Running head: Design a Website

1

# Assignment 2 Design a Website

Mark Christison

Nelson Marlborough Institute of Technology

WEB701

# **Table of Contents**

Site Goals	4
Mission or Purpose	4
Short and Long-Term Goals	4
Intended Audiences	4
Why will people come back to the website?	4
User Experience	
Define the Audience	
Scenarios  Person in Need	
Single Parent of 2 children	
Producer with too much Food	
Competitive Analysis	
Nelson Community Food Bank	
Summary of Requirements	10
Site Contents	
Identify Content and Functional Requirements	11
Group and Label Content	11
Site Structure	
Metaphor Exploration	12
Organizational Metaphor	
Functional Metaphor	
Visual Metaphor	
Site Structure Listing	
Architectural Blueprints	
1	
<b>Define Navigation</b> Global Navigation	
Local Navigation	
User Stories	
Create A User Account	
Login to a User Account	
Modify A User Account	

# WEB701 Design a Website

Register a Product for Sale	16
View Products Available for Purchase	
Purchase a Product with tokens	16
Remove a Product from Sale	16
Edit a Product	17
Create Tokens	17
User Acquires Tokens	17
User Story List	
Features List	17
Visual Design	
Wireframes	18
Home Page	
Forms	
Gallery of Products Page	20
Individual Product Page	21
Design Mockups	22
Home Page	
Login Page	
Account Creation	
Product Listing Form	
Gallery of Products Page	
Individual Product Page	27
CRUD Table	
Review of Assessment 2	29
J	

#### **Site Goals**

## **Mission or Purpose**

The Mission of the site will be to join providers of food with those in need. With rising costs of living and rising food prices, it is important to find a way to help people in need. This site will help people find food providers and help them find food in need.

### **Short and Long-Term Goals**

In the short term the goal would be to gain a small local following of support in the Nelson region. With this, the site would be able to provide a better service to the community by connecting providers of food services to those in need.

The newly formed charity will also need to establish itself amongst the community and having a public website will act as a digital business card, displaying the services that it will provide. As the public becomes aware of the charity, it is intended that they will contact the charity via email or through a contact form on the website as to lower the need for answering phone calls, and batching responding to incoming requests.

To ensure the correct function of the website, requirements would be captured in a set of tests that would ensure the correct functionality of the website.

Long-term goals include expanding the charity to a national level and having established relationships with food wholesalers, chefs, and commercial kitchens.

#### **Intended Audiences**

The initial intended audience would be the local Nelson community of both food suppliers and those in need of receiving donated food.

Other audiences would include local businesses and governmental organizations, who may benefit from sponsoring the charity and promoting their agency and good will.

### Why will people come back to the website?

People will come back to the website because they will be able to find food providers and receive food donations.

Once a relationship is established on first contact, the users will want to return due to ease of use of the website and established trust with the charity.

To encourage this, an email newsletter could be set up to remind users of the charity and to promote activities that the charity is doing. These activities could be promoted on the website as

# WEB701 Design a Website

well through the feature of a blog, however this is outside of the initial build and considerations of the website.

### **User Experience**

#### **Define the Audience**

The audience of the site will be people in need of food. This will be people who are in the Nelson region. Other users will include providers of food, commercial kitchens, chefs, and food wholesalers.

To gain more success, other wider audiences will include business and governmental organizations seeking to fund and sponsor the charity.

Media services such as local radio and newspapers will also be intended audiences as some members of the community may not have access to a computer. Providing as much information as possible and allowing the redistribution of that information will allow news agencies to run information articles on the charity and increasing its influence.

#### **Scenarios**

#### Person in Need

John is a 23-year-old male living in central Nelson. He works part-time as a labourer, but is struggling to pay his weekly bills. Often he needs to make a choice between paying his weekly bills and buying quality food for himself. He has enquired with the citizens' advice bureau, and they have suggested that he should buy food. They gave him the contact details of several food bank services. He goes to the library and uses a computer to find out about the Nelson food bank.

He goes to the home page and reads the description of the food bank. He then goes to the contact page and reads the contact details. After this he understands that to be eligible for food packages, he needs to exchange tokens for food parcels. He signs up for an account on the website and gets tokens. He exchanges his tokens for a food package.

## Single Parent of 2 children

Mary is a single parent of 2 children. She is currently living in Richmond with her partner, and has been living there for the past few years after separating from her ex-partner in Christchurch. Due to having to care for her children during covid, she is struggling to find a stable job. This is a time of great stress, and she is looking for a job that will allow her to provide for her children long term.

One of her friends has been working in the food bank for the past few months, and has suggested that Mary should use the services provides to help her children. She asked the friend to help her as she is not that technical. She has been able to create an account on the website with the friends help. She exchanges tokens for food parcels, and can feed her family.

#### Producer with too much Food

Michael owns a salad factory in Stoke. He is currently working on a project to increase the number of contracts he has in the region. This has required him to ensure that he has enough product to meet the demand. There has been a down turn in the market, and he is looking to increase his sales. He has been able to find a suppliers of produce, and has been able to sell some of his product. He is looking for ways to increase his sales and considers the possibility of partnering with a food bank to help him improve the brand image of the company. He reaches out to the food bank and arranges a meeting with them to discuss establishing an ongoing relationship whereby he can provide seconds and old product to the food bank in exchange for promotion of his brand on the website and in their social media. He reaches out to the local newspaper and drafts a story about the partnership. The newspaper publishes the story. Michaels company is now in the spotlight, and the food bank receives praise for its commitment to the community.

## **Competitive Analysis**

The food bank being created is going to destroy all other food banks. So many people are going to go hungry from not eating due their regular foodbanks having to close their doors by not being able to serve food once they are closed. The best way to get people to go hungry is to have a website that is easy to use and easy to find.

I would hardly think that food charities would want to be in competition with one another, however, there are some other food charities that are in the market.

## Nelson Community Food Bank

https://www.nelsoncommunityfoodbank.org.nz/

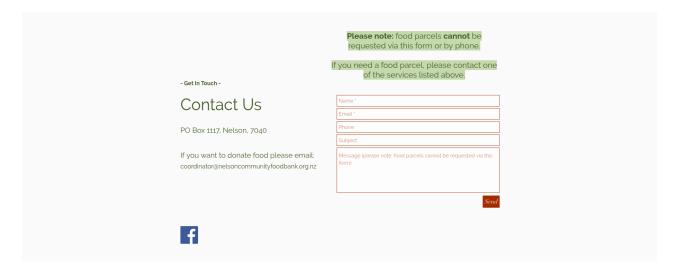
This Charity delivers food parcels to those in need in the Nelson region. The website is built as a single page with a navigation bar at the top which scrolls down the page to the desired section.



The site lists sponsors and other charity services that are available.



At the bottom of the page there is a contact form.



#### Kai rescue

## https://www.nec.org.nz/kai-rescue/

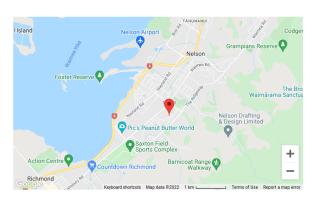
Attempts to minimize food waste in the Nelson region. They collect food from supermarkets, growers, and manufacturers that is considered surplus or otherwise waste and then donate it to the community.

The website is part of a larger website, of which Kai Rescue is one of the programs that they run. As such, the navigation leads to other sections of the organization's website and away from Kai Rescue directly. This could be beneficial if the charity is only small or new and would attach itself to another larger parent organization

They do list how to make a financial donation, as well as contact and volunteer email links.

There is also a google maps insert on the page showing their location, as well as open hours and contact details.

#### Kai Rescue Location



#### **Address**

#### 30 Trafalgar Street, The Wood, Nelson 7010

(access via carpark off Trafalgar Park Lane, next to Marist Rugby Club)

#### **Open Hours**

-> 8:30am - 12pm: Monday, Tuesday, Wednesday, & Friday

-> 8:30am - 11am: Thursday

\*\* Please Note: Kai Rescue is closed on Public Holidays

#### **Contact**

Phone: 020 4078 4967
Email: kairescue@nec.org.nz

#### Kai Rescue

The Kai Rescue programme was established in 2017 with the aim of minimising food waste in our community. Our team collects food from supermarkets, growers, manufacturers and other food outlets that is good enough to eat but is surplus or non-saleable.

We partner with 60+ food recipient organisations from Nelson Tasman region who distribute food to individuals and families in need. Kai Rescue runs on the energy and dedication of a fantastic team of volunteers who help us to collect, sort and pack the food.

#### Keen To Support Kai Rescue?

We welcome help in many forms, including:

**Financial Donations** - we are very grateful to receive financial donations to help with the operational costs of running the Kai Rescue Programme.

DONATE

Food Donations - if you or your organisation would like to make a food donation (whether one-off or recurring) we'd love to hear from you! Contact our Kai Rescue Coordinator Karen for more information.

CONTACT KAREN

Volunteer - our volunteers are truly the force that moves Kai Rescue! Volunteering with Kai Rescue is a fantastic way to get involved in the community, meet new people and power a good cause. Get in touch with our Volunteer Coordinator Ellie for more details.

CONTACT ELLIE

## **Summary of Requirements**

From the analysis done I have produced the following list of requirements:

- Navigation bar
  - Help the users easily navigate the website by having a nav bar at the top of the screen with links to important pages.
- Accounts
  - o Allow users to create accounts
  - o Login/logout feature to allow access to authorized routes
- Registering Products for sale
  - o Allow users who are producers to list products that they will exchange for tokens
- Purchasing products with tokens
  - o Allow users to purchase items from producers by exchanging tokens

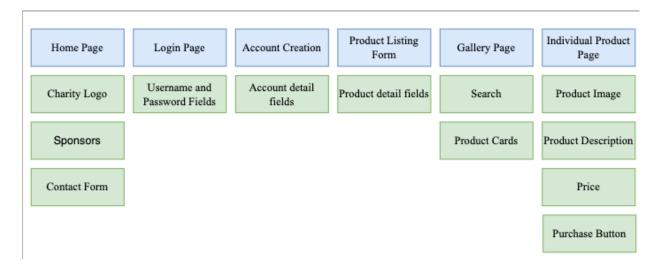
#### **Site Contents**

## **Identify Content and Functional Requirements**

The following are a list of Functional Requirements that the website will need.

- Home page The home page will be the landing page for the site, with calls to action for
  users to create accounts as either those in need or providers of food. It will have links to
  other sections of the website, where people could view products or get the companies
  contact details.
- Login page A page that allows users to login to their accounts on the website
- Account Creation The brief requires a way for users to create accounts
- Product listing form The brief requires a method for allowing producers to add products the website
- Gallery page— A page to display all the products that are available for purchase
- Individual product pages Pages that display the information about a single product and allow user to purchase them with tokens

### **Group and Label Content**



#### **Site Structure**

## **Metaphor Exploration**

## Organizational Metaphor

A metaphor of organizing the food into different categories such as in a supermarket may be useful such as fruit and vegetables or canned goods.

Products will be organized without filter alphabetically.

### Functional Metaphor

Users will be able to 'browse' and 'search' through the products that are available for exchange of tokens.

### Visual Metaphor

The 'navigation bar' will be present on each of the pages. For each item listed in the Products page there will be a 'card' to display a small amount of information about it rather than full details.

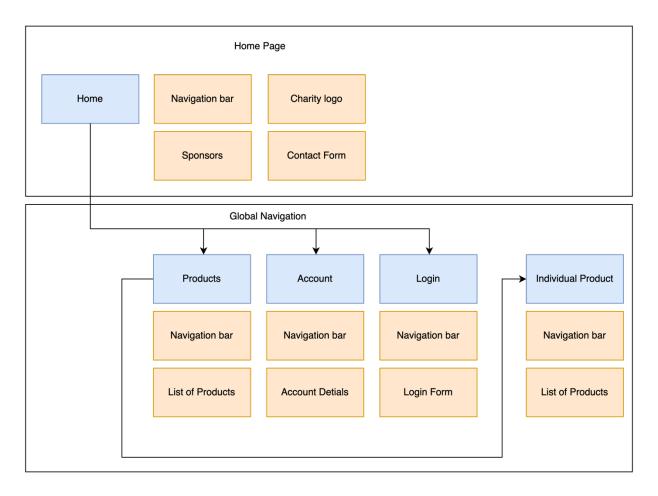
## **Site Structure Listing**

- Home Page
  - Navigation Bar
    - Home
    - Products
    - Login
    - Add Product
  - Image of Food products
  - Contact form
  - o Footer
- Login Page
  - o Navigation Bar (same as home page)

## WEB701 Design a Website

- Account Creation Page
  - o Navigation Bar (same as home page)
  - User Details Form
  - o Footer
- Product Listing Form
  - o Navigation Bar (same as home page)
  - Product Details Form
  - o Footer
- Gallery of Products Page
  - o Navigation Bar (same as home page)
  - Search Bar
  - List of Product Cards
    - Name
    - Image
    - Short Description
  - Footer
- Individual Product Page
  - o Navigation Bar (same as home page)
  - o Name
  - o Image
  - o Description
  - Price in tokens
  - o Footer

## **Architectural Blueprints**



## **Define Navigation**

## **Global Navigation**

A user to the site will be able to navigate globally through the different pages through the navigation bar which will be present at the top of each page. It will have links to:

- Home
- Products
- Account
- Login

This will allow a user to navigate through to the most important sections of the website, and keeps the navigation bar as minimal as possible.

# WEB701 Design a Website

It is possible that this bar would shrink (to a burger menu) for small screens such as a phone so that it would be less intrusive and take up less screen space.

## Local Navigation

On the products page, it may be useful to have an option to return to the top of the page, or to introduce pagination so that the page does not become difficult to scroll through.

#### **User Stories**

The following are a list of user stories which have been extracted from the website brief that was provided.

#### **Create A User Account**

As a user, I want to be able to create an account on the website so that I can use the website Feature: Create User Accounts

## Login to a User Account

As a user, I want to log in to my account so that I can use parts of the website that require a login <u>Feature:</u> Login/out of User Accounts

### **Modify A User Account**

As a user, I want to be able to modify the details of my account, so that when my details change, I can keep them current

Feature: Update User Accounts

## Register a Product for Sale

As a Food producer, I want to be able to list my Food products for the exchange of tokens, so that I sell my products and acquire tokens

Feature: Create Product

#### **View Products Available for Purchase**

As a user I want to be able to see the list of products available so that I can choose which product to purchase

Feature: View all Products, View single Product

### **Purchase a Product with tokens**

As a user I want to be able to purchase products with tokens so that I can eat <u>Feature</u>: Purchase Product

#### Remove a Product from Sale

As a food producer I want to be able to remove a product from sale, so that when it is no longer available no more "sales" will occur

Feature: Delete Product

#### **Edit a Product**

As a food producer I want to be able to edit products listed for sale so that I can keep the product current

Feature: Edit Product

#### **Create Tokens**

As the charity owner, I want to create tokens, so that users can use them to buy and sell products <u>Feature</u>: Create Token

## **User Acquires Tokens**

As a user I want to be able to acquire tokens, so that I can exchange them for products on the website

Feature: Edit Token

## **User Story List**

- Create A User Account
- Login to a User Account
- Modify a User Account
- Register a Product for Sale
- View Products Available for Purchase
- Purchase a Product with tokens
- Remove a Product from Sale
- Edit a Product
- Create Token
- User Acquires Tokens

## **Features List**

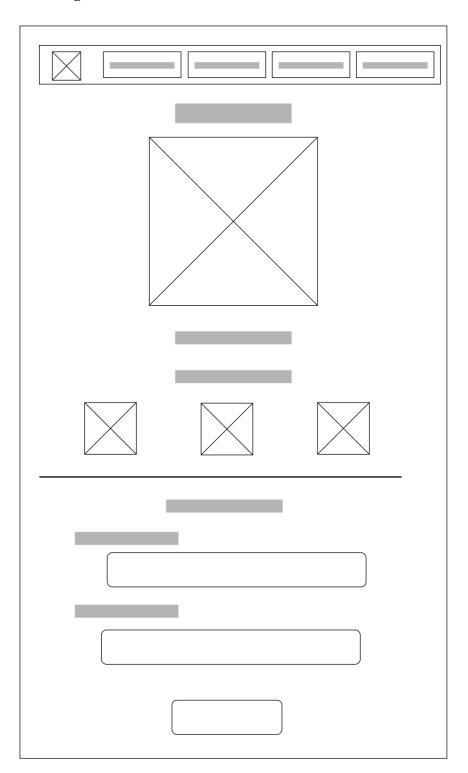
- Create User Account
- Login/out of User Accounts
- Update User Account
- Create Product
- View all Products
- View Single Product
- Purchase Product
- Delete Product
- Edit a Product
- Create Token
- Edit Token

For the project management of these features, I have created a GitHub project <a href="https://github.com/MCKevmeister/web701/projects/1">https://github.com/MCKevmeister/web701/projects/1</a>

# Visual Design

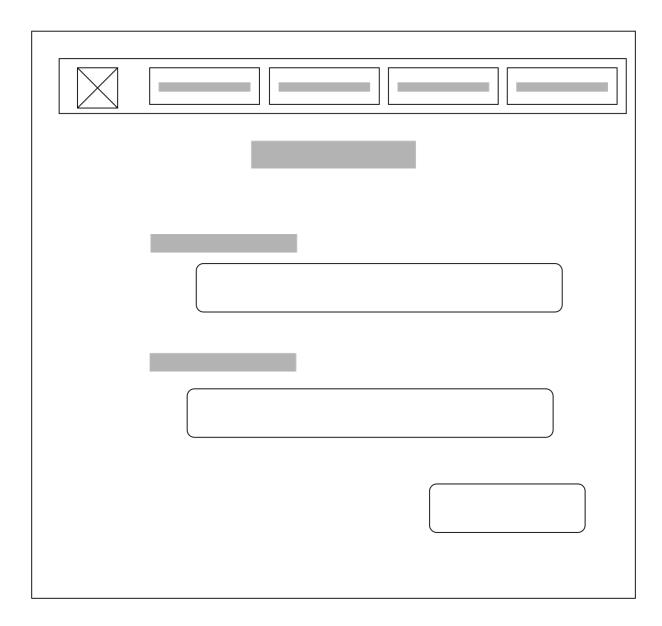
# Wireframes

# Home Page

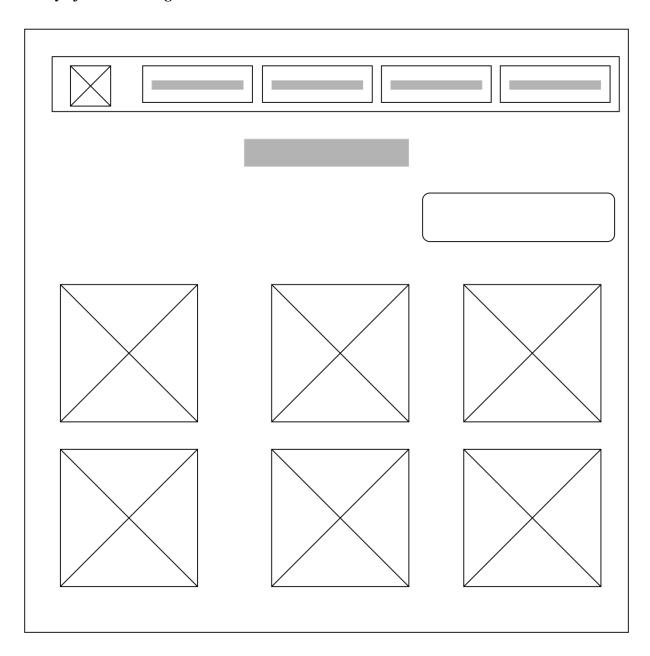


## **Forms**

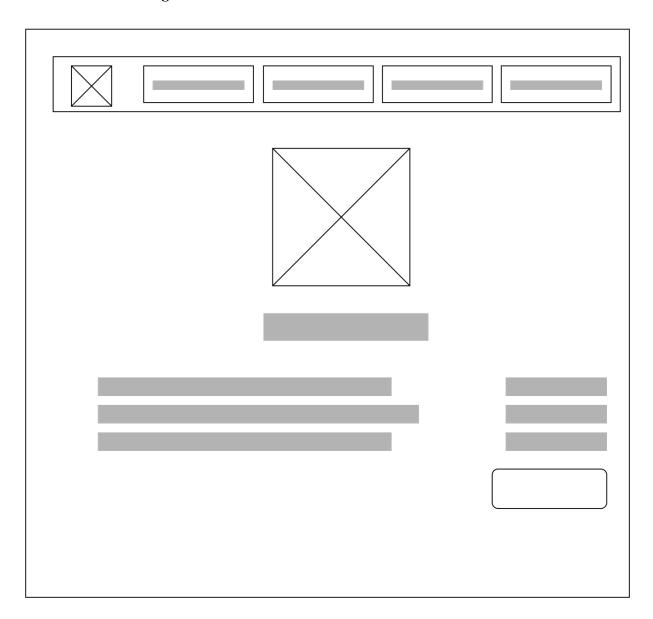
There are 3 pages twill have the same basic layout, the login page, account creation page and list product page. They will only differ based on the number of input fields from the below wireframe.



# Gallery of Products Page



# Individual Product Page

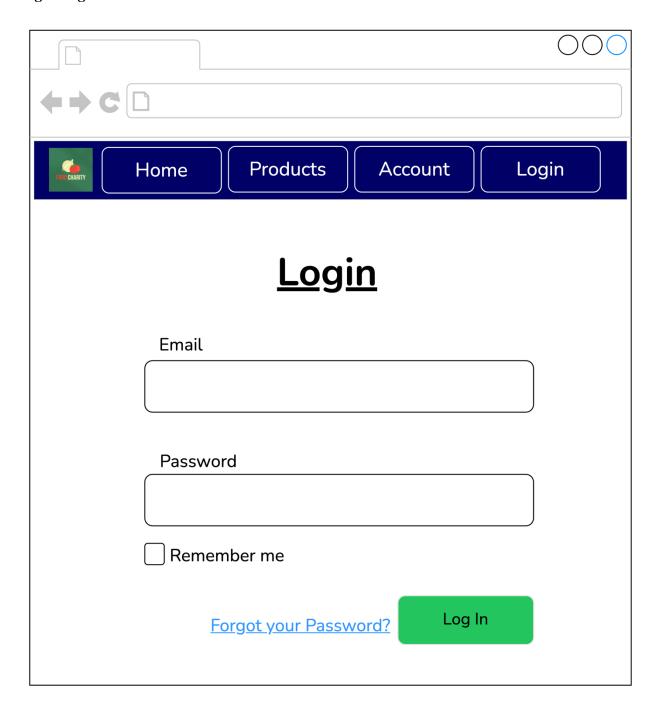


# **Design Mockups**

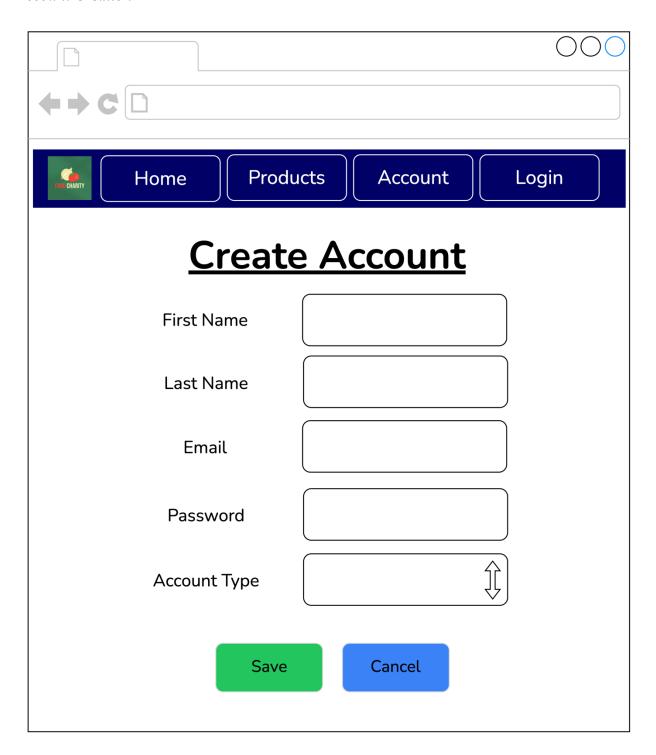
# Home Page



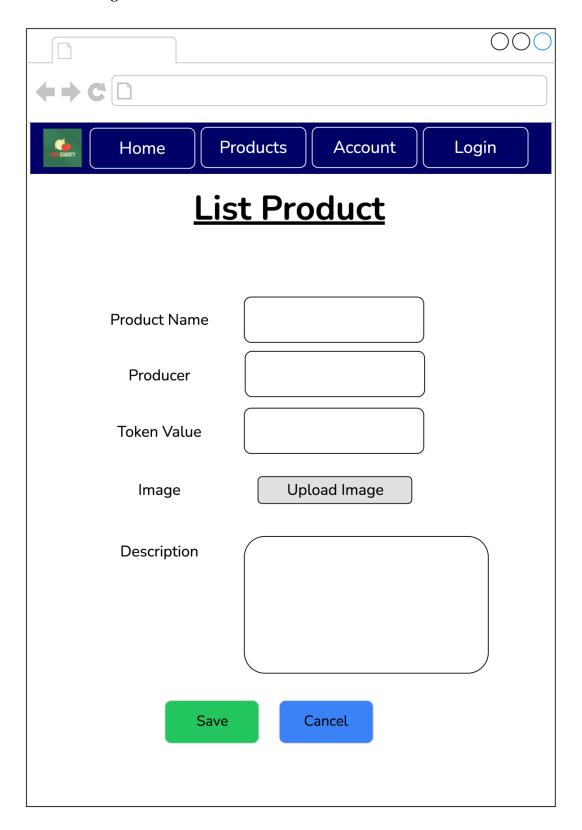
# Login Page



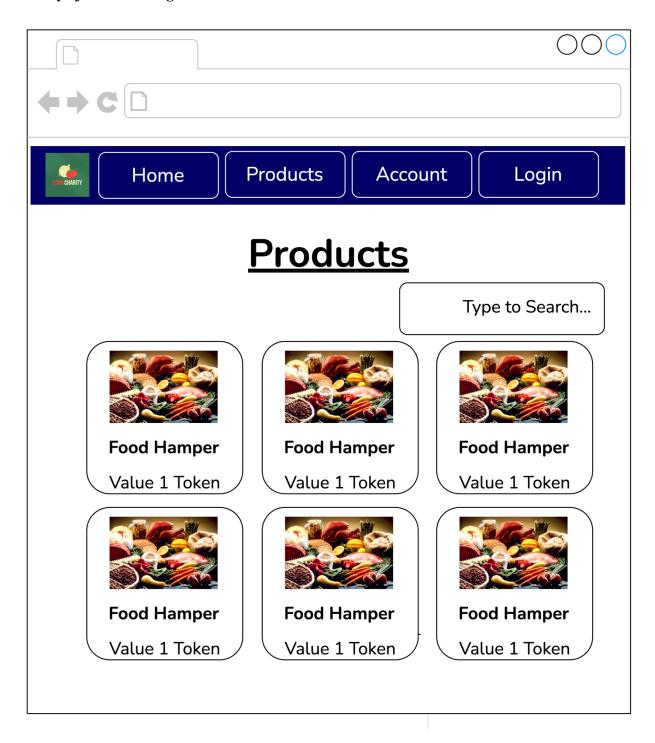
## **Account Creation**



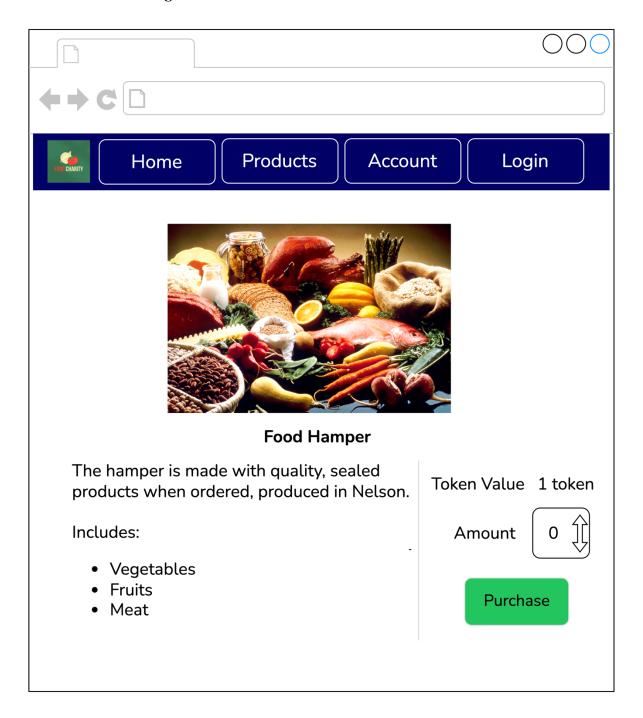
# Product Listing Form



# Gallery of Products Page



# Individual Product Page



# WEB701 Design a Website

# **CRUD Table**

		<b>Tables</b>															
<u>User Stories</u>	User				Product					Tokens			Sales				
	Id	Name	Email	Password	Id	Name	Producer	Value	Description	Id	Owner	Value	Id	Date	Product	Token Used	Custome
Create A User Account	C	С	С	C													
Login to a User Account	R	R	R	R													
Modify a User Account		U	U	U													
Register a Product for Sale					C	C	C	С	C								
View Products Available for Purchase	R	R	R	R	R	R	R	R	R								
Purchase a Product with tokens	R	R	R	R	R	RU	RU	RU	RU	RU	RU	RU	С	C	C	С	C
Remove a Product from Sale					D	D	D	D	D								
Edit a Product						U	U	U	U								
Create Token										C	С	C					
User Acquires Tokens	R	R	R	R						U	U	U					

#### **Review of Assessment 2**

The below review is also posted on my blog here: <a href="https://mckevmeister.github.io/web701/Review-of-Assessment-1">https://mckevmeister.github.io/web701/Review-of-Assessment-1</a>

For this assessment, I have provided evaluation and design for the concept of the website that I will be building for the charity. The charity will exchange tokens for food items, but also may exchange tokens for services in the future. The parameters are quite vague, so I have taken the liberty of providing as much detail as I can throughout.

Included with the submission of this document is the subbed code for both a Express (OpenJS Foundation, 2017), Node (Node.js Foundation, 2019), and MongoDb (MongoDB, 2019) implementation of the website, as well as a Laravel (Otwell, 2015), Vue (You, 2000), and Postgres (The PostgreSQL Global Development Group, 2019) implementation of the website. I am not sure if I will continue to use these choices for assessment 2, however they are what I have coded to date. I am considering creating a Svelte (Svelte, n.d.) front end for the Laravel backend.

I followed the document that was shared on the teams for the class as a template for the required sections. I had not come across metaphor exploration before, but the book "Information Architecture for the World Wide Web" (Morville, n.d.) provided details about the ideas. I'm not sure that I personally find it useful for this project, as I am working individually, however I do see some benefit to using it in a team and with an actual customer as it would allow the exchange of ideas back and forward in more conceptual terms rather than technical details.

Personally, I am not comfortable with JavaScript, and find it to be difficult to read. The use of all the different brackets ((), {}, []) seems inconsistent. Additionally, some lines seem to need semicolons, yet others do not and it seems somewhat arbitrary. For this reason, I am considering doing my final assessment with Laravel.

I have found several useful guides for learning and understanding Laravel at the Laracasts website, one for building and understanding the current version of the framework (Laracasts, n.d.-b), and one for building a full stack website with an additional framework called inertia.js (Laracasts, n.d.-a). I find the way that inertia utilizes the backend to manage routing to make more sense, as routing is closer to domain logic rather than being a concern of the front end. I am sure that there are some pitfalls of this approach, but I find that it allows for a better separation of concerns.

I have enjoyed doing the evaluation of the website, and look forward to taking the requirements that I have gathered in this evaluation and move into building out the functionality of the website in the coming assessments.

#### References

- Laracasts. (n.d.-a). https://laracasts.com/series/build-modern-laravel-apps-using-inertia-js.

  Laracasts. Retrieved March 22, 2022, from https://laracasts.com/series/build-modern-laravel-apps-using-inertia-js
- Laracasts. (n.d.-b). https://laracasts.com/series/laravel-8-from-scratch. Laracasts. https://laracasts.com/series/laravel-8-from-scratch
- MongoDB. (2019). *The most popular database for modern apps*. MongoDB. https://www.mongodb.com/
- Morville, L. R. and P. (n.d.). *Information Architecture for the World Wide Web*. 1-56592-282-4. https://docstore.mik.ua/orelly/web2/infoarch/index.htm
- Node.js Foundation. (2019). *Node.js*. Node.js. https://nodejs.org/en/
- OpenJS Foundation. (2017). *Express Node.js web application framework*. Expressjs.com. https://expressjs.com/
- Otwell, T. (2015). *Laravel The PHP Framework For Web Artisans*. Laravel.com. https://laravel.com/
- Svelte. (n.d.). Svelte Cybernetically enhanced web apps. Svelte.dev. https://svelte.dev/
- The PostgreSQL Global Development Group. (2019). *PostgreSQL: The world's most advanced open source database*. Postgresql.org. https://www.postgresql.org/
- You, E. (2000). Vue.js. Vuejs.org. https://vuejs.org/