login with an existing account on the left or they could create an account on the right. The info would be sent to the Users Database.

Clicking on the Login (Let's get a Plantin') will bring the user to the cropView page.

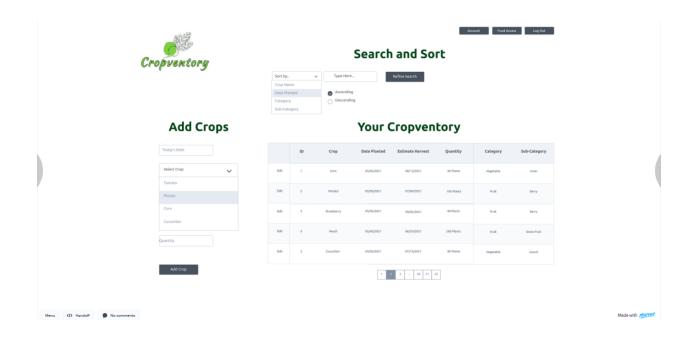
Clicking on the 'Create Account' button will redirect to a confirmation page.

Link to the MarvelApp: <a href="https://marvelapp.com/prototype/863d9gg/screen/79387324">https://marvelapp.com/prototype/863d9gg/screen/79387324</a>



# **User Registered**

After creating an account, the user will be directed to this page that will display a success message and then be redirected back into the login page, after 3 seconds, where the user can login into their account.

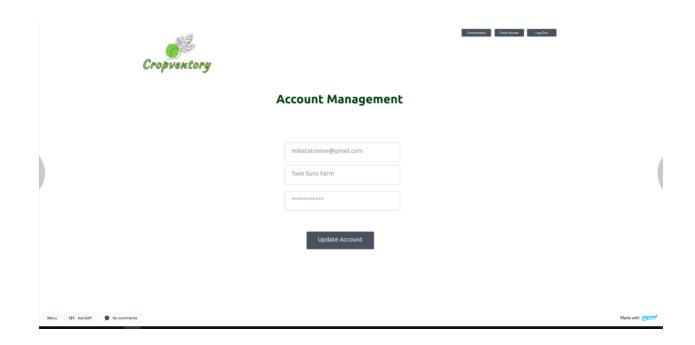


## **Cropventory Home**

After logging into their account, the user will be directed to the Cropventory home screen. This will be the main hub of this tool where the user can add crops to their existing inventory, flip through their inventory, refine their search to only pull up what they want along with other buttons at the top. After receiving feedback of making this a more compact design, this is what I came up with in terms of compact and simple to use. The idea is that the farmer would be using this tool at a desktop and everything would be easy to see and clear in functions.

Clicking on the 'Add Crop' Button will add the selected crop into the table, refreshing the page for the user.

Playing with the search and sort, users will be able to search by 'crop name ' or 'date planted'. This will bring the user to a page with the filtered table.



## **Account Management**

Users will also be able to change up the credentials of their account and update the database with their new information. Their credentials are their email, farm name and password. The email would be secure and not be able to be used twice.

Clicking the 'update account' will update the users.sql table with the new information, and will redirect the user back to the cropView.php (home page).



### **Food Access**

Also located at the top of the page is the button that directs the user to the Food Access page. My original idea had to be scaled down and I decided to leave an open ended page where the users could be directed to local or federal food access programs where they may be able to organize and collaborate with the selling of their crops. Obviously this will just be directing this to just an information page on their respective websites, but I would love to revisit this in the future.

For now, clicking on the pictures will send you to the Farm Fresh RI website or USDA Food Assistance programs website depending on which is clicked.

# Design

### **Font and Color**

I really enjoy minimalist design on websites. I feel that it makes it easier to navigate and easy to just find what you're looking for. The only font I use on this website is Helvetica(Which this page is written in.. Helvetica is a sans-serif font and is an OpenType-based font family, designed to be a modern, humanist-style typeface. This is fitting because farming and sustainability is a big message with this project, at least in my mind. It's also very easy to read.

For color I mainly stuck with Black and White, with a little hint of green in some places to represent the logo I made. Again, going with a minimalist style to help make things easier to read and easier to find. The green i chose has a hex code of #7CCE44 Which looks like this! This is the only green I chose for this project as it makes for consistency.

Throughout the entire project, most of the text is written in 12px font. Headers are running at 40px big. Other than that, font sizes stayed really consistent throughout.

## **Feedback Received**

#### Week 1 + 2

The first two weeks worth of feedback was immensely helpful. At this time, myself and the other classmates have decided to work alone on our projects which meant that my original scope had to be scaled down tremendously. Make it more one-sided rather than including the customer end of the website where they could purchase from farmers, etc. This feature can be a side project of sorts but is too large for one person to make within ten weeks.

#### Week 3

During week 3, I continued to receive feedback and criticism. This time it was about the flow of the website, how many clicks will it take to reach a specific page, where the buttons should be placed on the website, etc. This week I reworked my MarvelApp prototype to better condense my website and allow for most of the functional hub to be in one page. This includes the Inventory itself, the adding of crops and the searching / sorting of crops with pagination. This was immensely helpful as the website definitely was shaping to be a lot cleaner and clear in message.

### Week 4

During Week 4, Most of the feedback given was from Jay and was mostly about this document. Giving the document more information about the project was necessary to be able to keep the scope and vision of the project a priority. This includes the User Personas, the choices of design like fonts and colors and creating a flowchart for how the website flowed together.

## **Status Reports**

### Week 1

#### This week I worked on

- 1. Brainstorming ideas about Capstone Projects with my fellow classmates, ultimately making a decision to work on my own.
- 2. Wrote out a proposal for said project and also started a documentation of my progress for Jay's class (which works with this class as well.)

### In the upcoming week I plan to

- 1. Continue with said documentation to gather my thoughts and progress
- 2. Gather any more information needed before starting a prototype
- 3. Starting a prototype.

#### Impediments / roadblocks

1. Deciding to go solo or with a group. My idea for my capstone project is personal and I believe I wouldn't have budged on any other idea, however I was and still am open to partners and help from my fellow classmates.

#### This week I worked on

- 1. Scaling down the scope of my project and finding a middle ground of what I want for this project.
- 2. Ultimately deciding that I'm going for a farmer focused approach and not doing transactions for my project.
- 3. Building a wireframe for this project using MarvelApp.

### In the upcoming week I plan to

- 1. Continue with said documentation to gather my thoughts and progress
- 2. Gather any more information needed before starting a prototype
- 3. Starting a prototype.

### Impediments / roadblocks

1. Deciding to scale down was difficult for myself as I had greater ambition, but after seeing what scaling can do and using the Agile method I was able to prioritize this project to be able to be done within our 10 week timeframe.

#### This week I worked on

- 1. Receiving feedback on my project and deciding the next course of action
- 2. Updating my prototype

## In the upcoming week I plan to

- 1. Update my prototype
- 2. Start working on the code

## Impediments / roadblocks

1. Continuing to scale down the scope of my project and reworking the prototype to better fit the info needed down to fewer pages.

#### This week I worked on:

- 1. Receiving feedback from both Jay and Scott about my "final" wireframe of the project before coding.
- 2. Reworked the MarvelApp prototype to better suit the scope of my project, I feel that I have reached a comfortable level.
- 3. Updating my Documentation of the project with more detailed sections and clarification of users and user personas.

#### In the upcoming week, I plan to:

- 1. Begin coding my project.
- 2. Receive more feedback about code
- 3. Continue updating my Documentation

#### Impediments / Roadblocks:

1. None this week so far, Most of the feedback was aimed towards the documentation and adding more information about the project.

- Begin coding, creating tables and creating the login functionality
- Adding more info on the documentation

#### This week I worked on:

- Completing/Finalizing the prototype of my project, allowing me to begin the coding stages.
- Began the coding stages, created the tables needed for this project as well as gathering notes to figure out where to start tackling the project.

## In the upcoming week, I plan to:

• Continue coding the project.

#### **Roadblocks:**

None yet.

- Began early coding stages
- Created SQL tables
- Continue Working on the documentation as I go along.
- Creating the functioning login page to work with the table.

### This week I worked on:

- Starting to create the login/page page
- Populating and preparing tables.

### In the upcoming week, I plan to:

- Begin working on the home page
- Complete the login/ registration page.

#### **Roadblocks:**

• None so far, I do fear the login function being a little difficult though.

- Populated Tables
- Complete Login Function

#### This week I worked on:

Finishing the login functionality, worked on the aesthetics of it

Began working on the home page/the central hub.

## In the upcoming week, I plan to:

Complete functionality of the home page

#### **Roadblocks:**

Login was a bit tough to work with but I managed to fix the issue on the DB side of things to allow logging in.

- Login functionality
- Complete functionality of the home page

#### This week I worked on:

Worked on the home page which includes table, add/update/del/search features. Users will be able to view their inventory here and be able to add to the table. The user will also be able to delete crops from the table on this same page. The page will also feature a search-sort feature to better refine their inventory. Users will also be able to update the information on the table, such as updating the quantity of a crop, the date it was added, etc.

#### In the upcoming week, I plan to:

Finish up the aesthetics of each page as well as finishing touches. I also plan to present my project week 10.

#### Roadblocks:

At home internet issues caused a bit of a slowdown but i managed to work around it in time.

- Login and Registration functionality
- Complete the home page. More specifically, add/update/delete/search functions on the page as well as adding the inventory table.
- Final aesthetic changes
- any other finishing touches.