Kitchen Story

Phase 4 Frontend Project

Nia Kelley Jester

October 2022

Instructor: Sonam Soni

Project Overview

- **Kitchen Story** is an e-commerce portal that lets people shop for basic food items on their website using Angular. It enables users to search and buy the available products. You are not required to connect to a backend (i.e. Spring Boot). You can use JSON data or hard coded arrays for the application.

- Required Technical Components

IDE: Visual Studio Code

Programming Language: Angular

JSON

HTML

CSS

Bootstrap

- Optional Technical Components

spring BOOT

Core Concepts Demonstrated (page 1:2)

- **Angular Framework**
  - Demonstrate component-based architecture to build responsive single page application
  - Interpolation & Dependency Injection
  - Implemented Angular Directives
    - Component
    - Structural (`ngIf, ngFor`)
    - Attribute (`ngClass`)
  - Implemented various types of binding
    - Property Binding
    - Class Binding
    - Style Binding
    - Binding to User Input Events
    - Two-Way Binding (forms)
  - Built-in and Custom Pipes
  - Defined services to implement business logic
  - Implement the Angular routing mechanism
  - Responsive Forms for User input and validation

Core Concepts Demonstrated (page 2:2)

- Implement **Node Package Manager (NPM)** via Node.js
- **Bootstrap**
  - Utilized bootstrap design templates for some interface components
- **HTML**
  - Used to create content for webpages
- **CSS**
  - Used to format and style webpages (still working on developing these skills)
- **JSON Data**
  - Hardcoded JSON data for each product, tag, and User in the Kitchen Story application

User Roles

User/Customer that provides the following features:

- ☑A search form on the home page to allow entry of the food items to be purchased by the customer.
- ☑Based on the item details entered, it will show the available food items with their respective prices.
- ☑Once a person selects an item to purchase, they will be redirected to the list of available items.
- ☑On the next page, they are shown the complete breakout of the order and details of the payment to be made in the payment gateway.
  - ✓ Checkout Button
  - ✓ Products Number Shown
  - ✓ Cart items shown
  - ✓ When payment is made, they are shown a confirmation page with details of the order

User/Customer functionality not implemented for this release (ran out of time):

- Fully functional login feature
- Logout Feature

Admin User with the following features:

- ☑A add a new product to the master list of all the food items available for purchase
- ☑A functionality remove a product form the master list of items

Admin functionality not implemented for this release (ran out of time):

- Admin change password page where the admin can change the password after login
- Login/Logout Feature

Project Management

Project Overview	
Client	Simplilearn
Consultant	Nia Kelley Jester Full Stack Java Developer
Application Name	Kitchen Story
Application Phase	Prototype
Phase 4 Project Deliverable	E-commerce portal that let's people shop for basic food items on the Kitchen Story website.

Project Management – Code Development	
Project Code Duration	4 Weeks (20 working days)
Planned Start Date	Monday, September 5, 2022
Planned Finish Date	Friday, September 30, 2022
Number of Sprints	4
Planned Sprint Duration	1 Week (5 working days)
Total Number of Product Backlog Items	35

Project Documentation	
Planned Start Date	Monday, Oct 3, 2022
Planned Finish Date	Friday, Oct 7, 2022

Total Project Hours (Actual)	**78 Hours**

Sprint 1: User Stories/Product Backlog

Product Backlog ID		Role	Scenario	Backlog Item (User Story)	Story Points	Assigned Sprint
	1.1.1	Customer/Admin	Home Page	The Kitchen Story Logo will serve as the home page link on the navigation bar.	Small	1
	1.1.2	Customer/Admin	Home Page	The Home Page will display all of the items in the Kitchen Story avaiable for purchase	Small	1
1.2		Customer	Register as new user	The Customer can register as a new user using a registration form	Medium	1
1.5		Customer	Proceed without logging in	The customer can proceed as a guest without logging in to the application	Small	1
	3.1.1	Customer	Individual Product Page	Each individual product page will show the product price	Medium	1
	3.1.2	Customer	Individual Product Page	Each individual product page will have a button to add the product to the shopping cart	Small	1
	3.1.3	Customer	Individual Product Page	Each individual product page will have a button to continue shopping by taking the Customer back to the home page	Small	1
	4.1.1	Customer	Product Tags	Each product can have a tag/category (hard-coded for this release)	Small	1

Sprint 2: User Stories/Product Backlog

Product Backlog ID		Role	Scenario	Backlog Item (User Story)	Story Points	Assigned Sprint
1.3		Customer	Customer Login	The customer can login to the Kitchen Story application using a 'login' link (hard coded for a specific user for this version of the application)	Medium	2
	2.1.1	Customer	Search Form	A search form on the home page to allow entry of the food items to be purchased by the customer.	Medium	2
	2.1.2	Customer	Search Form	The search form will uncover any product matches. The customer has the option to go to the individual product page.	Small	2
	2.1.3	Customer	Search Form	If the search does not find any matches, the Customer will be notified by a appropriate message.	Medium	2
	5.1.1	Customer	Shopping Cart page	The shopping cart page will have the ability to change the quantity of each individual product	Small	2
	5.1.2	Customer	Shopping Cart page	The shopping cart page will have the reflect the total price of cart	Small	2
	5.1.4	Customer	Shopping Cart page	The shopping cart page will have the ability to remove an item from the cart	Medium	2
	5.1.5	Customer	Shopping Cart page	Each shopping cart page will have a button to proceed to the checkout page	Small	2
	5.1.6	Customer	Shopping Cart page	Each shopping cart page will have a button to continue shopping by taking the Customer back to the home page	Small	2

Sprint 3: User Stories/Product Backlog

Product Backlog ID		Role	Scenario	Backlog Item (User Story)	Story Points	Assigned Sprint
	4.1.2	Customer	Tags Feature from the Home Page	The home page will have all of the tags/cagetory and show the total number of products that are in that category	Medium	3
	4.1.3	Customer	Tags Feature from the Individual Product Page	Each product page will have a tags/category button. When pressed, it will filter the product list for the products that belong in the category.	Medium	3
	5.1.3	Customer	Shopping Cart page	The shopping cart page will have the reflect the total number of items in the cart	Medium	3
	6.1.1	Customer	Order Details	Customer is shown a order details page, that includes the item count, order total, ordered items, and a button to proceed to payment.	Medium	3
	6.1.2	Customer	Order Details	Customer can not update item quantity from the order details page.	Small	3
	6.1.3	Customer	Order Details	The products shown in the order details page are not hyperlinked to the individual product pages.	Small	3

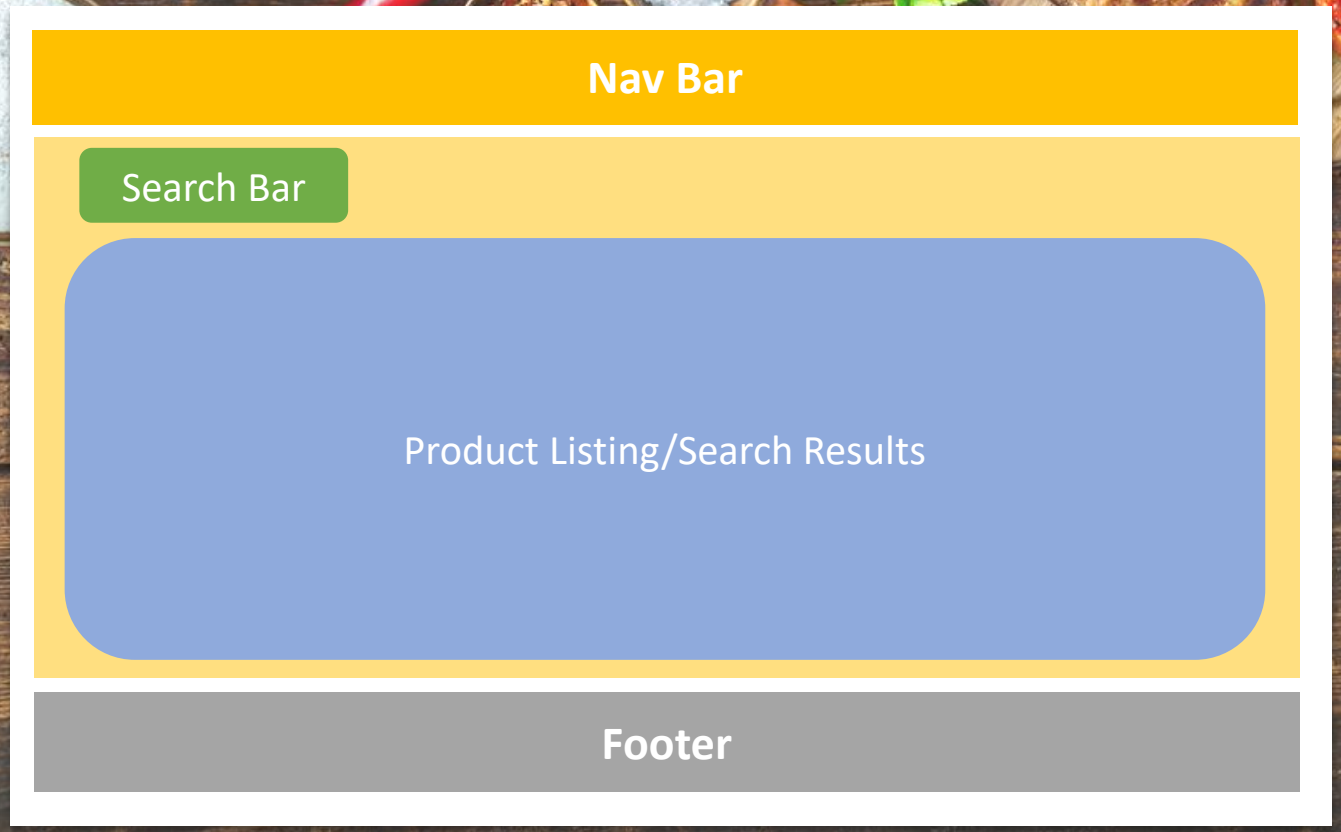
Sprint 4: User Stories/Product Backlog

Product Backlog ID		Role	Scenario	Backlog Item (User Story)	Story Points	Assigned Sprint
	7.1.1	Customer	Payment	Once the order is paid for, the Customer will receive a message in the application stating that the order is confirmed and payment has been processed.	Small	4
	7.1.2	Customer	Payment	Once payment has been processed, the Cart is cleared	Small	4
	8.3.1	Admin	Add new product	A add a new product to the master list of all the food items available for purchase	Medium	4
	8.3.2	Admin	Delete produt	A functionality remove a product form the master list of items	Medium	4

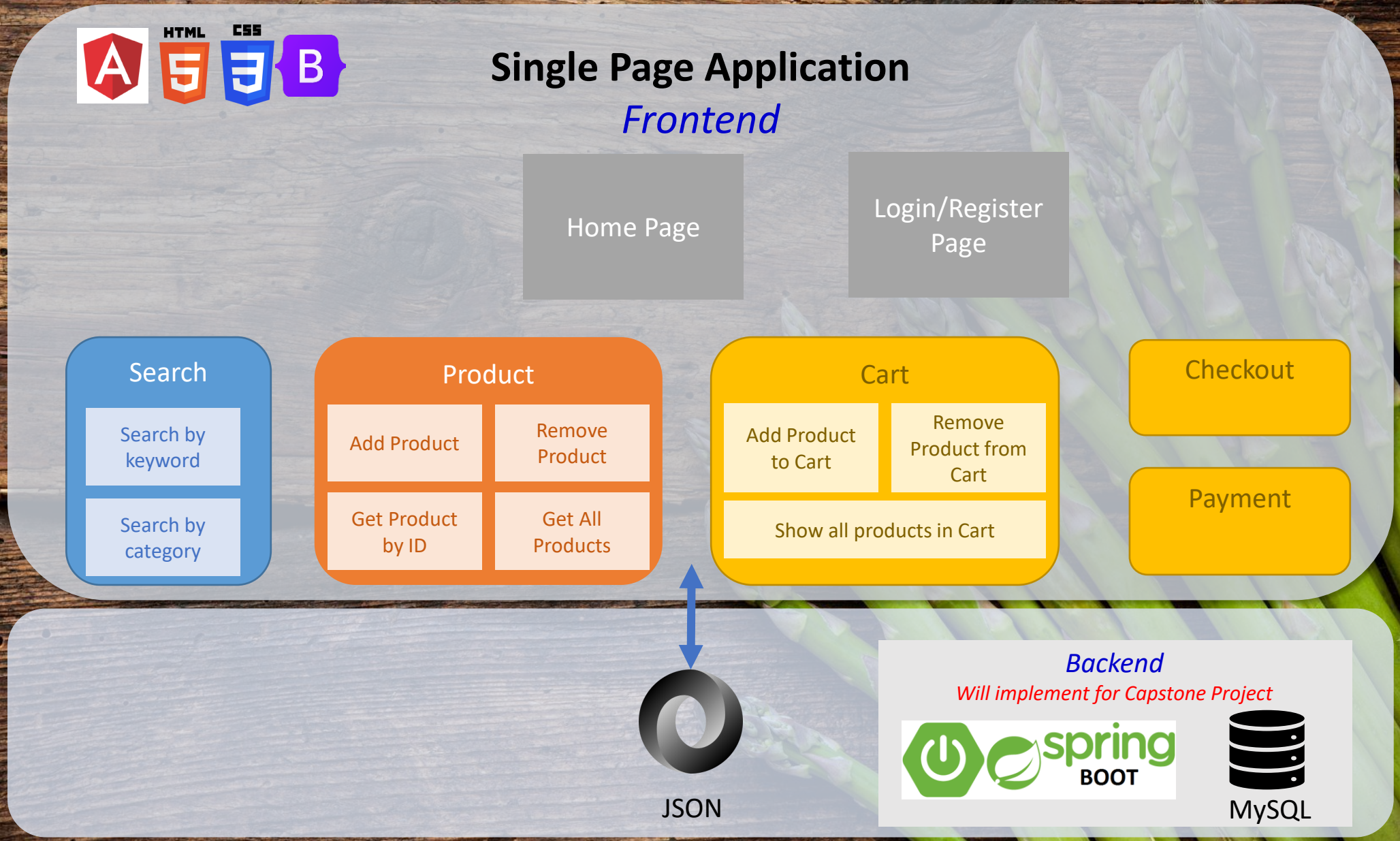
Ran Out of Time: User Stories/Product Backlog

Product Backlog ID		Role	Scenario	Backlog Item (User Story)	Story Points	Assigned Sprint
	1.3.1	Customer	Customer Login	Once a Customer is logged in, the "Login" navbar should no longer be visible	Medium	5
1.4		Customer	Customer Logout	User can logout of the application	Small	5
	1.4.1	Customer	Customer Login	Once a Customer is logged in, a "Logout" link should be visible on the navbar	Medium	5
	8.1.1	Admin	Admin Login	Admin can login to the application	Medium	5
	8.1.2	Admin	Admin Logout	Admin can logout of the application	Medium	5
	8.2.1	Admin	Admin Menu	The Admin menu lists services that an Admin User can perform	Medium	5
	8.2.2	Admin	Admin Menu	The Admin menu is not visible unless an Admin User is logged in	Medium	5
	8.3.3	Admin	Change Password	Admin change password page where the admin can change the password after login	Medium	5

High Level App Design: Kitchen Story



High Level Program Flow



Kitchen Story App Logos

App Color Palette

Palette

1

F8AD9D	FBC4AB	FFDAB9	DB5461	F87666

- https://coolors.co/palette/f8ad9d-fbc4ab-ffdab9-db5461-f87666

Kitchen Story Code

Git Repository

All code for this project can be found at the following link:
https://github.com/niakelleyjester/simplilearn-projects

Kitchen Story Application Layout

Due to application size, only a few screenshots are shown herein. However, here is the directory structure of my Kitchen Story application:

File Edit Selection View Go Run Terminal Help

java-simplilearn-fsd-phase4-frontend

EXPLORER

OPEN EDITORS

app.module.ts phase 4 project - kitchenstory\kitch... M

JAVA-SIMPLILEARN-FSD-PHASE4-FRONTEND

- phase 4 project - kitchenstory \ kitchenstory
  - .angular
  - .vscode
  - node_modules
  - src
    - app
      - forms
      - models
      - pages
      - services
      - widgets
      - app-routing.module.ts M
      - app.component.css
      - app.component.html M
      - app.component.spec.ts
      - app.component.ts M
      - app.module.ts M
      - truncate.pipe.ts A
    - assets
    - environments

OUTLINE

- AppModule

TIMELINE app.module.ts

- Staged Changes now
- File Saved 1 day
- Workspace Edit 2 days
- File Saved
- Workspace Edit

app.module.ts M

phase 4 project - kitchenstory > kitchenstory > src > app > app.module.ts > ...

```
import { NgModule } from '@angular/core';
import { BrowserModule } from '@angular/platform-browser';

import { AppRoutingModule } from './app-routing.module';
import { AppComponent } from './app.component';
import { HomeComponent } from './pages/home/home.component';
import { HeaderComponent } from './widgets/header/header.component';
import { ProductComponent } from './models/product/product.component';
import { FooterComponent } from './widgets/footer/footer.component';
import { TruncatePipe } from './truncate.pipe';
import { SearchComponent } from './widgets/search/search.component';
import { FormsModule, ReactiveFormsModule } from '@angular/forms';
import { TagsComponent } from './widgets/tags/tags.component';
import { ProductPageComponent } from './pages/product-page/product-page.component';
import { CartPageComponent } from './pages/cart-page/cart-page.component';
import { NotFoundComponent } from './widgets/not-found/not-found.component';
import { StarRatingModule } from 'angular-star-rating';
import { RegisterComponent } from './forms/register/register.component';
import { CheckoutPageComponent } from './pages/checkout-page/checkout-page.component';
import { OrderConfirmationComponent } from './pages/order-confirmation/order-confirmation.component';
import { LoginComponent } from './forms/login/login.component';
import { LoginService } from './services/login/login.service';
import { AddProductComponent } from './forms/add-product/add-product.component';
import { RemoveProductComponent } from './forms/remove-product/remove-product.component';
import { ResetPasswordComponent } from './forms/reset-password/reset-password.component';

@NgModule({
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
polyfills.js          | polyfills     | 315.34 kB |
main.js               | main          | 244.89 kB |
runtime.js            | runtime       |   6.52 kB |

                      | Initial Total |   3.44 MB

Build at: 2022-10-07T16:34:48.912Z - Hash: eb4ddf5cd6b68058 - Time: 10652ms

** Angular Live Development Server is listening on localhost:4200, open your browser on http://localhost:4200/ **


√ Compiled successfully.
```

Product Interface

TS product.ts U ×

phase 4 project - kitchenstory > kitchenstory > src > app > models > TS product.ts > Product > brand

```
1   //Define an interface to represent a product
2   //An interface is a simple class that contains properties
3   //The Product Interface will enforce the structure of the Product object
4   export default interface Product{
5       productId: number;
6       imageUrl: string;
7       productName: string;
8       price: number;
9       brand: string;
10      rating: number;
11      numOfReviews: number;
12      description: string;
13      favorite:boolean;
14      organic:boolean;
15      tags:string[];
16  }
```

Hardcoded JSON Data – Product Array

product.service.ts U

phase 4 project - kitchenstory > kitchenstory > src > app > services > product > product.service.ts > ProductService > getAllProducts > price

```
66
67    //Returns an array of Product Objects
68    getAllProducts(): Product[]{
69      return [
70        {
71          productId:1,
72          imageUrl: "/assets/images/basil.webp",
73          productName: "Organic Basil",
74          price: 3.07,
75          brand: "H□E□B Organics",
76          rating: 3,
77          numOfReviews: 715,
78          description: "Our H□E□B Organic Fresh Basil has about 1/2 CUP Chopped within the package! TIP: Toss fresh basil directly into salads, or chop &
79          favorite: false,
80          organic: true,
81          tags: ["herbs", "produce"]
82        },
83        {
84          productId:2,
85          imageUrl: '/assets/images/Bonipaks-Celery-Hearts.jpg',
86          productName: 'Celery Hearts',
87          price: 2.84,
88          brand: 'Bonipaks',
89          rating: 4,
90          numOfReviews: 645,
91          description: "Crunchy organic celery, perfect for any soup, sandwich mix, or snack. Celery hearts are what we're used to eating: they're the te
92          favorite: false,
93          organic: true,
94          tags: ['vegetables', 'produce', 'snack']
95        },
96        {
97          productId:3,
98          imageUrl: '/assets/images/DavesKillerBreadOrganicPowerseed.jpg',
99          productName: 'Organic Powerseed Bread',
100         price: 6.16,
101         brand: "Dave's
```

Hardcoded JSON Data – Users Array

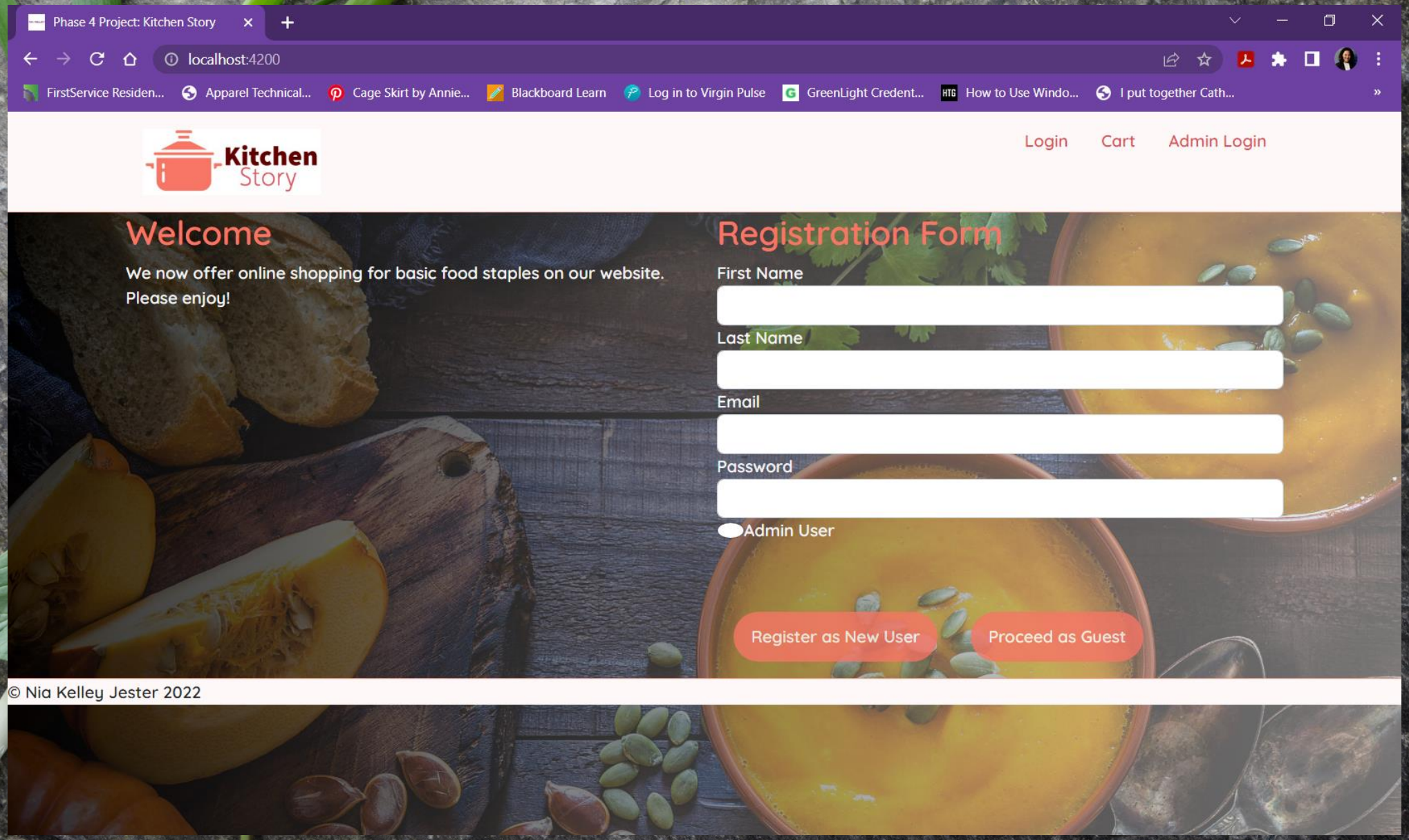
kitchenstory > src > app > services > user > TS user.service.ts > UserService

```
/* ****************************************
 * Method Name: setUsers()
 * Access Type: public
 * Input Parameters: none
 * Return Type: User[] array
 * Purpose: Set the dummy list of users
 * ****************************************** */
setUsers():User[]{
  return [
    {
      userId:1,
      name:"Nia Jester",
      username:"niakelley",
      password:"admin123",
      address:{
        streetNumber:123,
        streetName: "Predule Way",
        suite:"",
        city:"Dallas",
        state: "Texas",
        country: "USA",
        zipcode:"31932"},
      email: "iamtheadmin@home.com",
      isAdmin: true
    },
    {
      userId:2,
      name:"Leanne Graham",
      username:"Bret",
      password:"abc123",
      address:{
```

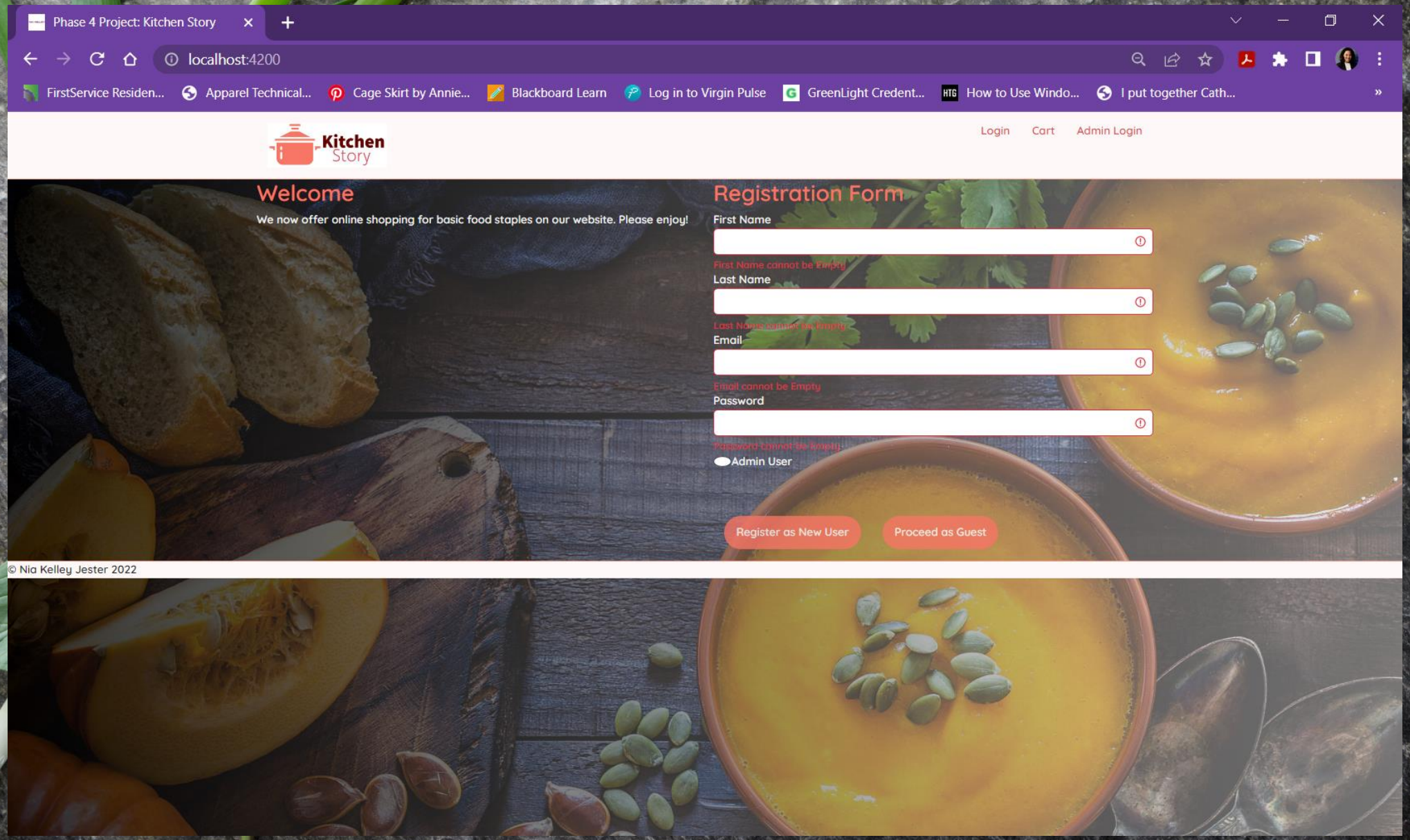
Application Screenshots

Kitchen Story

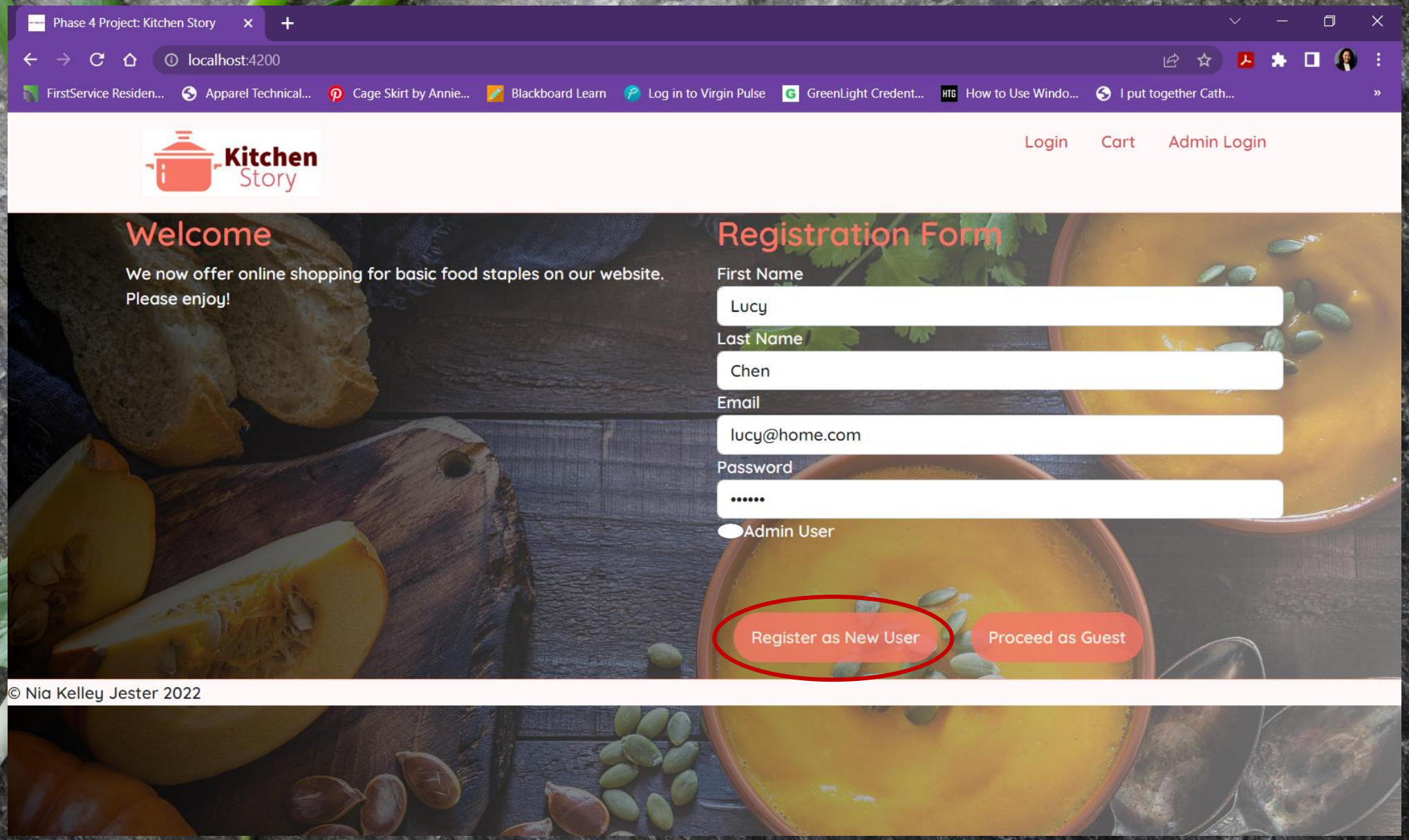
Landing Page



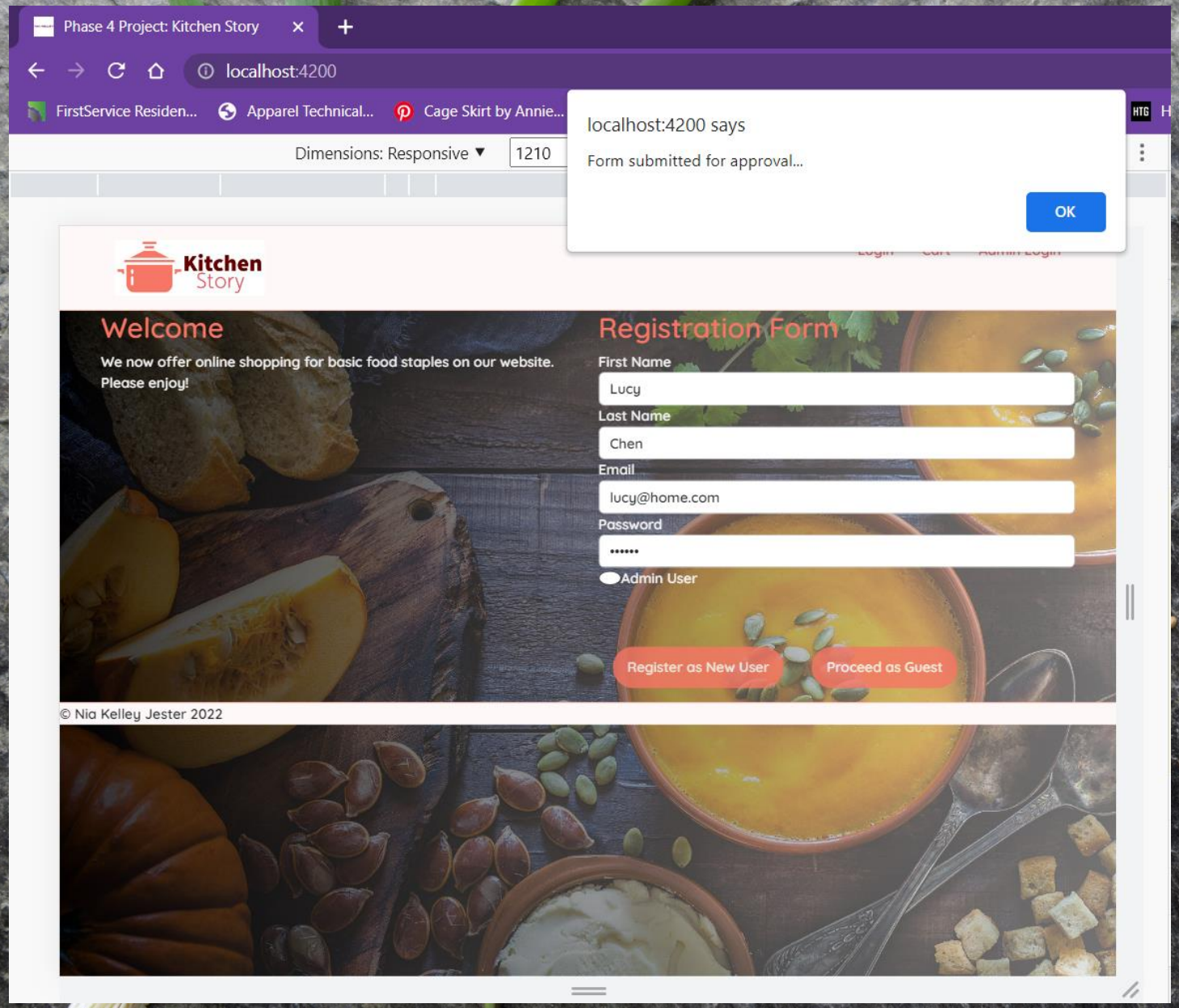
Register Form with Validation



Registration Form



Registration Form

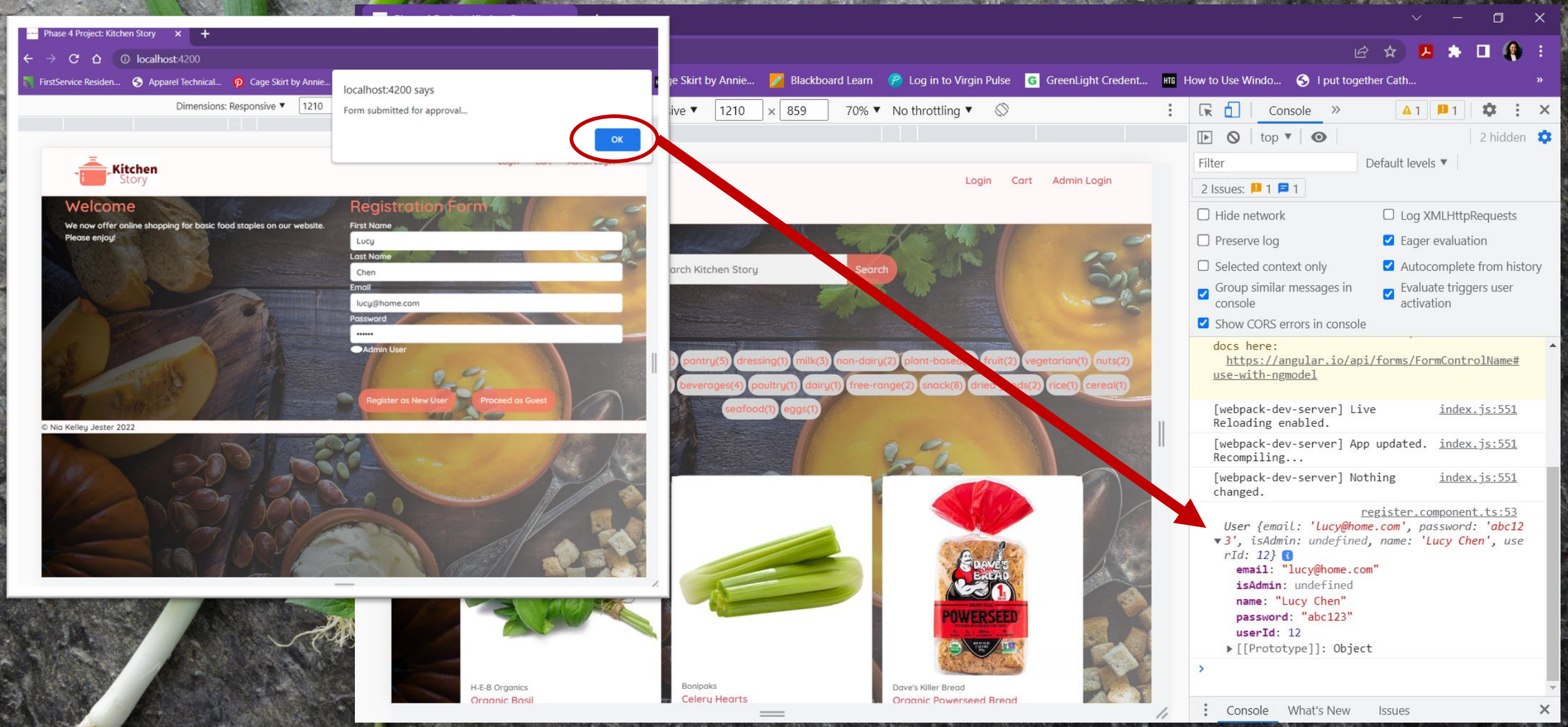


register.component.ts U

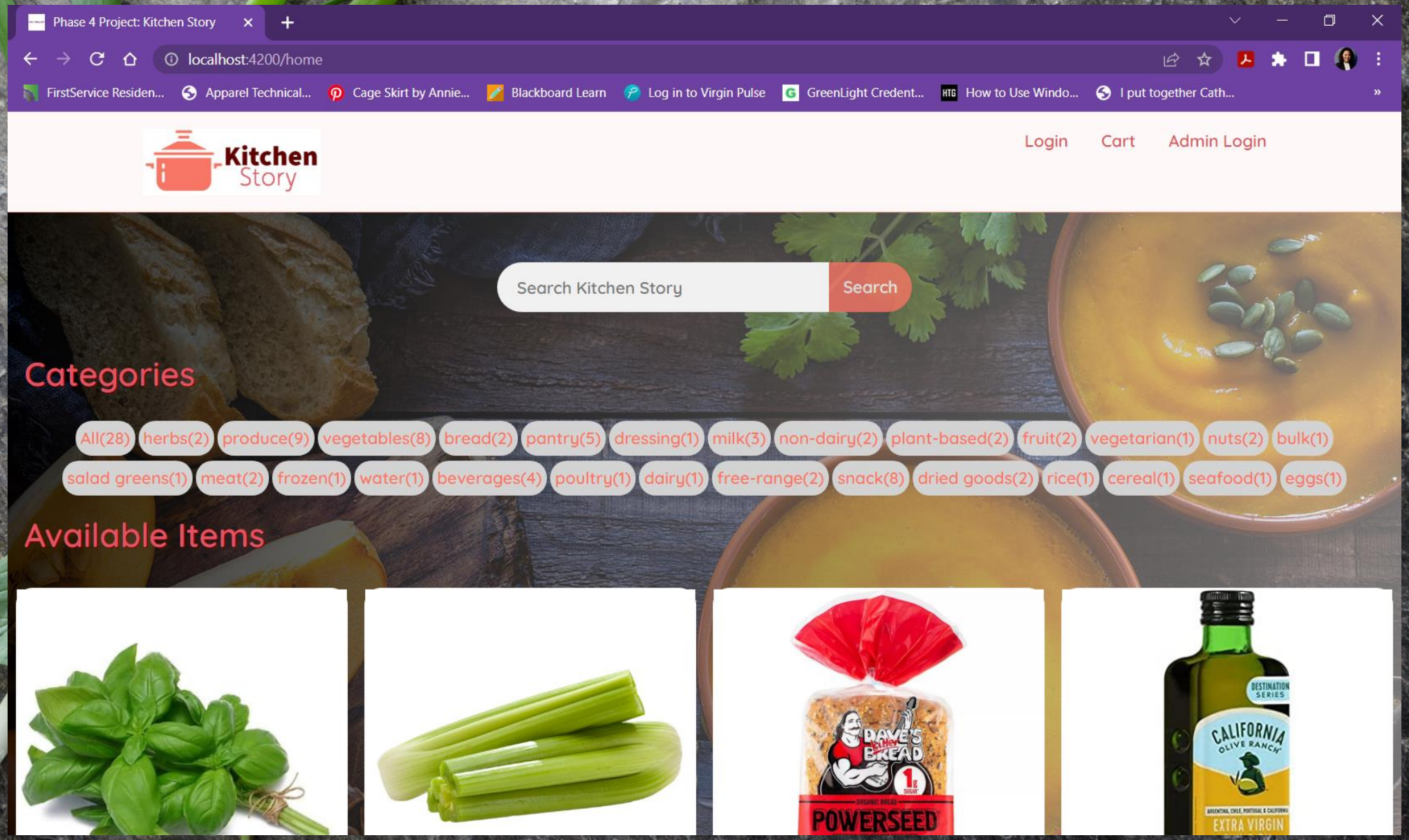
kitchenstory > src > app > forms > register > register.component.ts > ...

```
35    }
36
37    //method to get all of the form controls
38    get form(){
39      return this.registerForm.controls;
40    }
41
42    onSubmit(){
43      this.submitted = true;
44      if(this.registerForm.invalid)
45        return; //don't allow the user to submit the form
46      else{
47        alert("Form submitted for approval...")
48        this.newUser.name = this.registerForm.get('firstName')?.value + " "
49                            + this.registerForm.get('lastName')?.value;
50        this.newUser.userId = this.refineUserData(this.newUser);
51        this.userService.addUser(this.newUser);
52        this.isLoggedIn = true;
53        console.log(this.newUser);
54        this.userService.setUser(this.newUser);
55        this.router.navigate(['/home']);
56      }
57    }
58
59    refineUserData(u:User){
60      u.userId = this.userService.userCount;
61      return u.userId;
62    }
63
64    onChange($event:any){
65      return this.newUser.isAdmin ? false : true;
66    }
67
68  }
69
```

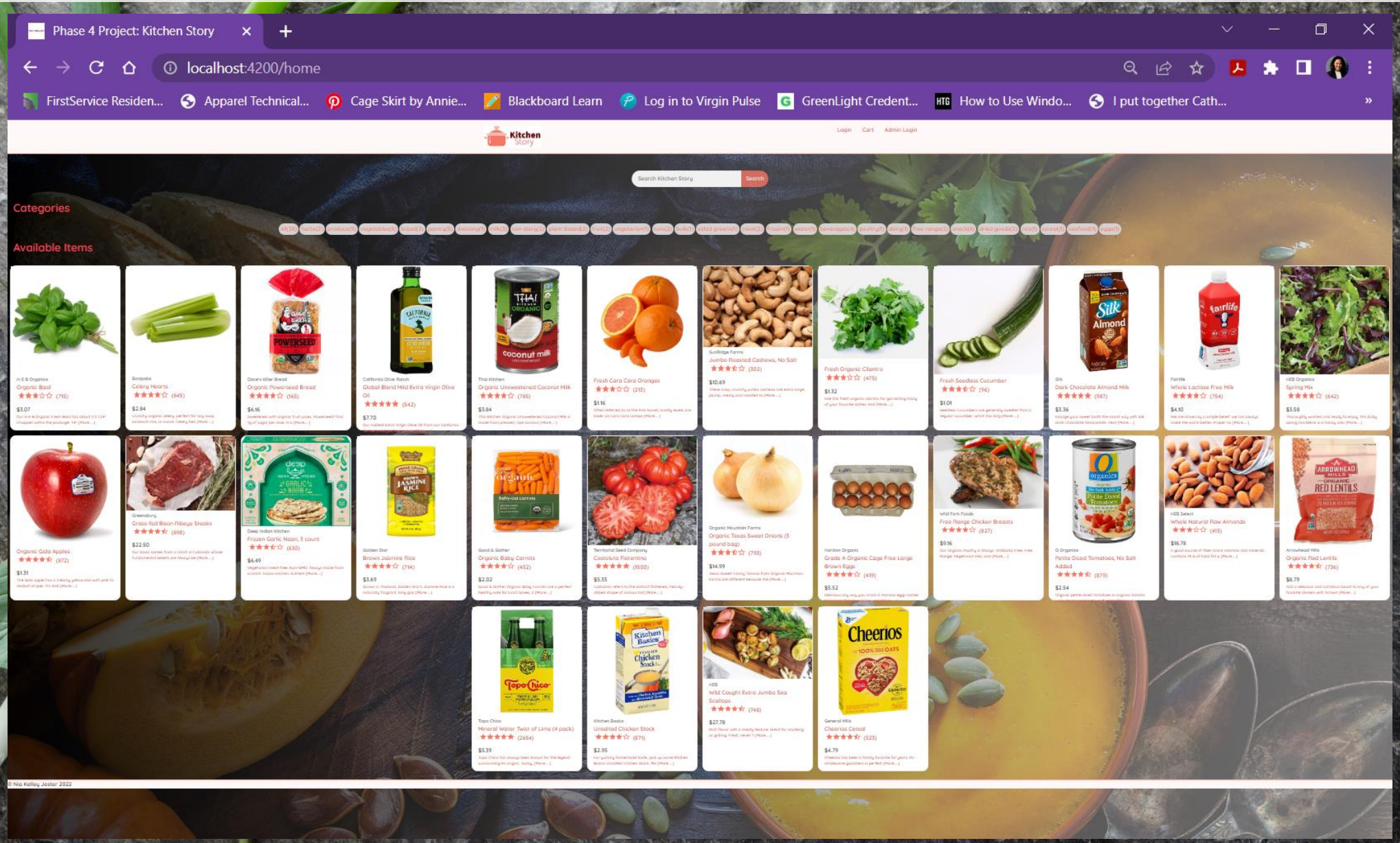
Registration Form



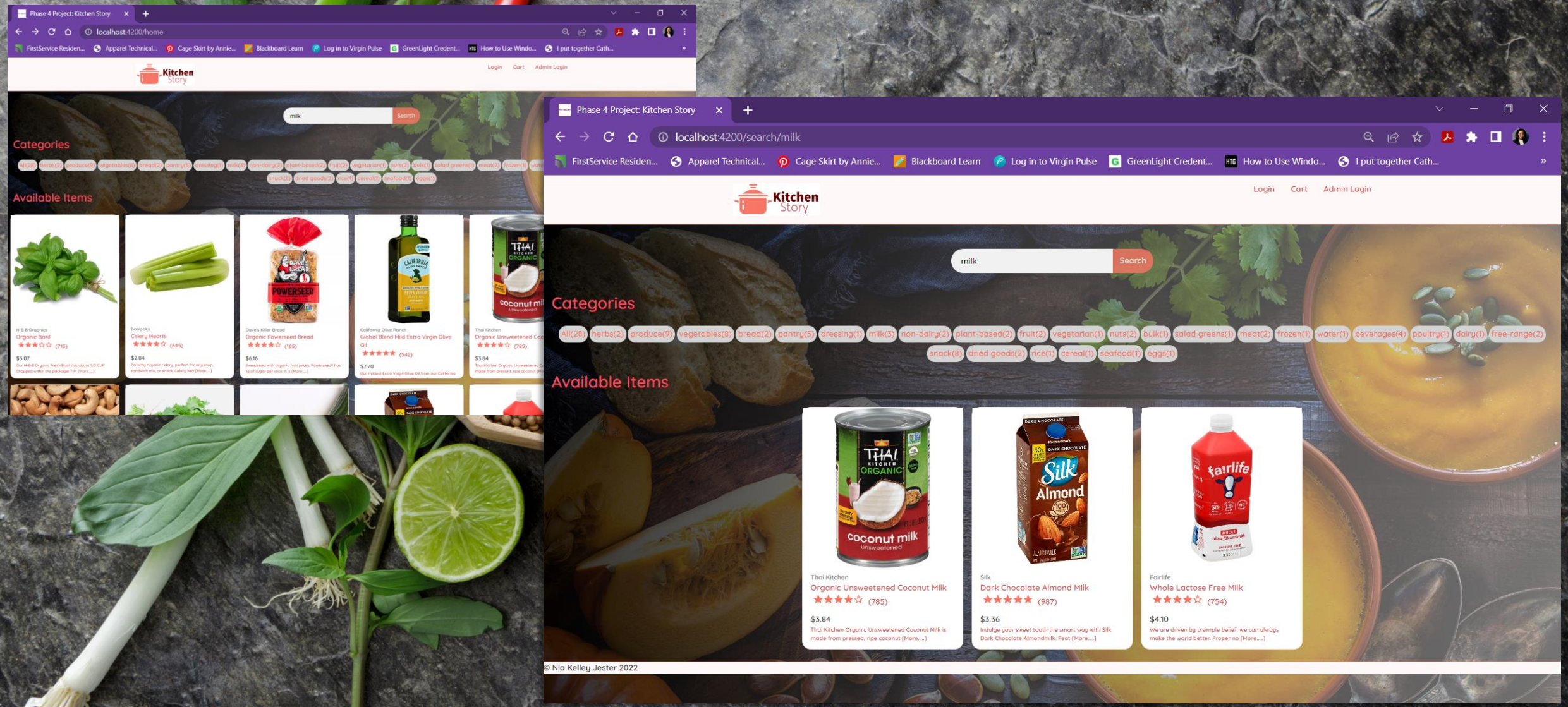
Home Page (with 100% Zoom)



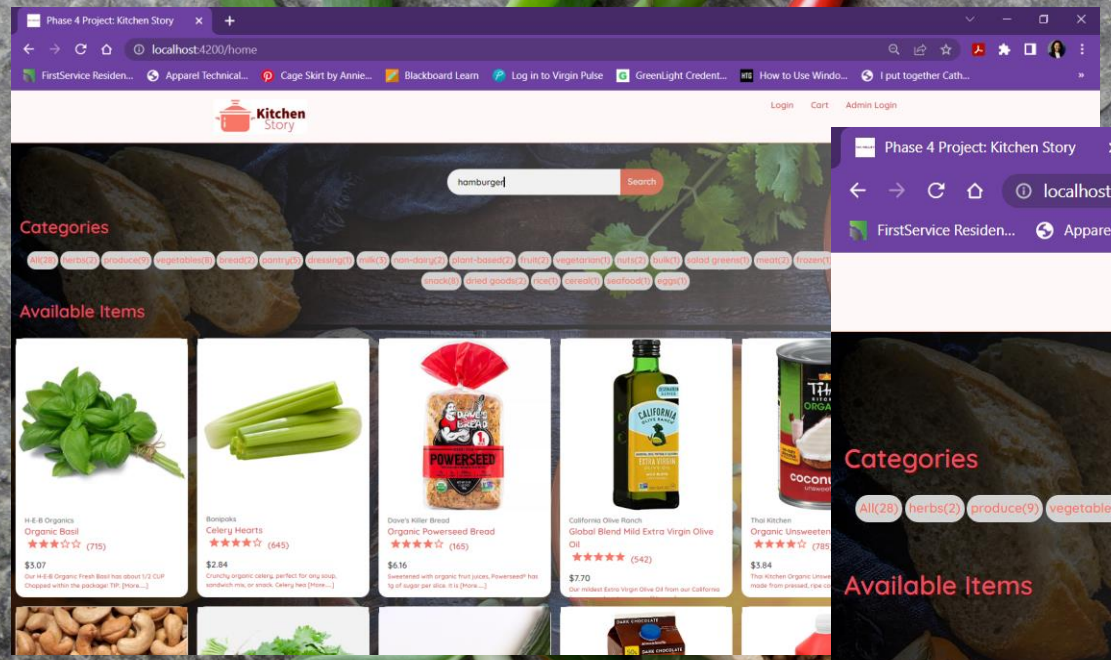
Home Page (with 50% Zoom)

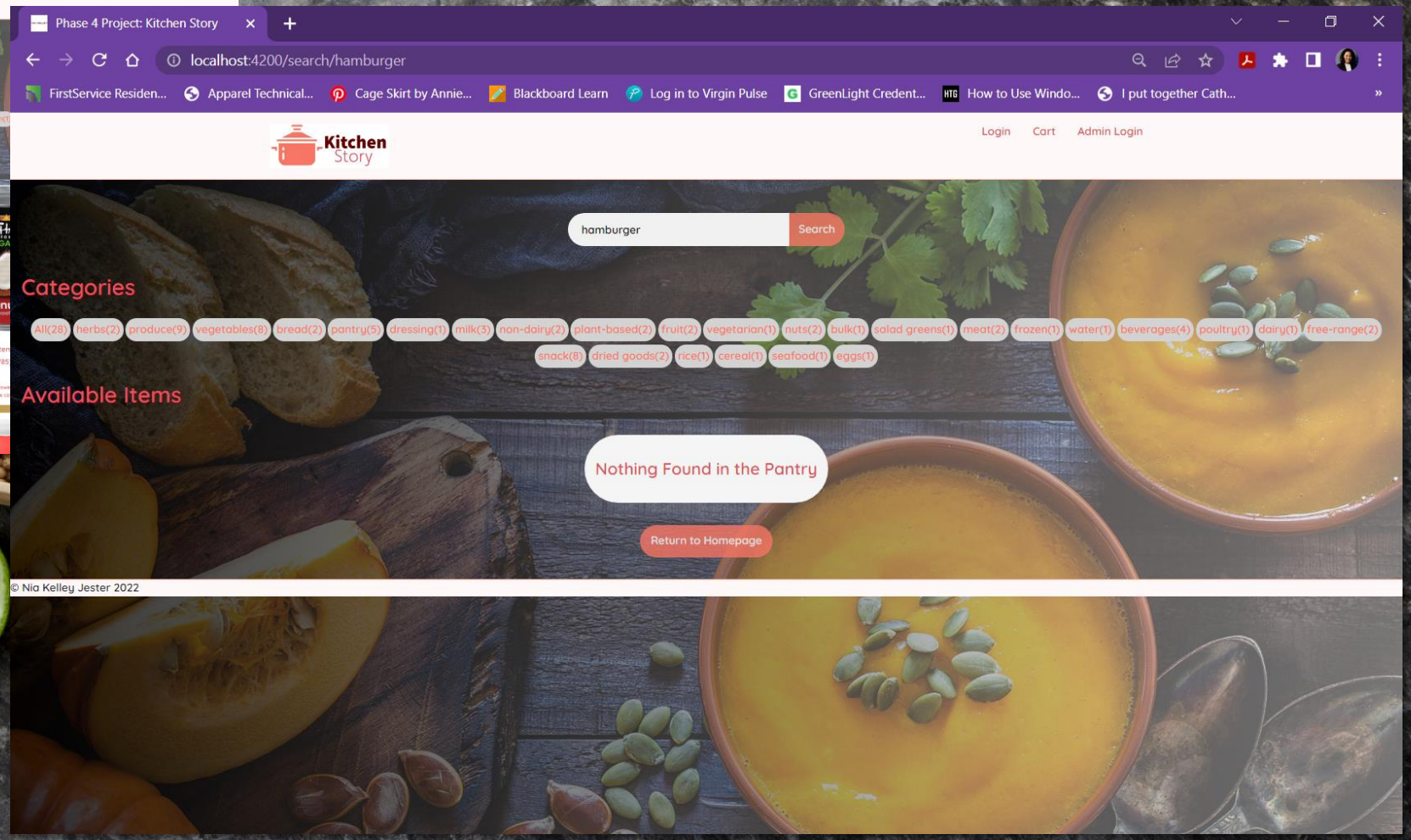


Search Page – Item Found

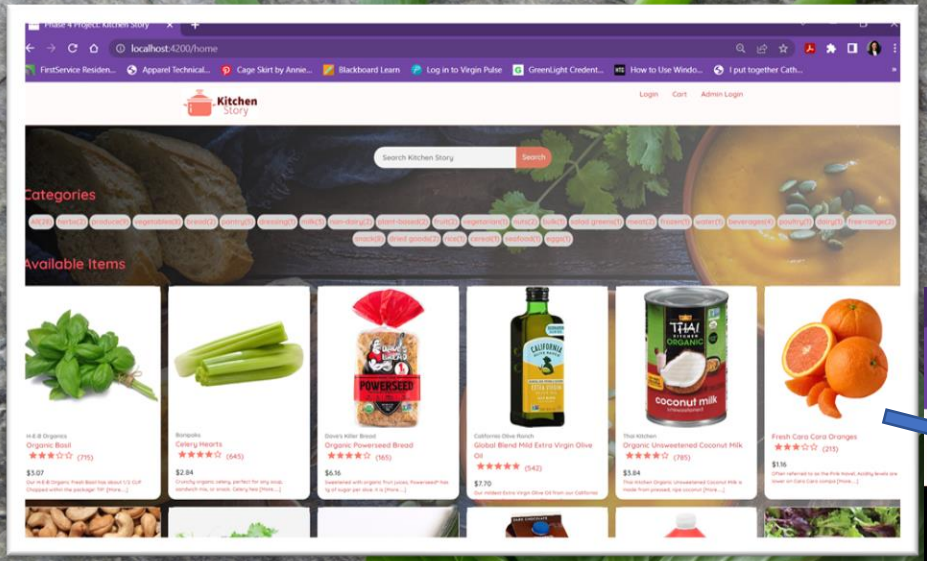


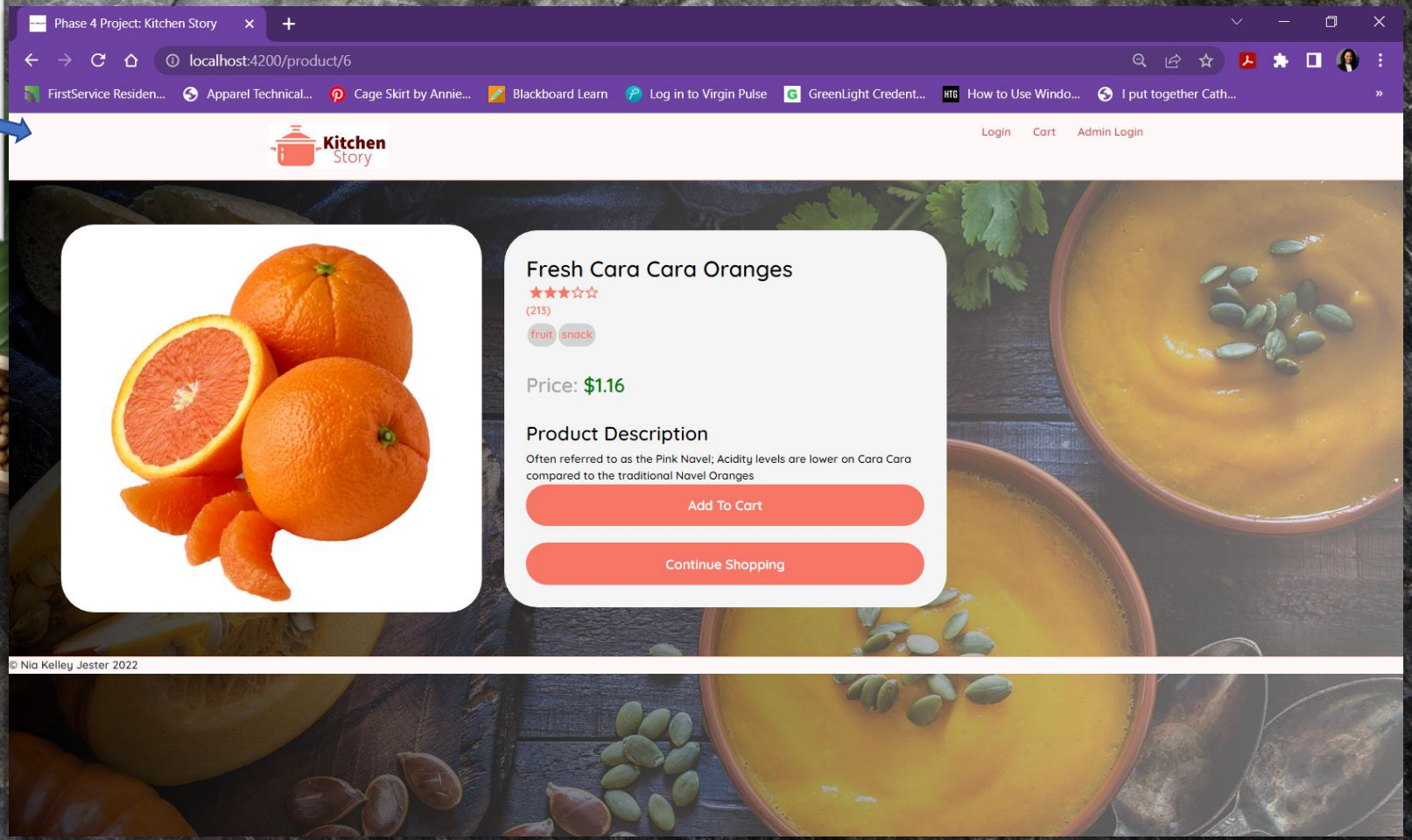
Search Page – Item Not Found



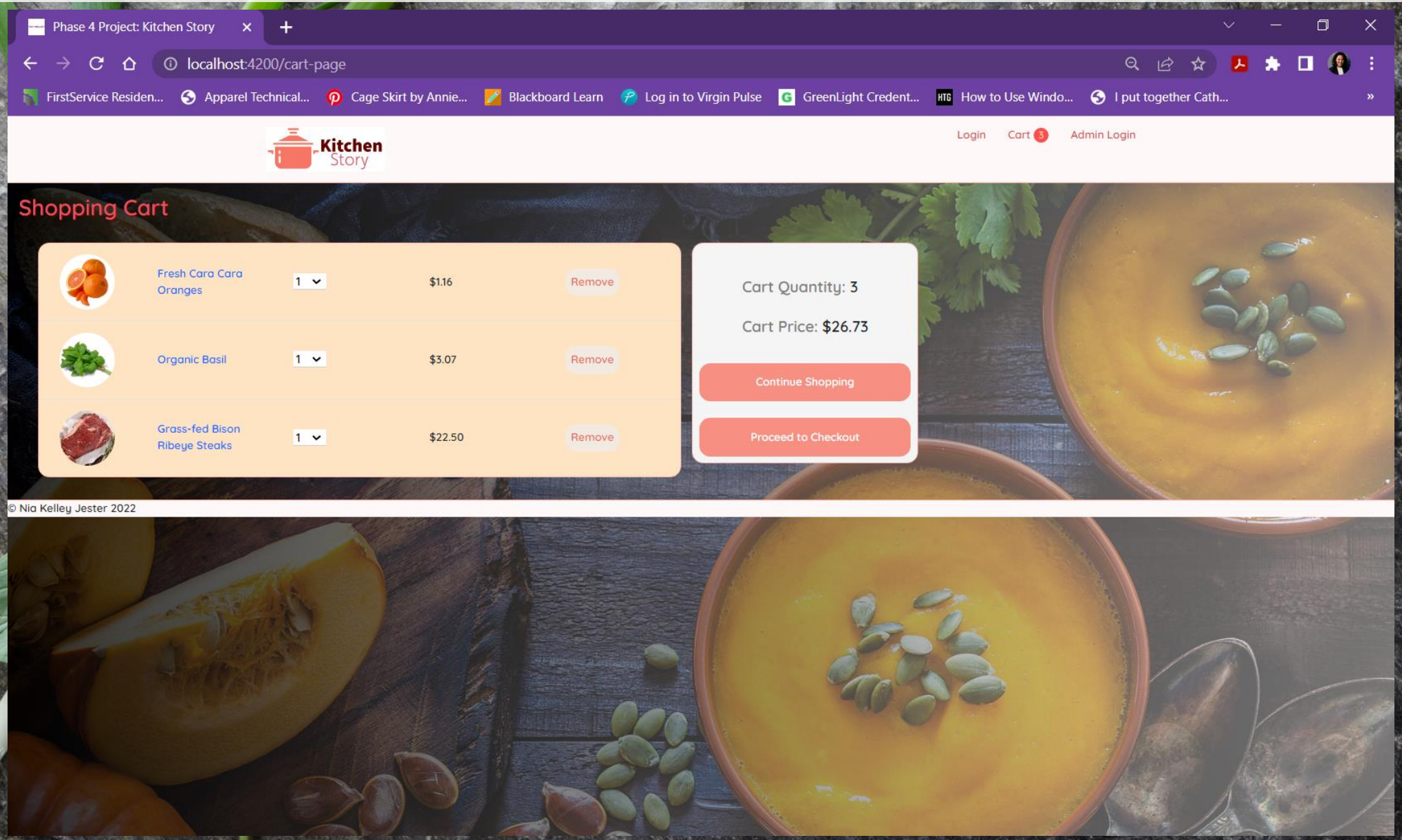


Product Page

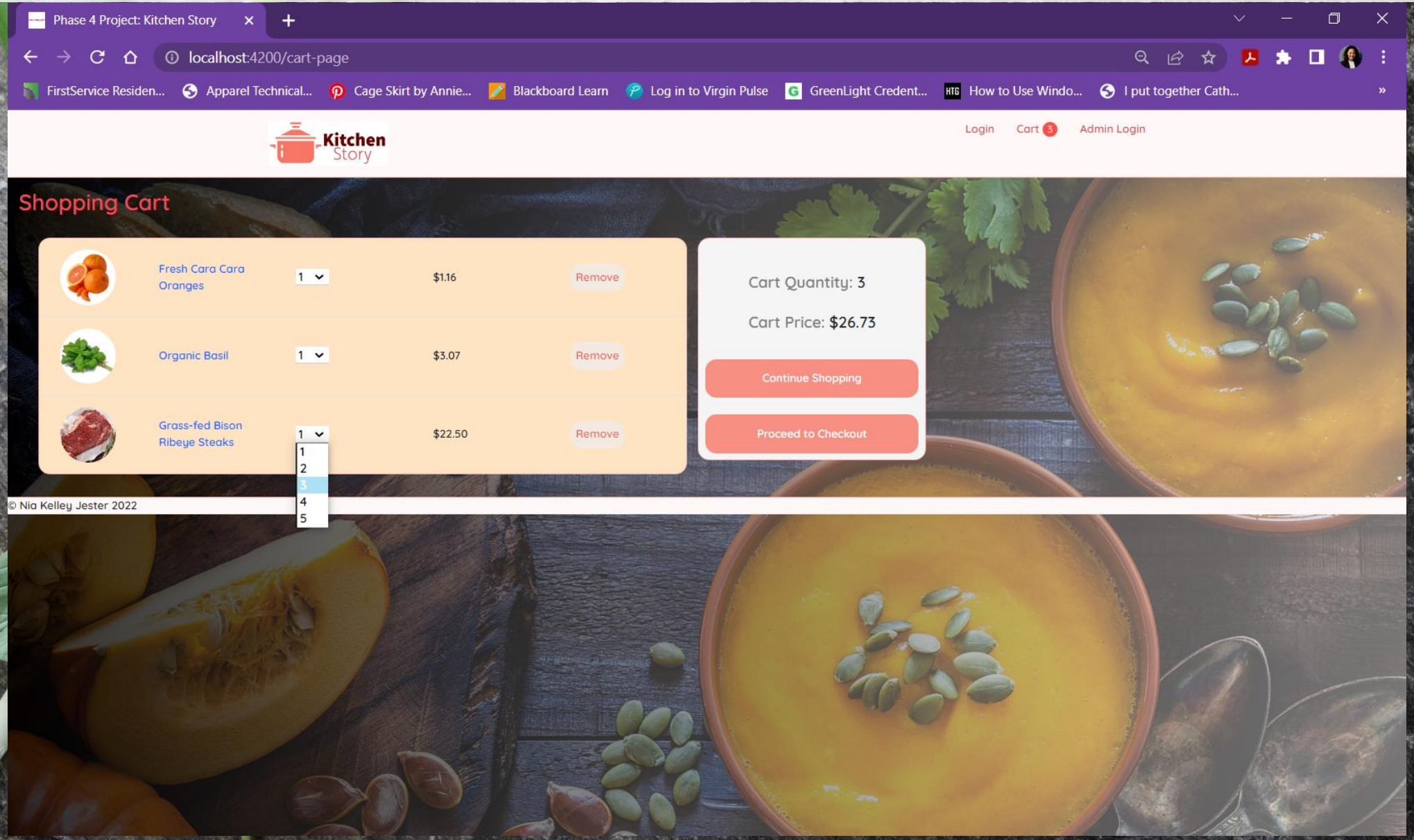




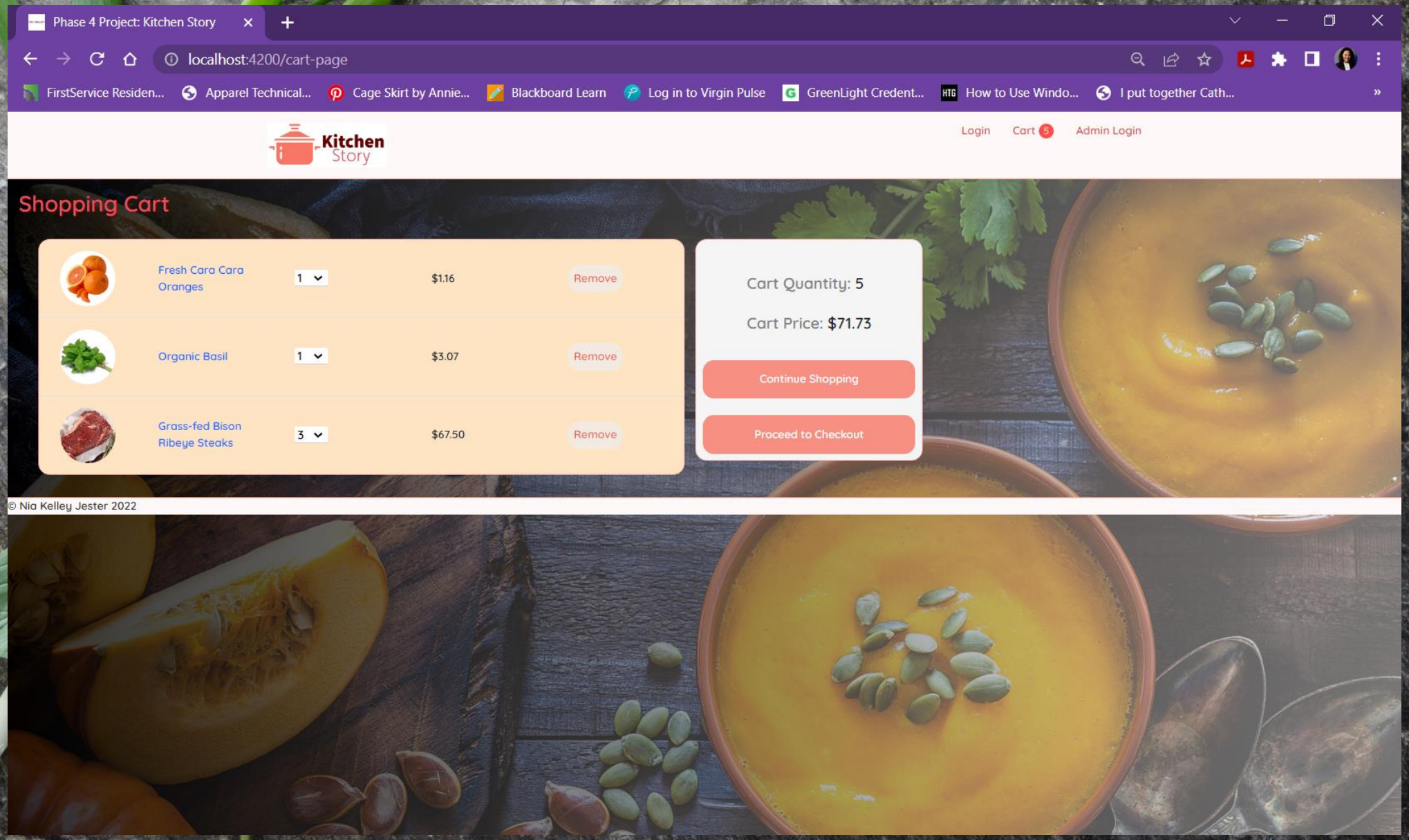
Adding Items to Cart



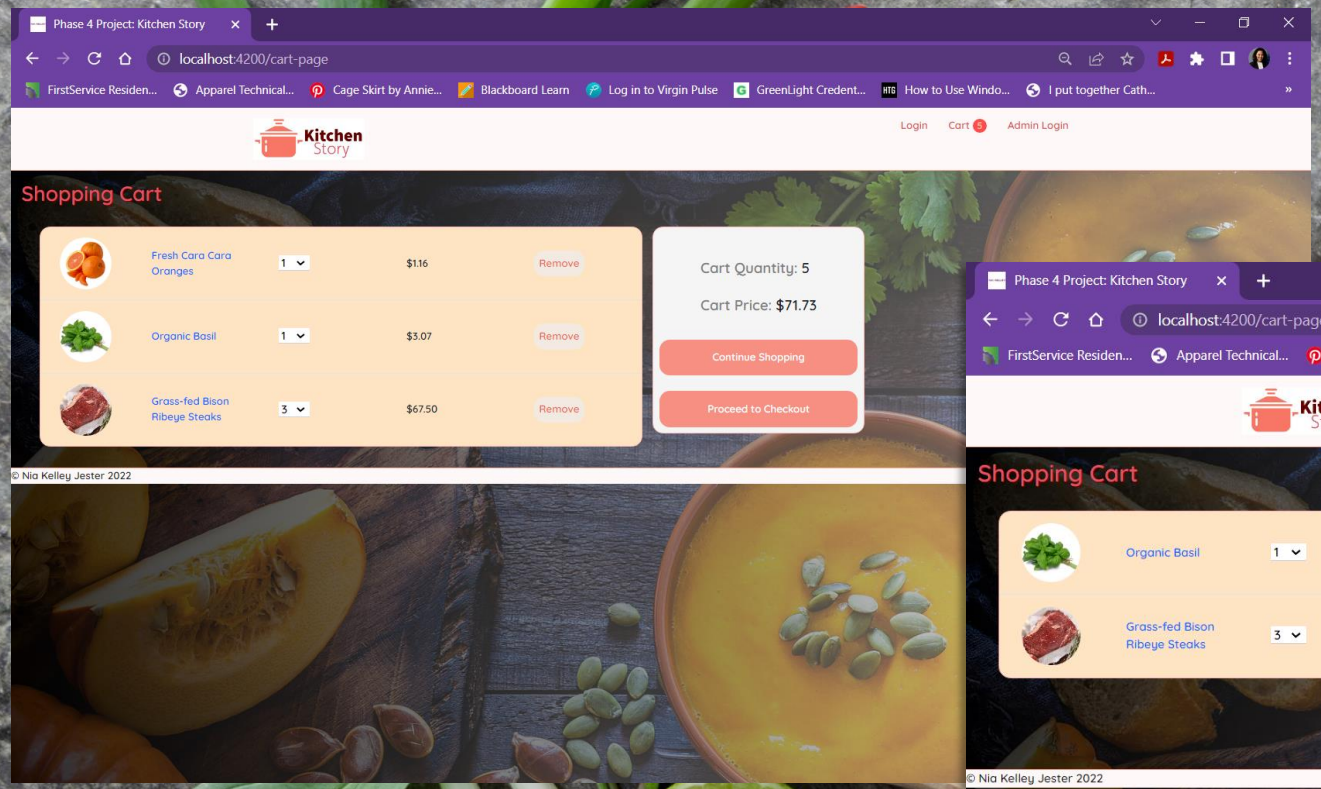
Changing Item Quantity (screen 1 of 2)

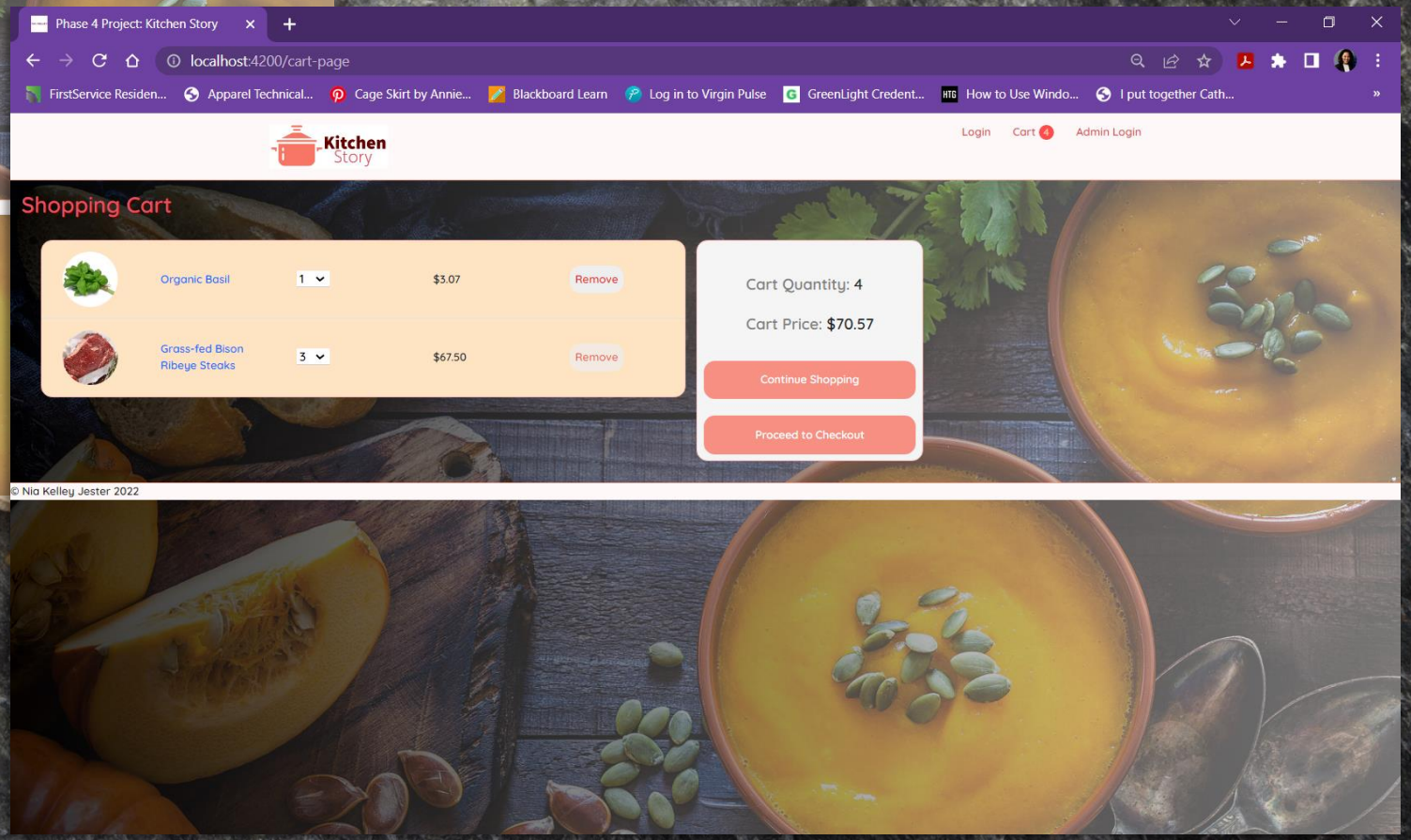


Changing Item Quantity (screen 2 of 2)

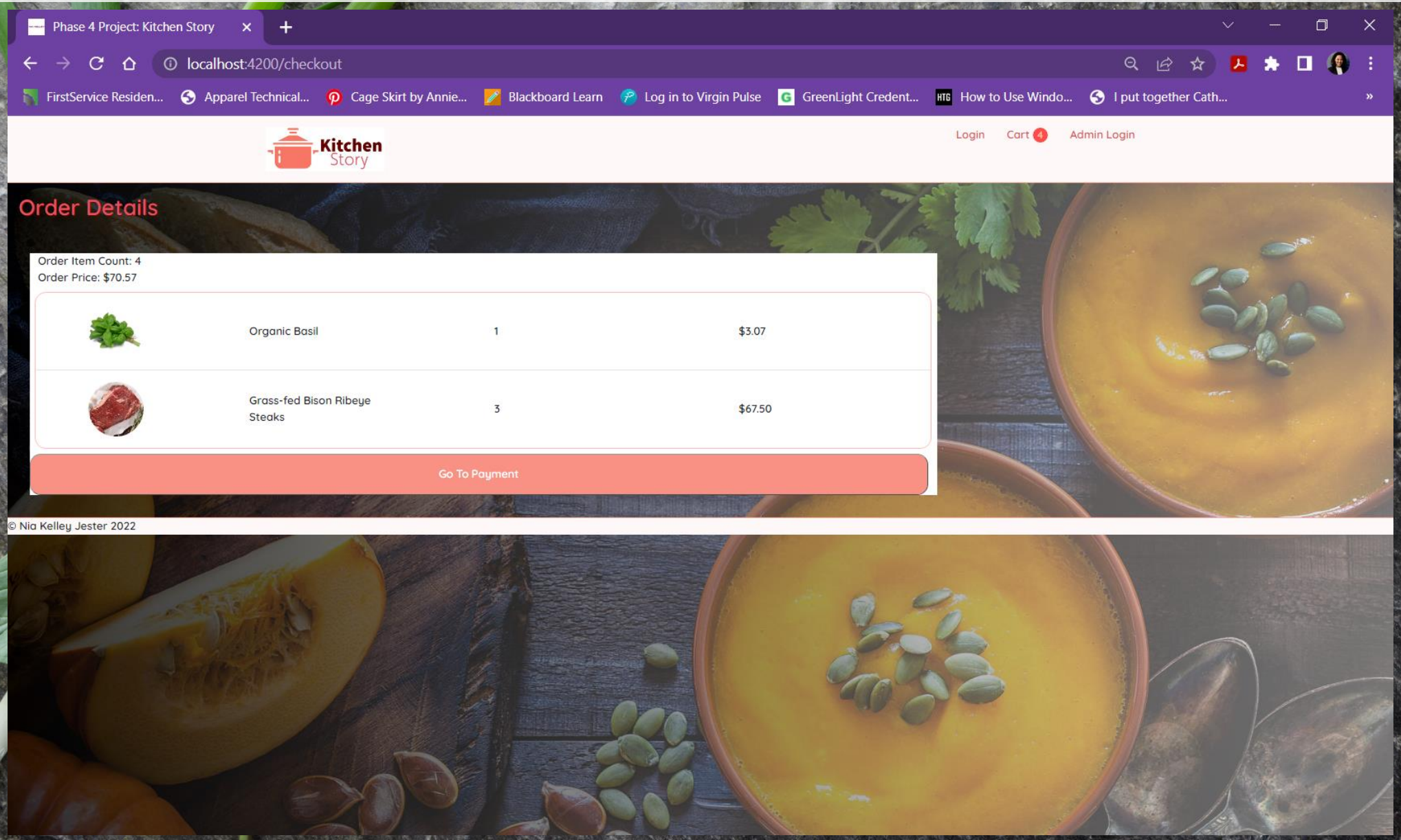


Remove Product from Cart

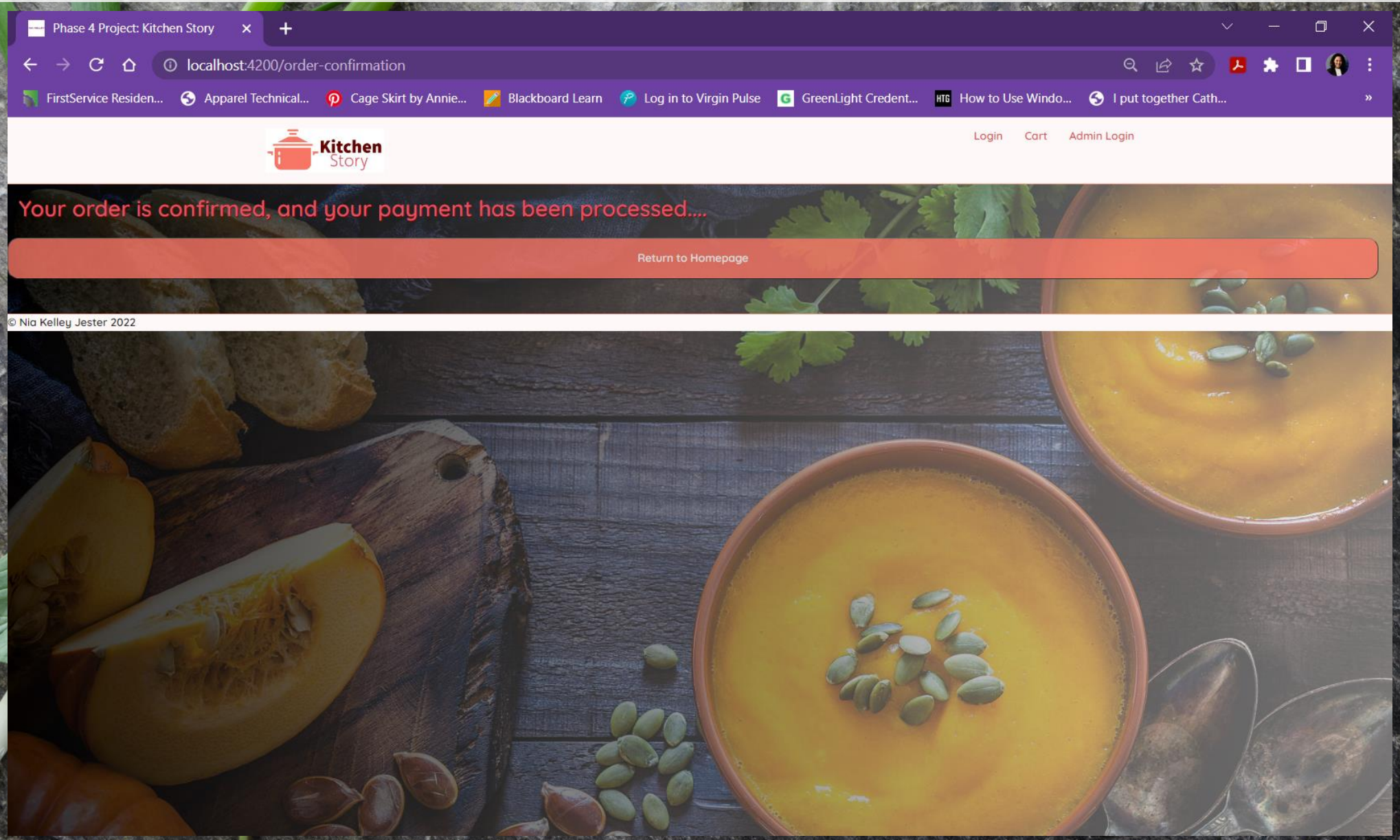




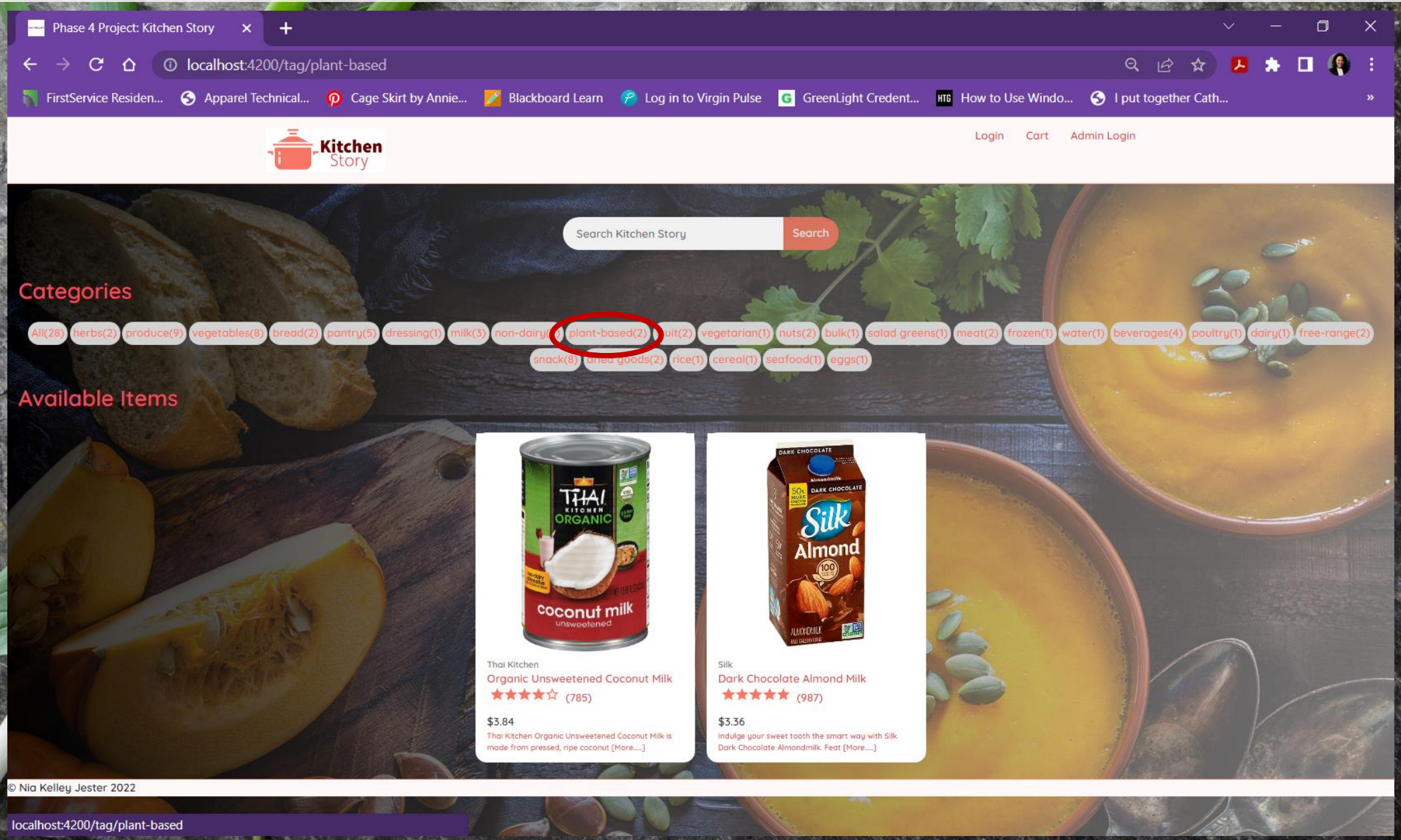
Proceed to Checkout



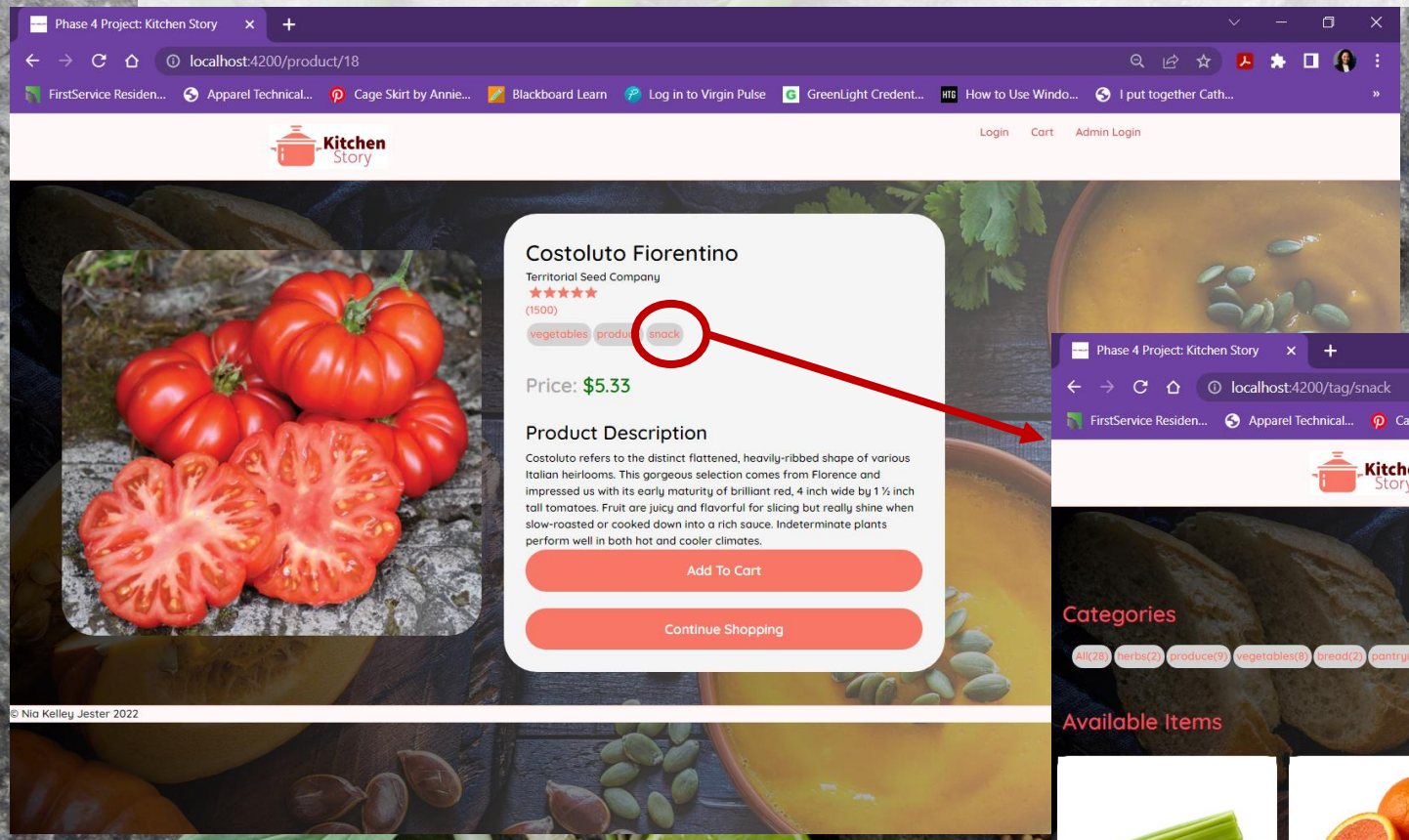
Payment Button

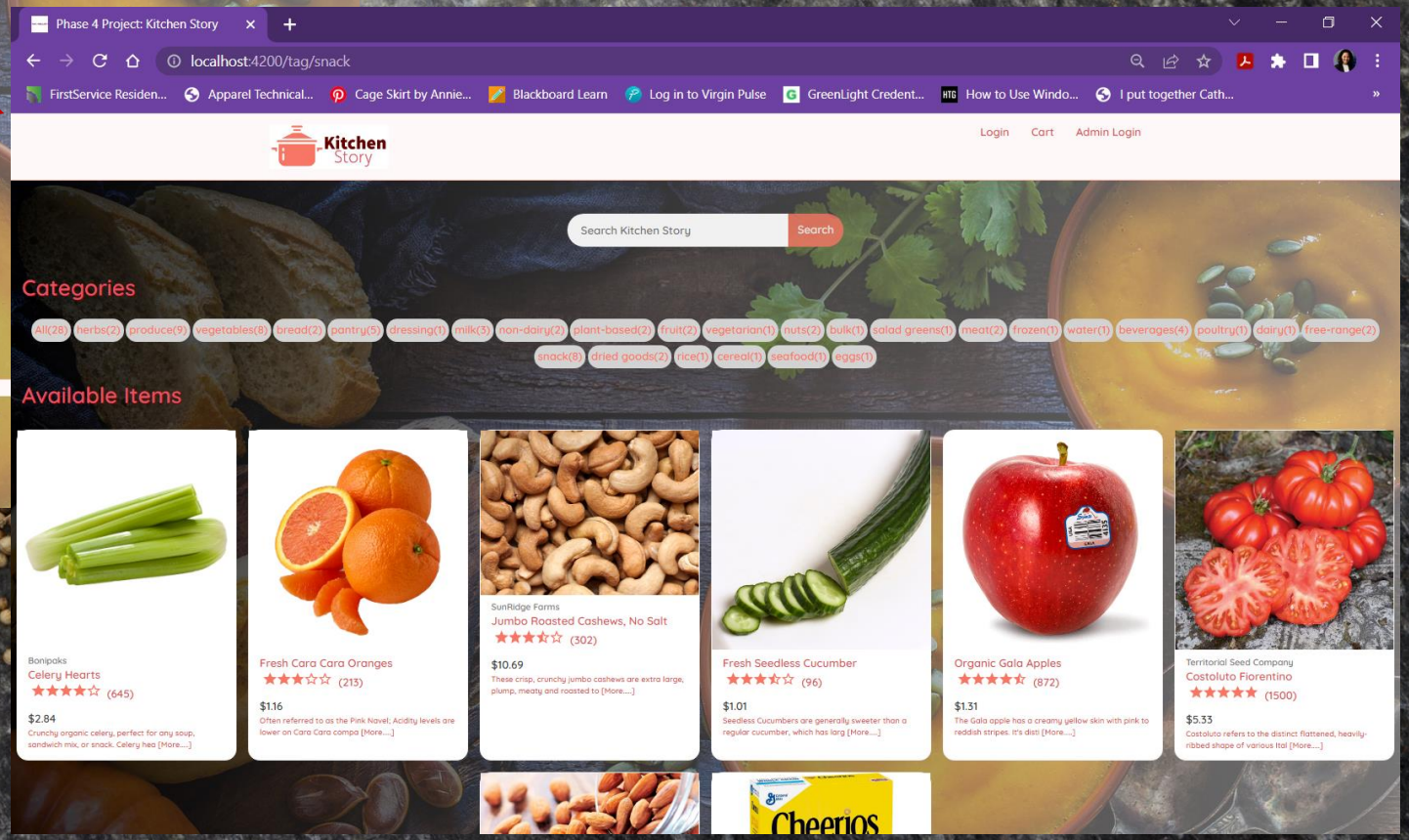


Tags Feature – From Landing Page

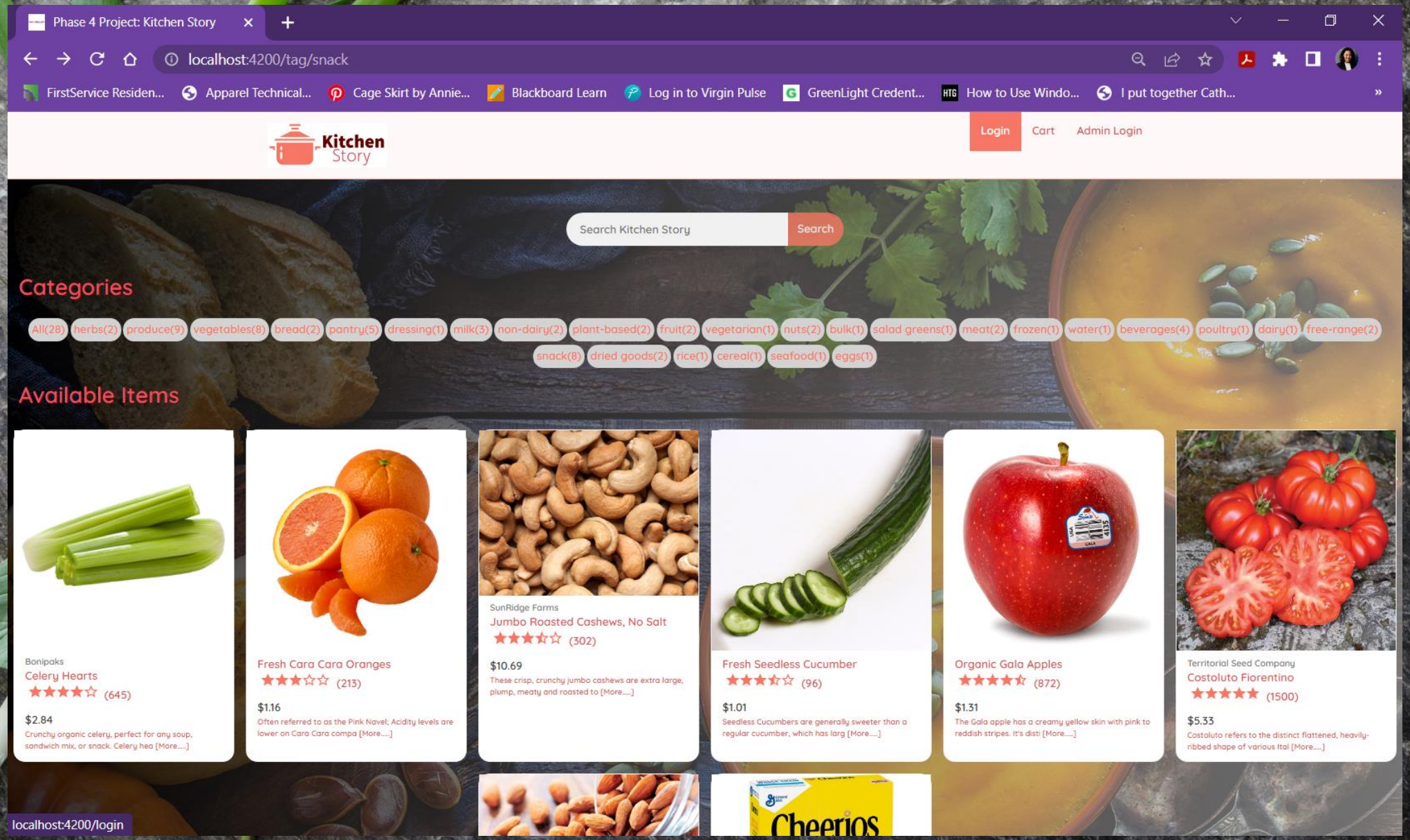


Tags Feature – From Product Page

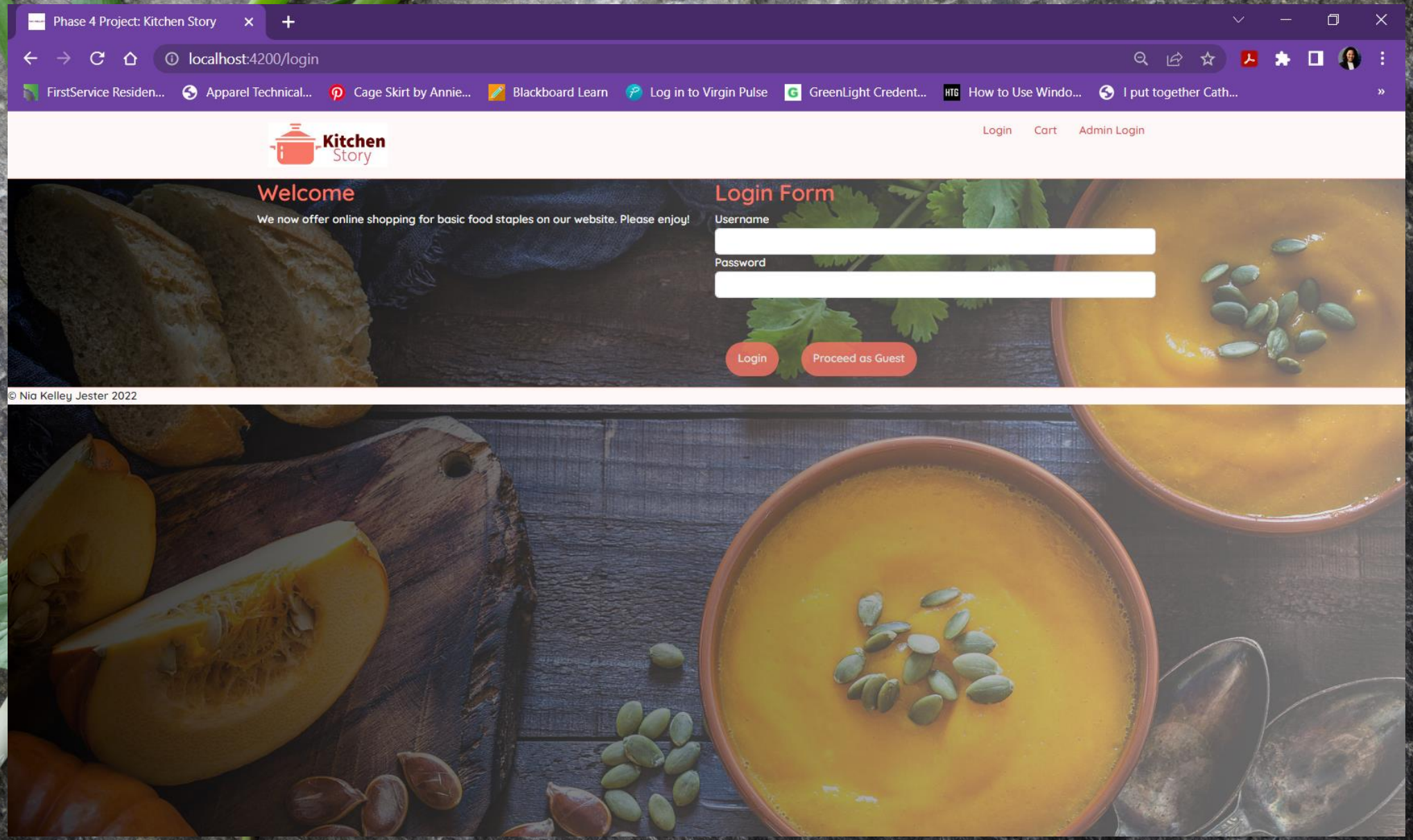




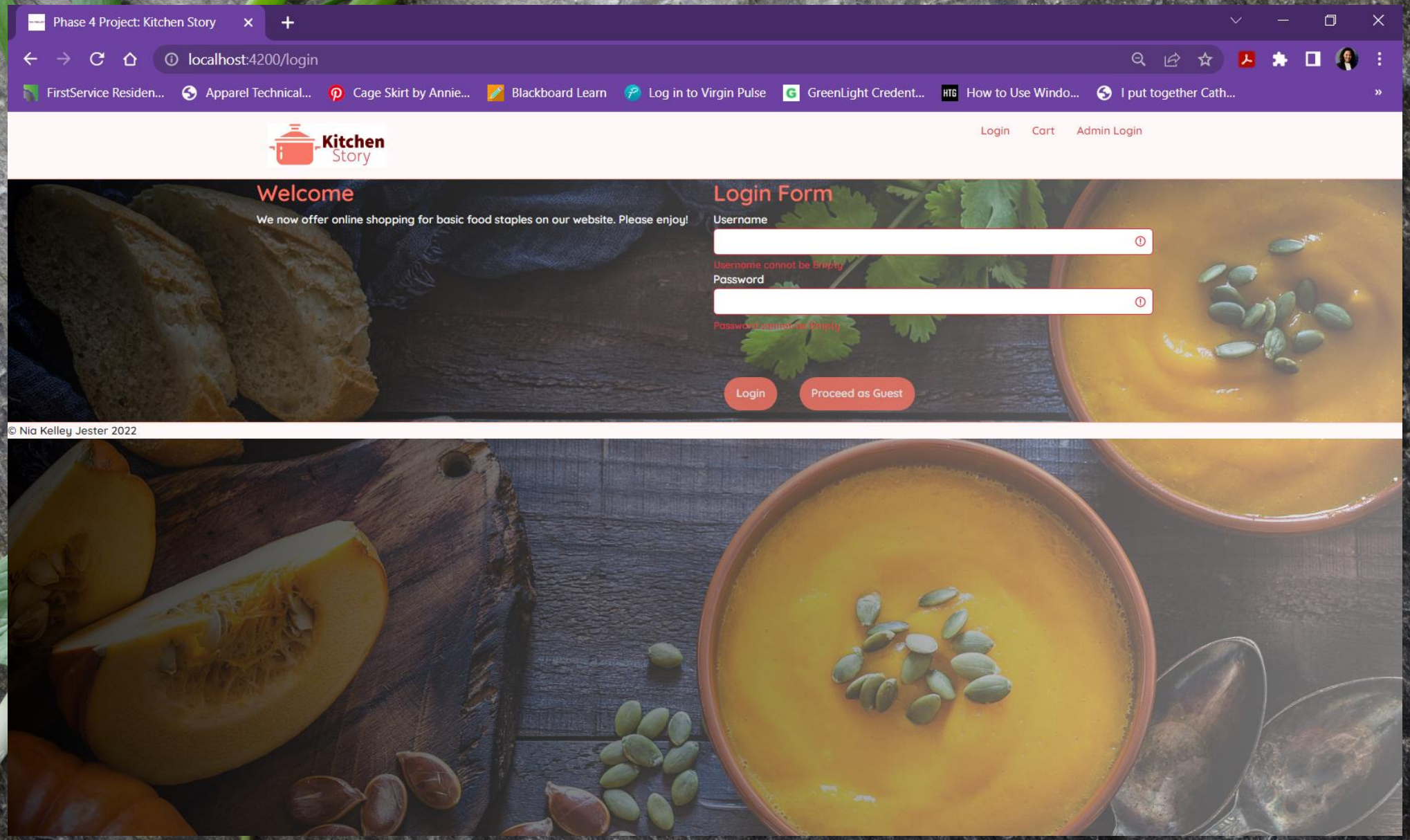
Login Feature



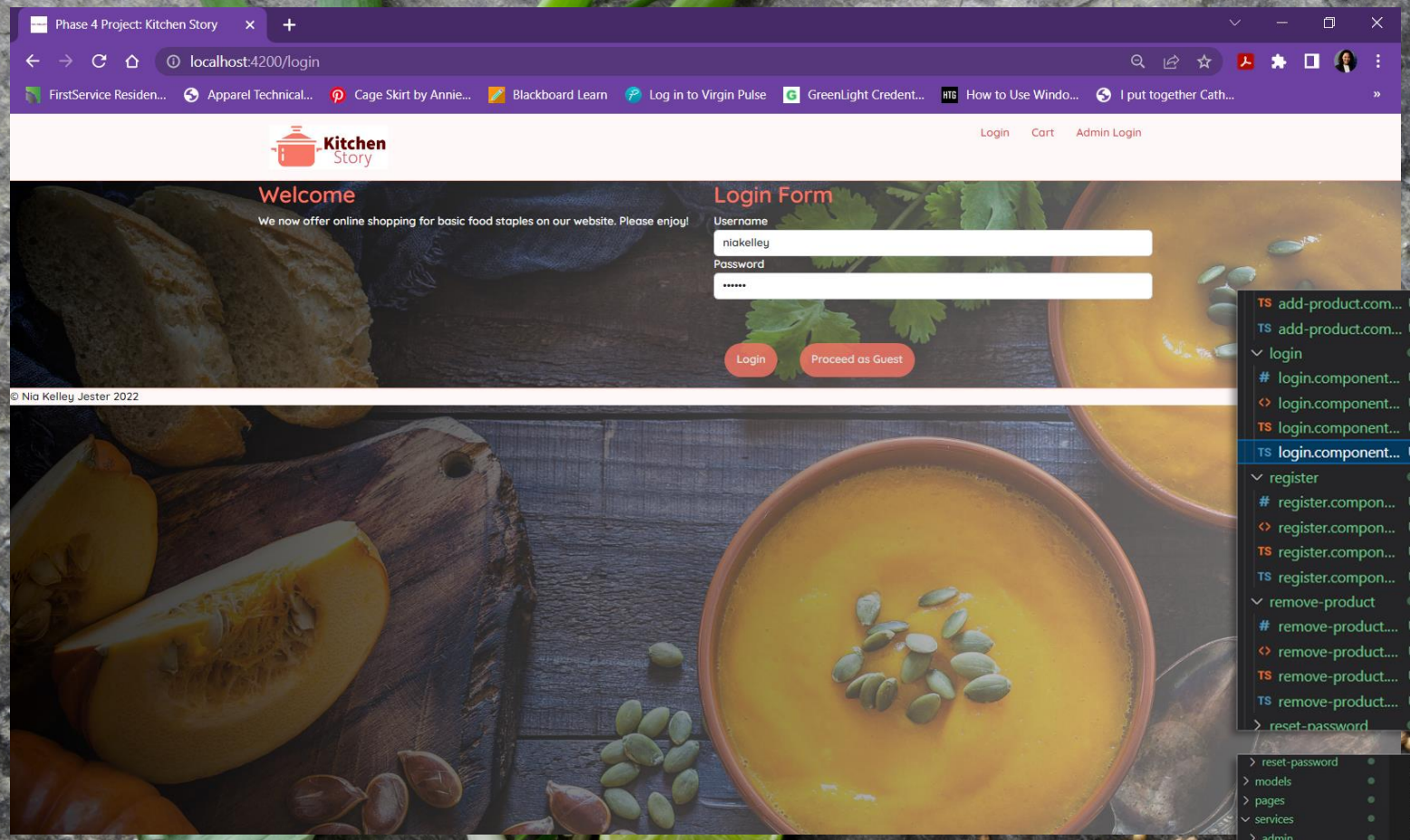
Login Form


Phase 4 Project: Kitchen Story
localhost:4200/login
FirstService Residen...
Apparel Technical...
Cage Skirt by Annie...
Blackboard Learn
Log in to Virgin Pulse
GreenLight Credent...
How to Use Windo...
I put together Cath...
Kitchen Story
Login
Cart
Admin Login
Welcome
We now offer online shopping for basic food staples on our website. Please enjoy!
Login Form
Username
Password
Login
Proceed as Guest
© Nia Kelley Jester 2022

Login Form with Form Validation



Login Form (screen 1 of 2)




```
add-product.com... U
add-product.com... U
login
login.component... U
login.component... U
login.component... U
login.component... U
register
register.compon... U
register.compon... U
register.compon... U
register.compon... U
remove-product
remove-product.... U
remove-product.... U
remove-product.... U
remove-product.... U
reset-password
```

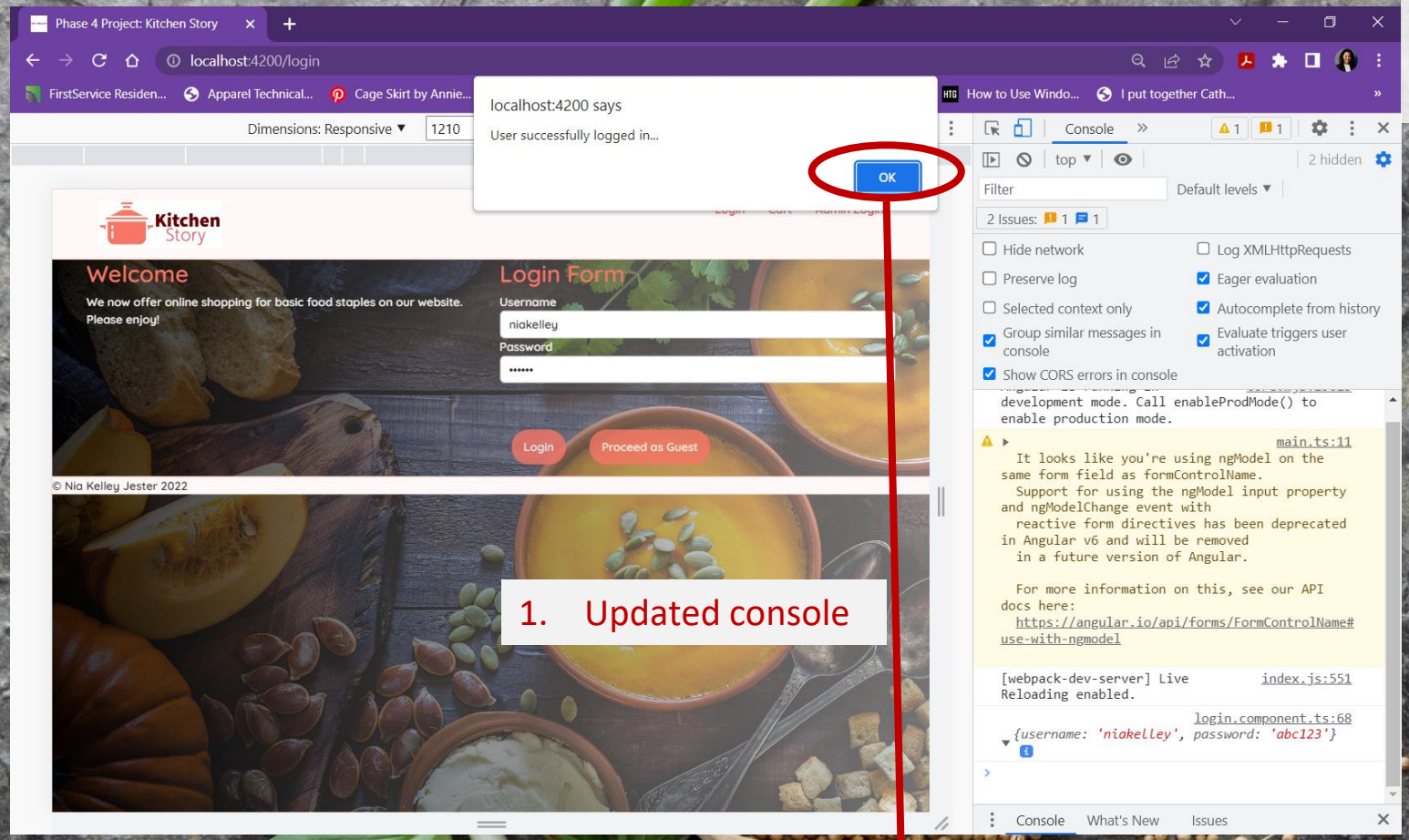
```
/* ****************************************
 * Method Name: onSubmit()
 * Access Type: public
 * Input Parameters: none
 * Return Type: void
 * Purpose:
 * **************************************** */
 onSubmit(){
   this.submitted = true;
   if(this.loginForm.invalid)
     return; //don't allow the user to submit the form
   else{
     var result = this.loginService.login(this.loginForm.controls['username'].value,
                  this.loginForm.controls['password'].value);
     console.log(this.loginForm.value); // prints form values in json format
     //compare the username and password to the User[] array
     alert("User successfully logged in...");
     this.router.navigate(['/home']);
   }
 }
```

```
reset-password
models
pages
services
admin
cart
login
login.service.spec... U
login.service.ts U
product
user
widgets
app-routing.modul... M
app.component.css
app.component.html M
app.component.spec.ts
```

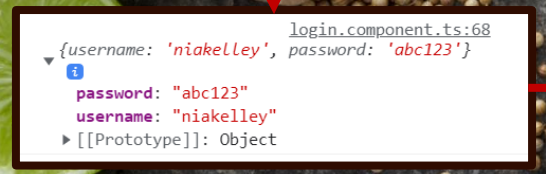
```
/* ****************************************
 * Method Name: login()
 * Access Type: public
 * Input Parameters: Username String, Password String
 * Return Type: boolean
 * Purpose: To validate username and password against the application's database, upon submitting the form to the server.
 *          In a real application, our login method should call an authentication API on a server with the credentials.
 *          To simplify our illustration for now, we authenticate with hardcoded values.
 * **************************************** */
login(username: string, password: string):boolean{
  if(username === "niakelley" && password === "abc123")
    this._isUserLoggedIn = true;
  else
    this._isUserLoggedIn = false;

  return this._isUserLoggedIn;
}
```

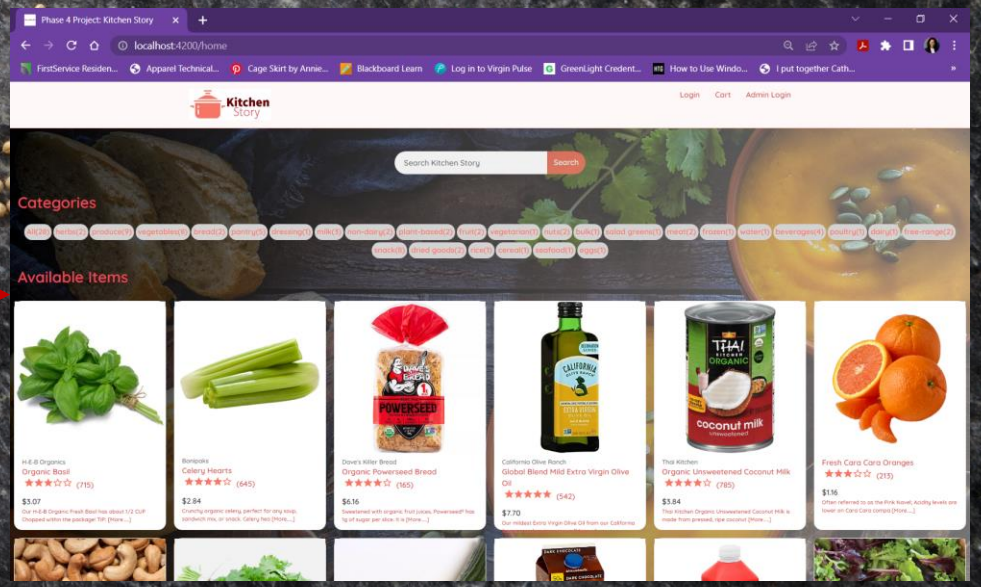
Login Form (screen 2 of 2)



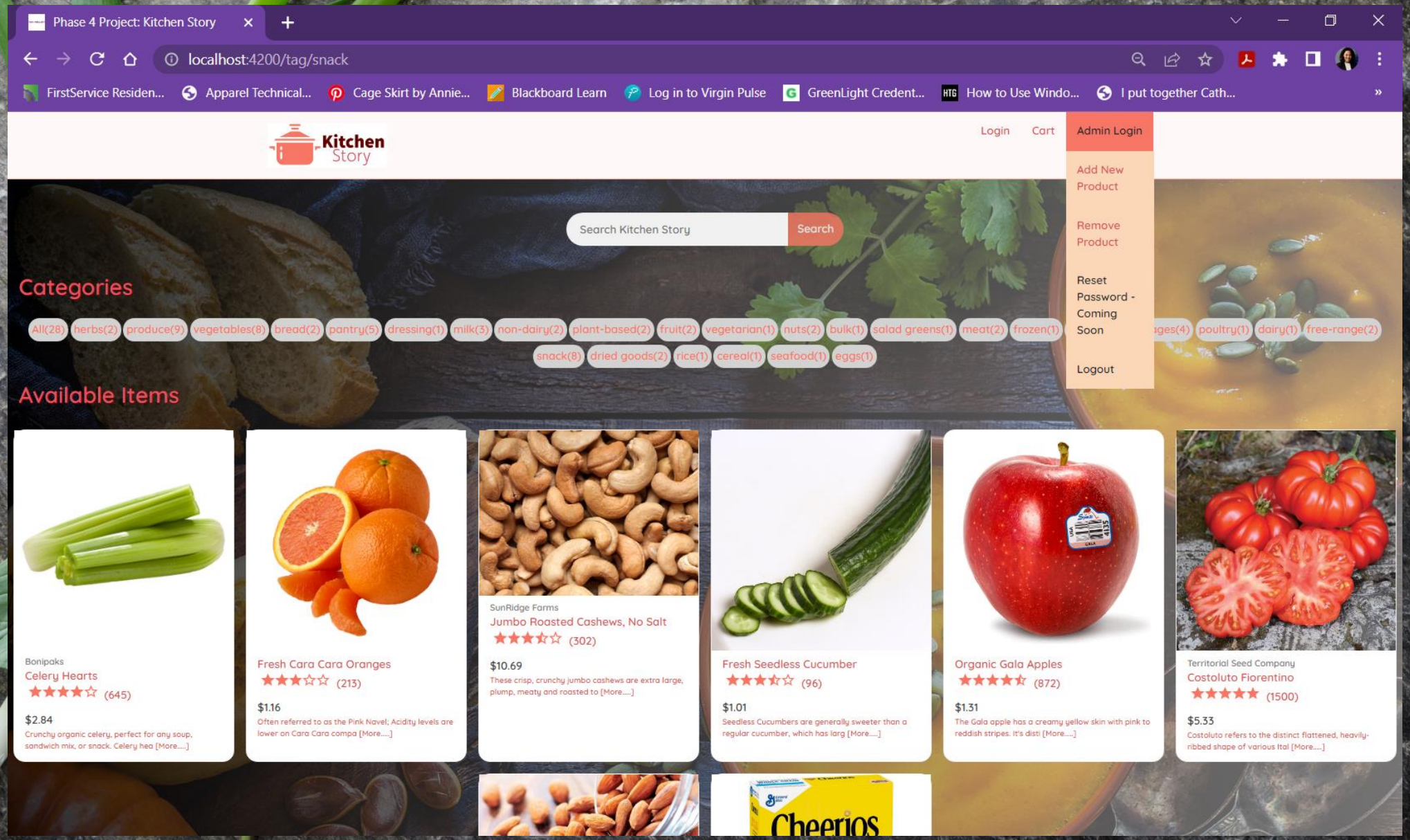
1. Updated console



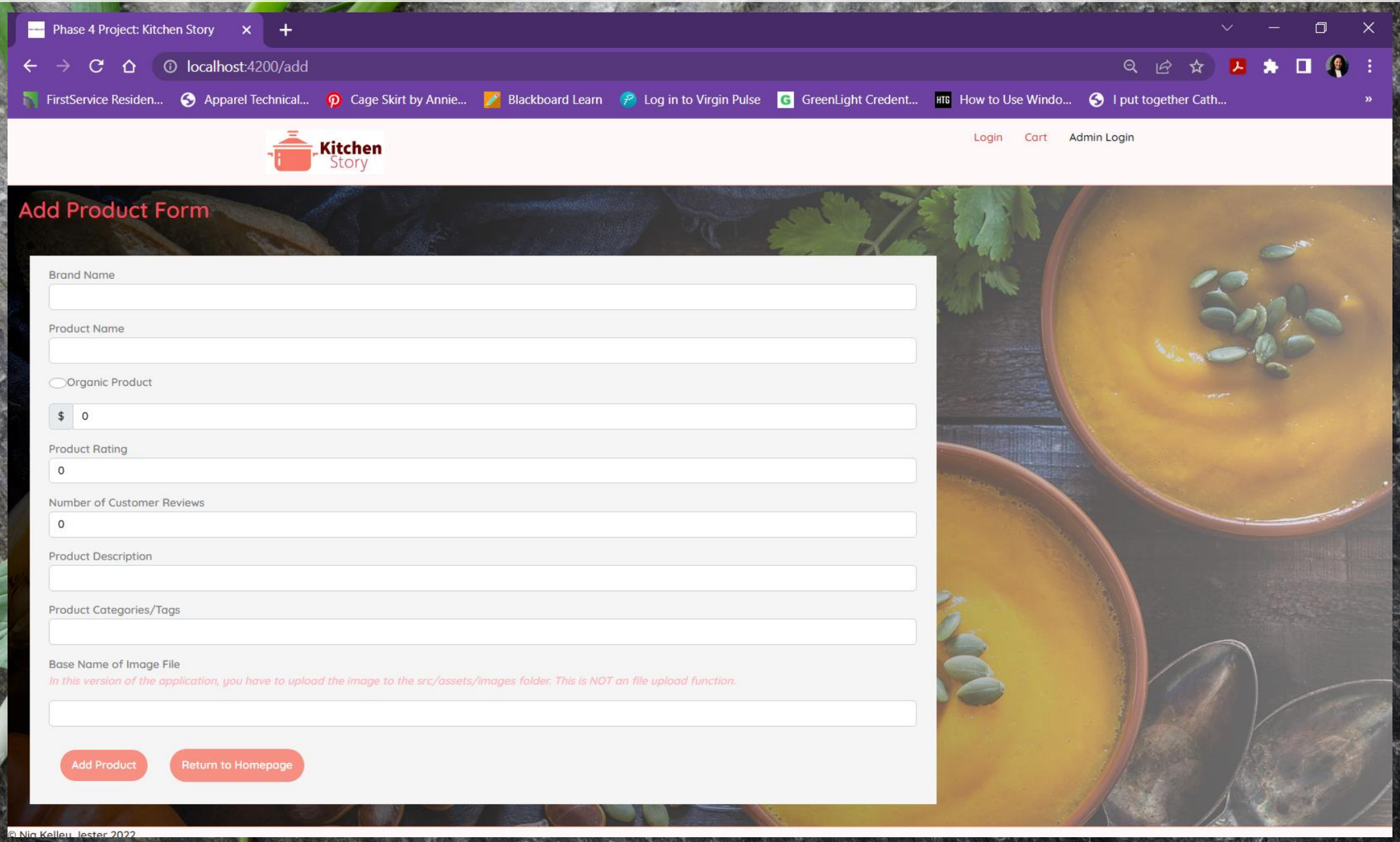
2. Redirected to the home page



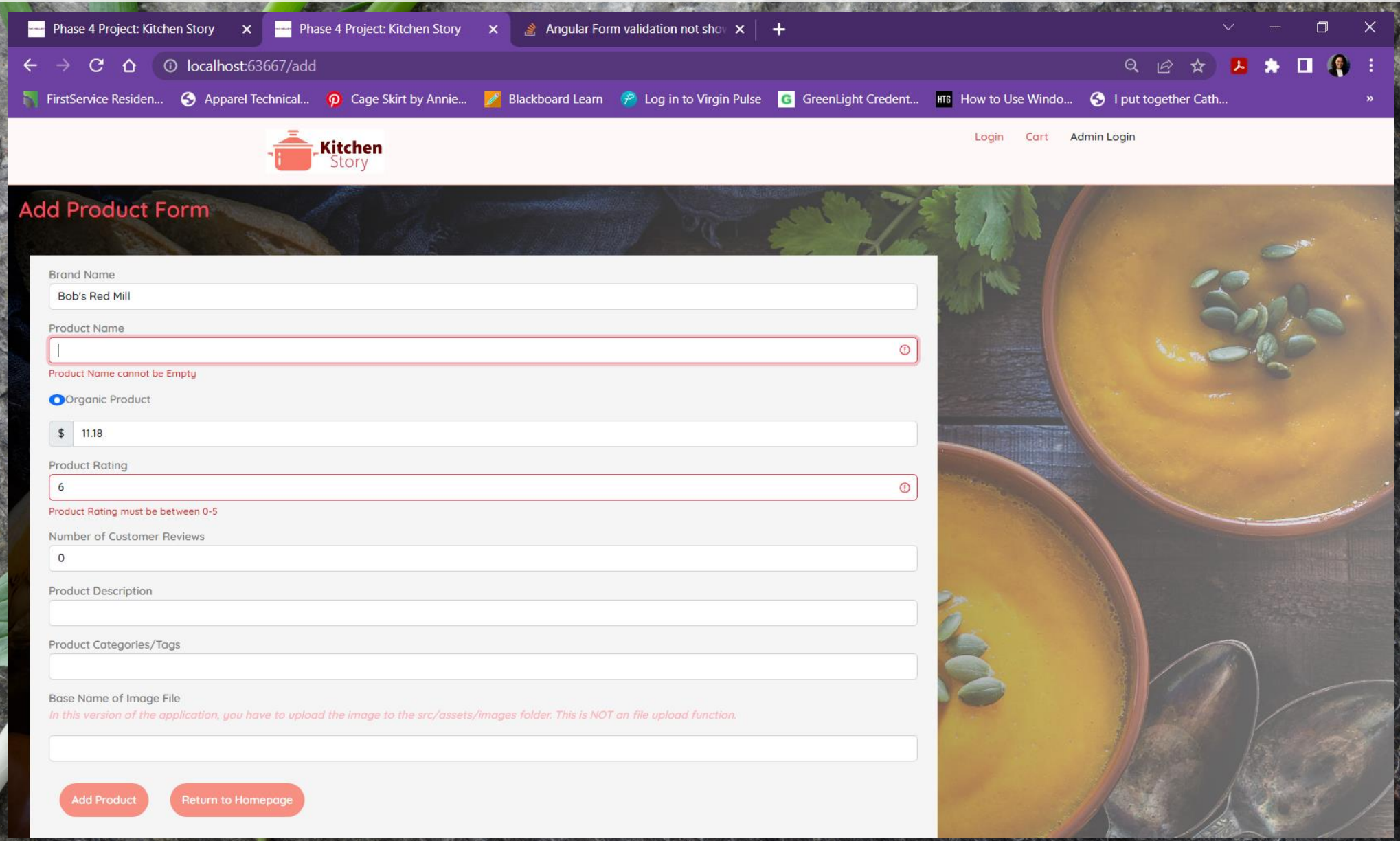
Admin Menu


Phase 4 Project: Kitchen Story
localhost:4200/tag/snack
FirstService Residen...
Apparel Technical...
Cage Skirt by Annie...
Blackboard Learn
Log in to Virgin Pulse
GreenLight Credent...
How to Use Windo...
I put together Cath...
Kitchen Story
Login
Cart
Admin Login
Add New Product
Remove Product
Reset Password - Coming Soon
Logout
Search Kitchen Story
Search
Categories
All(28) herbs(2) produce(9) vegetables(8) bread(2) pantry(5) dressing(1) milk(3) non-dairy(2) plant-based(2) fruit(2) vegetarian(1) nuts(2) bulk(1) salad greens(1) meat(2) frozen(1) poultry(1) dairy(1) free-range(2)
snack(8) dried goods(2) rice(1) cereal(1) seafood(1) eggs(1)
Available Items
Bonipaks
Celery Hearts
(645)
$2.84
Crunchy organic celery, perfect for any soup, sandwich mix, or snack. Celery hea [More.....]
Fresh Cara Cara Oranges
(213)
$1.16
Often referred to as the Pink Navel; Acidity levels are lower on Cara Cara compa [More.....]
SunRidge Farms
Jumbo Roasted Cashews, No Salt
(302)
$10.69
These crisp, crunchy jumbo cashews are extra large, plump, meaty and roasted to [More.....]
Fresh Seedless Cucumber
(96)
$1.01
Seedless Cucumbers are generally sweeter than a regular cucumber, which has larg [More.....]
Organic Gala Apples
(872)
$1.31
The Gala apple has a creamy yellow skin with pink to reddish stripes. It's disti [More.....]
Territorial Seed Company
Costoluto Fiorentino
(1500)
$5.33
Costoluto refers to the distinct flattened, heavily-ribbed shape of various Ital [More.....]
Cheerios

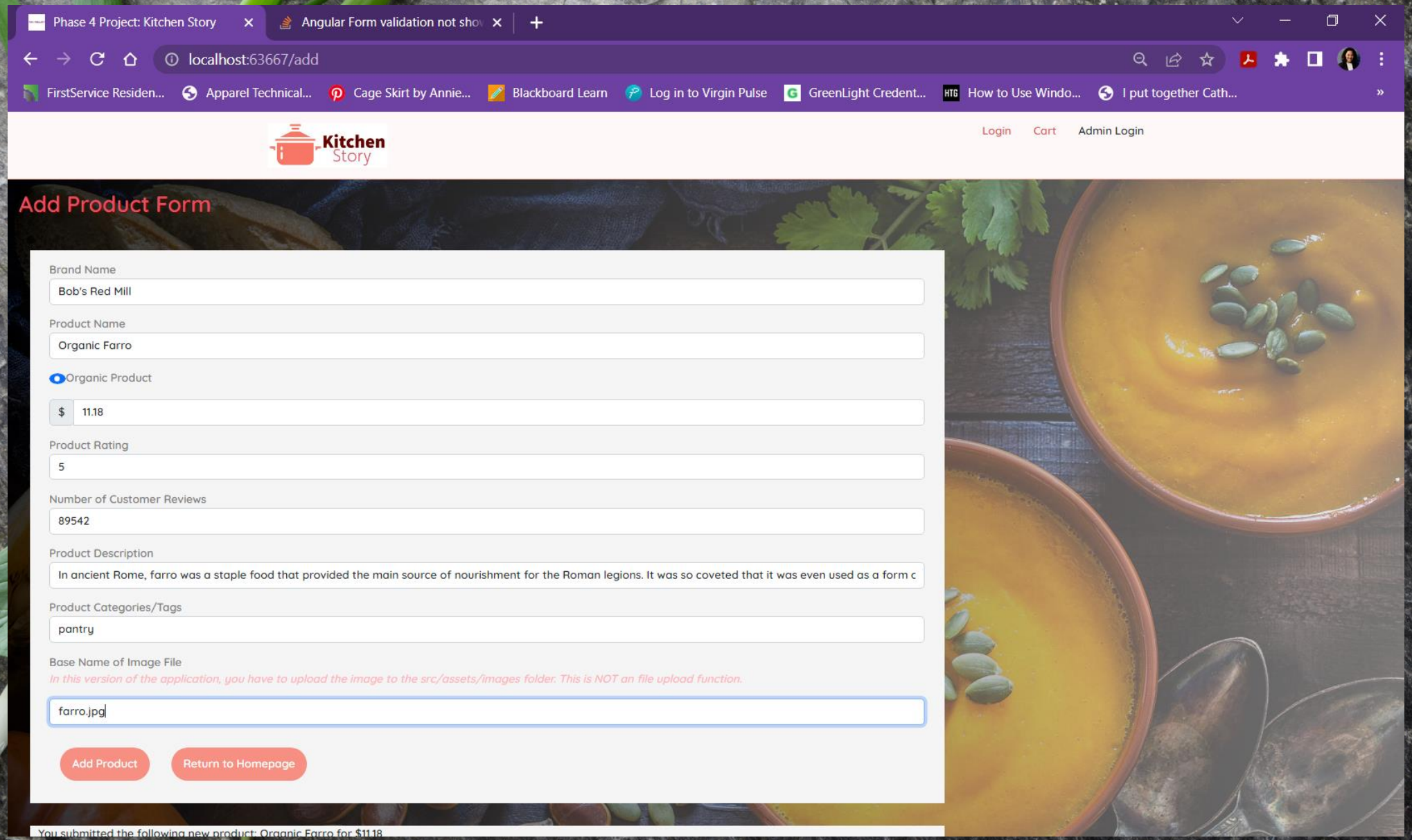
Admin Feature – Add New Product Form



Admin Feature – Add New Product Form Validation



Admin Feature – Add New Product Form



Admin Feature – Add New Product Form

Phase 4 Project: Kitchen Story | Angular Form validation not show

localhost:63667/add

FirstService Residen... | Apparel Technical... | Cage Skirt by Annie... | How to Use Windo... | I put together Cath...

Dimensions: Responsive 1210

localhost:63667 says

Successfully added a new product...

OK

Brand Name

Bob's Red Mill

Product Name

Organic Farro

Organic Product

$ 11.18

Product Rating

5

Number of Customer Reviews

89542

Product Description

In ancient Rome, farro was a staple food that provided the main source of nourishment for the Roman legions. It was so coveted that it wa

Product Categories/Tags

pantry

Base Name of Image File

In this version of the application, you have to upload the image to the src/assets/images folder. This is NOT an file upload function.

farro.jpg

Add Product | Return to Homepage

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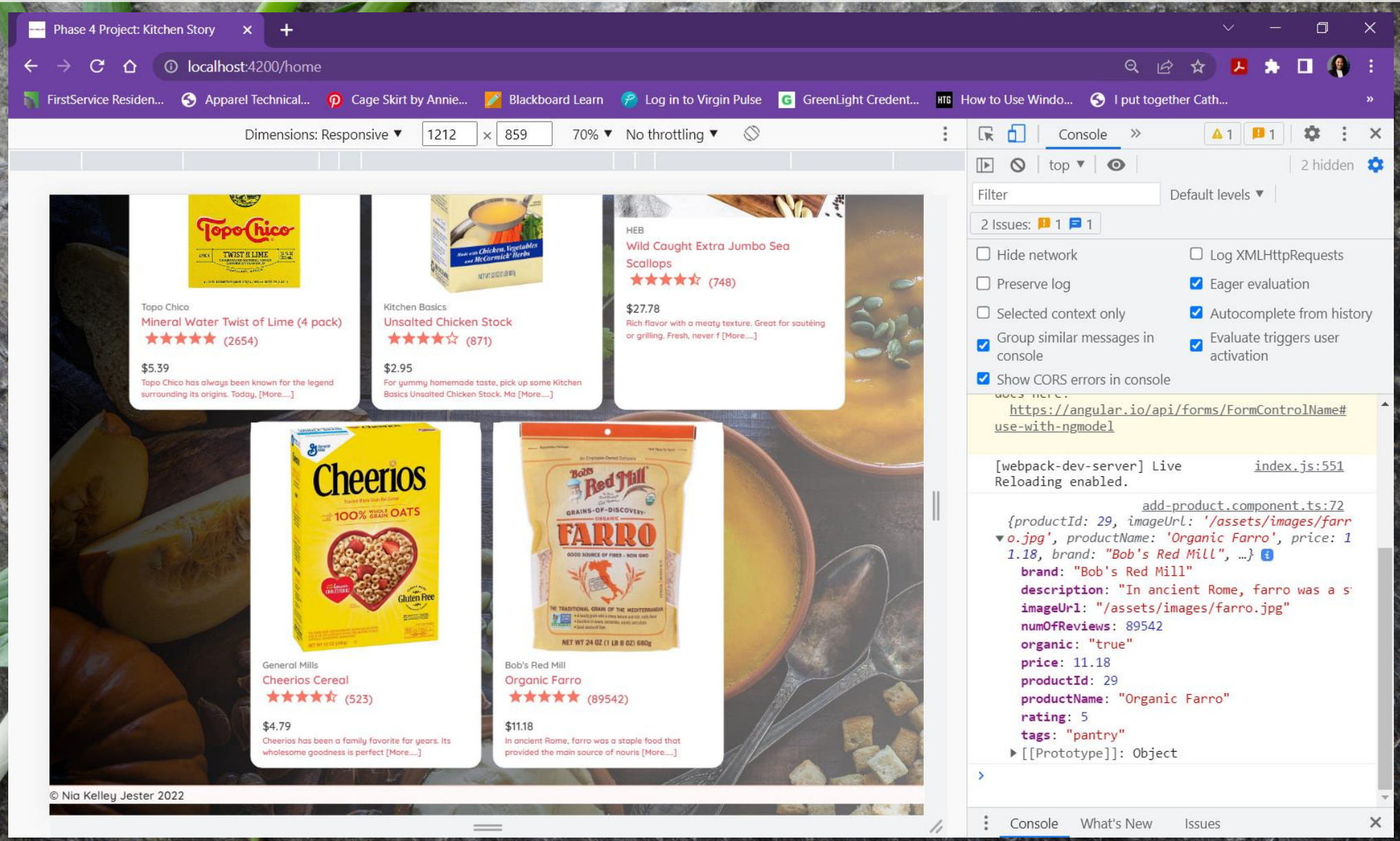
Console | top | 1 hidden | Filter | Default levels | 2 Issues: 1 1

Hide network | Log XMLHttpRequests | Preserve log | Eager evaluation | Selected context only | Autocomplete from history | Group similar messages in console | Evaluate triggers user activation | Show CORS errors in console

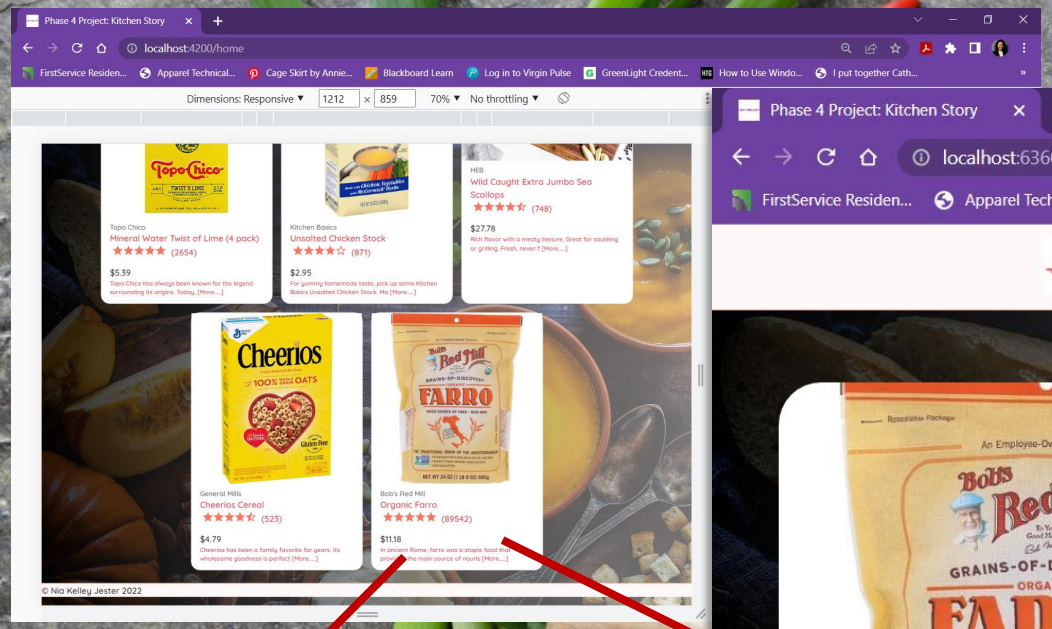
```
enable production mode.
                                    add-product.component.html:25
  It looks like you're using ngModel on the
same form field as formControlName.
  Support for using the ngModel input property
and ngModelChange event with
  reactive form directives has been deprecated
in Angular v6 and will be removed
  in a future version of Angular.

  For more information on this, see our API
docs here:
  https://angular.io/api/forms/FormControlName#
use-with-ngmodel

[webpack-dev-server] Live                 index.js:551
Reloading enabled.

                                add-product.component.ts:72
  {productId: 28, imageUrl: '/assets/images/farr
o.jpg', productName: 'Organic Farro', price: 1
1.18, brand: "Bob's Red Mill", …}
```

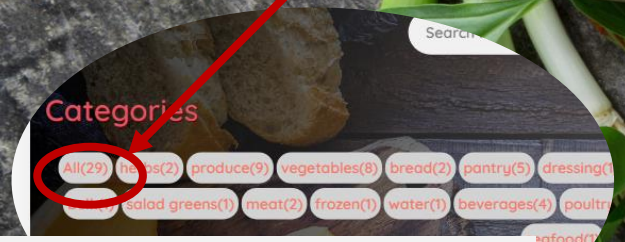
Console | What's New | Issues

Admin Feature – Add New Product Form

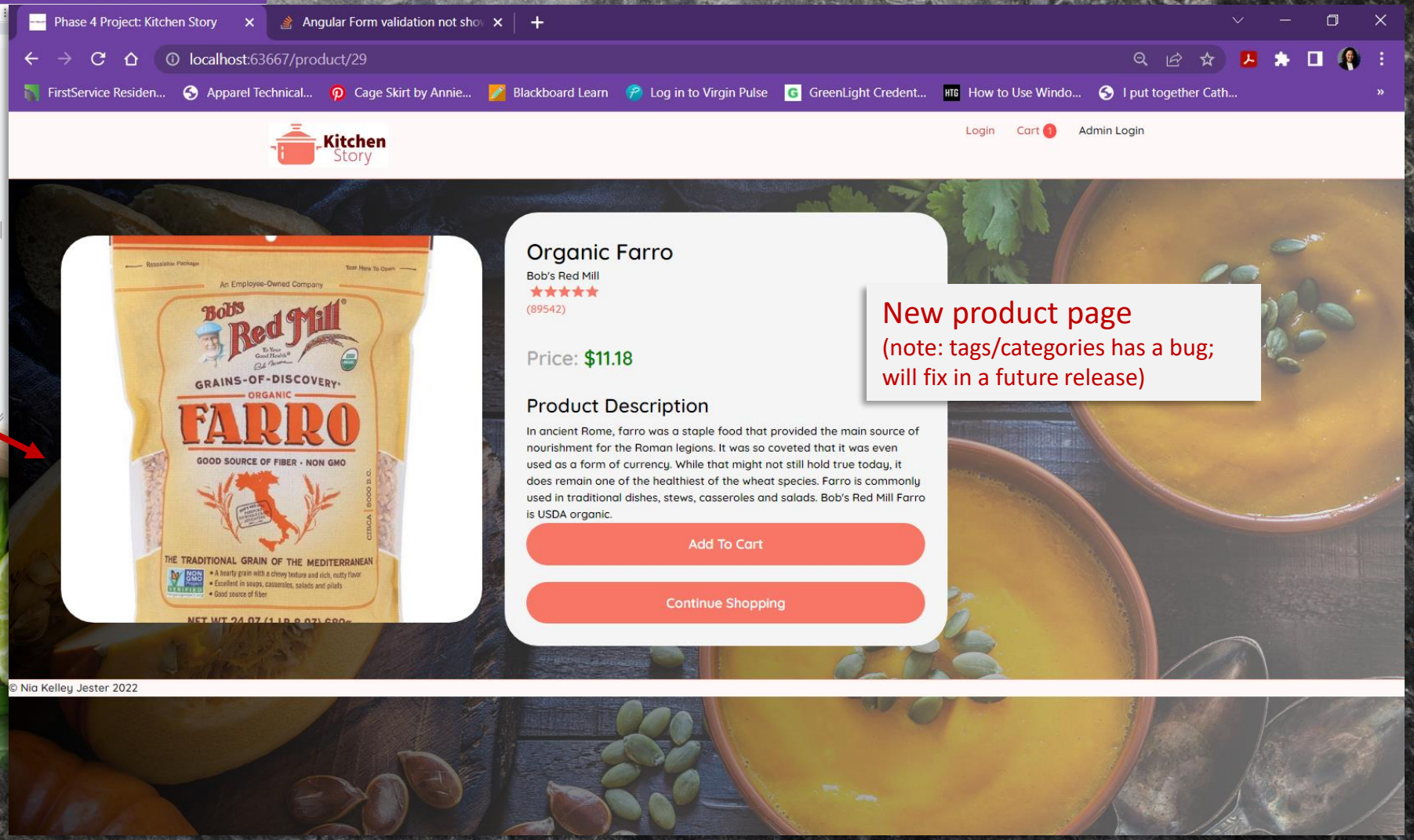


Admin Feature – Add New Product Form



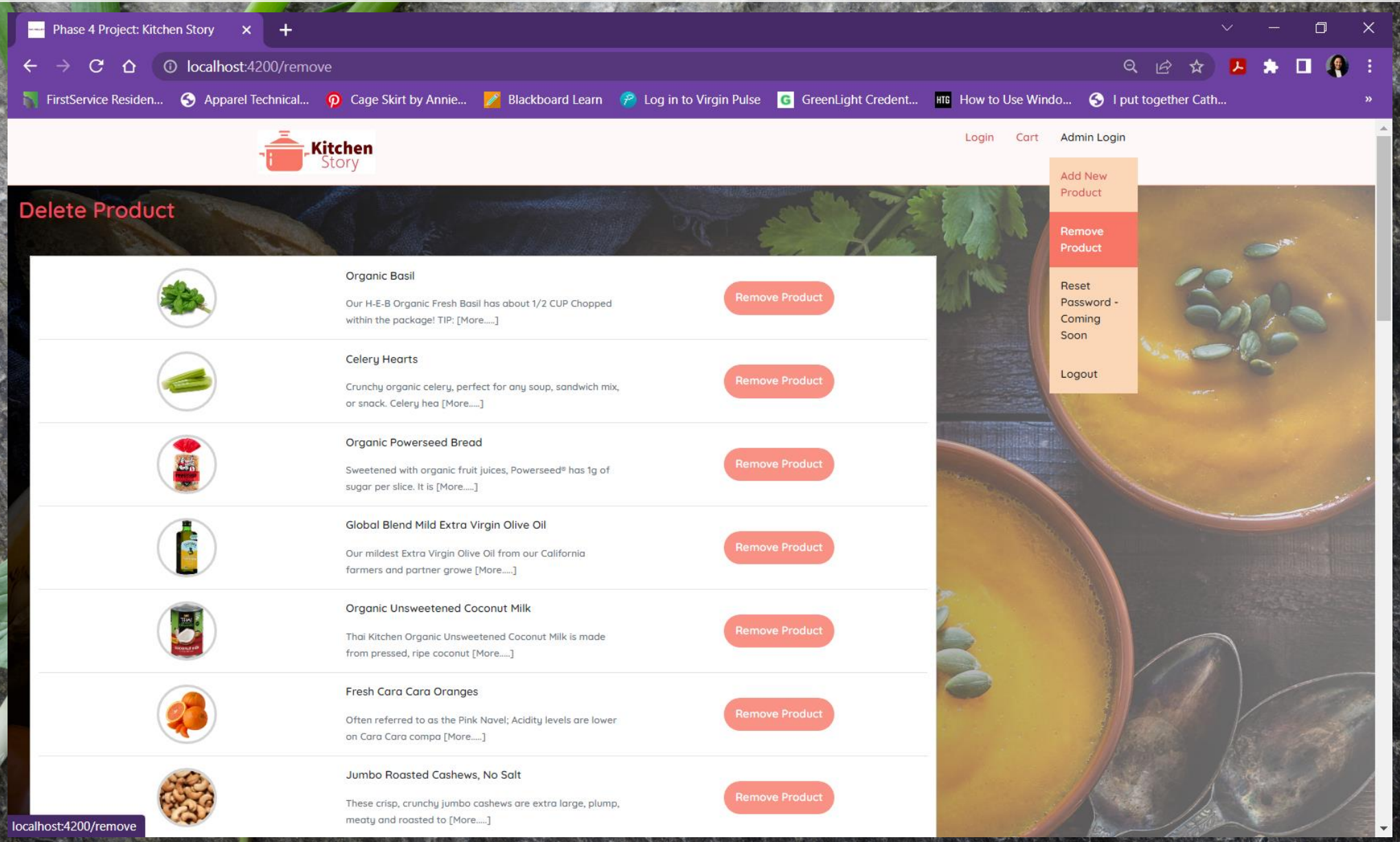


Note: The 'All' products count also increased correctly

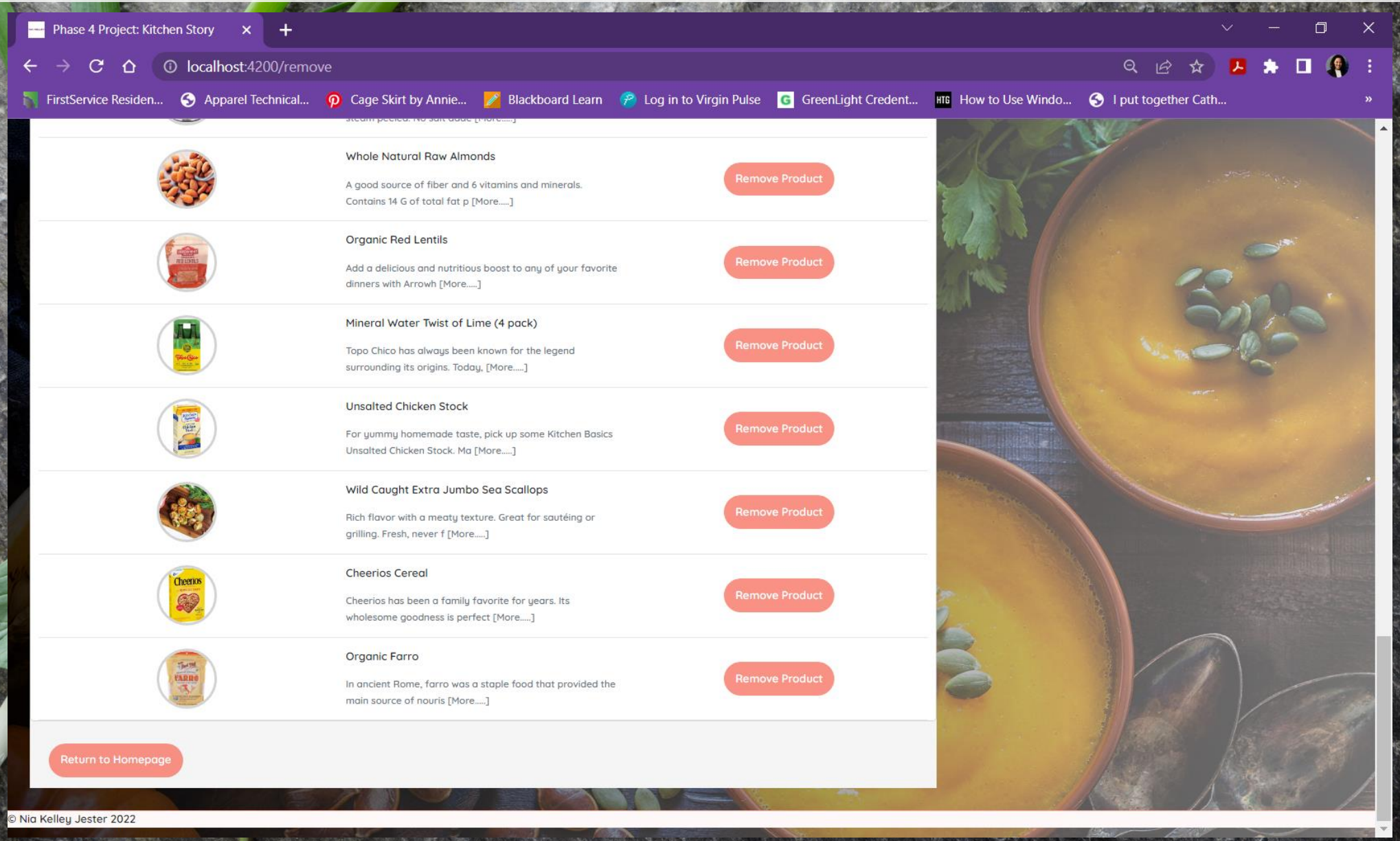


New product page
(note: tags/categories has a bug; will fix in a future release)

Admin Feature – Remove Product Form



Admin Feature – Remove Product Form



Admin Feature – Remove Product Form

Phase 4 Project: Kitchen Story

localhost:4200/remove

localhost:4200 says

Removed Product from the Kitchen Story inventory...

OK

Mineral Water Twist of Lime (4 pack)

Topo Chico has always been known for the legend surrounding its origins. Today, [More.....]

Remove Product

Unsalted Chicken Stock

For yummy homemade taste, pick up some Kitchen Basics Unsalted Chicken Stock. Ma [More.....]

Remove Product

Wild Caught Extra Jumbo Sea Scallops

Rich flavor with a meaty texture. Great for sautéing or grilling. Fresh, never f [More.....]

Remove Product

Cheerios Cereal

Cheerios has been a family favorite for years. Its wholesome goodness is perfect [More.....]

Remove Product

Organic Farro

In ancient Rome, farro was a staple food that provided the main source of nouris [More.....]

Remove Product

Return to Homepage

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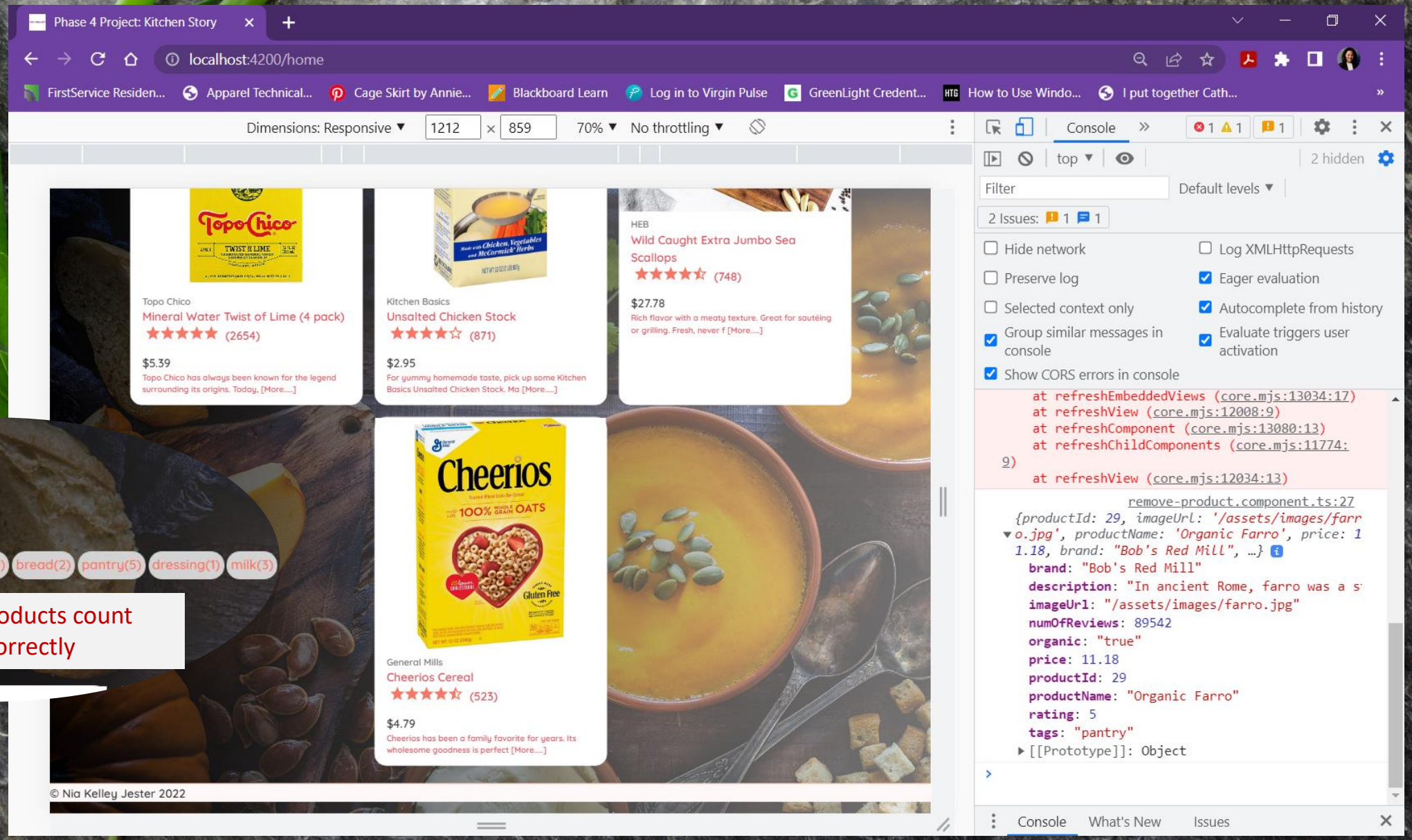
```
ERROR Error: NG02200: Cannot find a differ supporting object 'pantry' of type 'string'. NgFor only supports binding to Iterables, such as Arrays. Find more at https://angular.io/errors/NG02200
    at NgForOf.ngDoCheck (common.mjs:3202:31)
    at callHook (core.mjs:2501:18)
    at callHooks (core.mjs:2460:17)
    at executeInitAndCheckHooks (core.mjs:2411:9)
    at refreshView (core.mjs:11999:21)
    at refreshEmbeddedViews (core.mjs:13034:17)
    at refreshView (core.mjs:12008:9)
    at refreshComponent (core.mjs:13080:13)
    at refreshChildComponents (core.mjs:11774:9)
    at refreshView (core.mjs:12034:13)
remove-product.component.ts:27
{productId: 29, imageUrl: '/assets/images/farro.jpg', productName: 'Organic Farro', price: 11.18, brand: "Bob's Red Mill", …}
```

Admin Feature – Remove Product Form



Features to Implement for Capstone Project

Kitchen Story

Features

FRONTEND

- Tags for New Product
  - Fix bug – use ngFor to bind to an Array
- Add “Reset Password” functionality for the Admin user
- Use Observables for User monitoring
- Add HTTP functionality
- Add dynamic appearance of the nav bar, based on user state
- Continue to refine the CSS code to improve the overall look & feel of the application
- Remove hardcoded product, tags/categories, and User data

BACKEND

- Create the Spring Boot application
- Establish the REST API
- Create the MySQL database
  - Product information
  - Tags/categories
  - User data
- Connect the frontend and the backend