SLO County Farmers Market Association System

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2. BACKGROUND INFORMATION

The Organization

San Luis Obispo's first famer's market was founded in 1978 with only a few farmers selling their goods in the Young's Giant Food parking lot on Broad St. It was very small the first couple of years—with just around 10-15 local farmers who participated—, but has grown over the past decades to become what it is today, accommodating over 100 local vendors.[1]

SLO Farmers Market Association is a mutual benefit, not-for-profit organization. SLOFMA serves two groups, family owned farms and businesses & the local community; they establish their value by creating multiple marketplaces for vendors to deliver fresh products to consumers. SLOFMA connects vendors and farmers market customers by organizing and operating the farmers markets, providing consumers with a central location to browse and shop for locally sourced products. All members (vendors) of SLOFMA have the responsibility to elect a seven-member Board of Directors, each board member serving a three-year term. Additionally there is the Executive Director—who works with the board—Peter Jankay, who was hired by the Board of Directors in 1985. In an interview, Jankay said they didn't have "thousands of dollars in sales, but it was exciting", meaning people had good feelings and a great time even walking around the farmers market.[1]

People in the Organization

The players in the organization include the SLOFMA staff, which includes: the Board of Directors, Executives Director, Market Managers, the vendors, and the customers. The Board of Directors establishes policies and directs SLOFMA on how the markets will run and grow; the Executive Director, Peter Jankay, implements all policies agreed on by the Board of Directors and is responsible for all day-to-day activities.[2] His responsibilities include hiring Market Managers as well as overseeing each of the

[1] Cain, Hayley Thomas. "From 1978 to 2018, 40 Years of Farmer's Markets in SLO." *New Times San Luis Obispo*, New Times San Luis Obispo, 22 Oct. 2018, www.newtimesslo.com/sanluisobispo/from-1978-to-2018-40-years-of-farmers-markets-in-slo/Content?oid=6590397.
[2] "About." *SLO County Farmers' Markets*, slocountyfarmers.org/about/.

markets general operations. As mentioned, each active market has an on-site Market Manager who works hands on to enforce all the California state regulations, health department requirements, weights and measures standards and all SLOFMA rules and policies.[2] If there are any customer questions or any market troubles that arise, managers are there to help solve the problems.

Current State of the use of information Technology

Currently, there is a website that is used by SLOFMA with many aspects that provide users with general resources, and link them to their social media platforms: Facebook, Instagram, and Pinterest. The SLOFMA's current system is user-friendly and easily navigable for customers. Unfortunately however, it is underdeveloped in its communication phase with vendors, and lacks modularity in accessing detailed information regarding both vendors and markets. Although the Graphic User Interface and system design is aesthetic, it lacks the information necessary for vendors and customers to easily navigate their website; and critically underutilizes its community interaction function (i.e. the Blog).

3. PROBLEM IDENTIFICATION

Upon examination of the current business processes and systems in place within the San Luis Obispo Farmers Market Association (SLOFMA), it became apparent that there were several factors in which the organization could stand to improve upon. These factors involve the following: opportunity for Business Process Automation (BPA), opportunity for Business Process Improvements (BPI), and additionally in building better content awareness, communication, and consumer engagement.

To gain this insight on the necessary improvements to the systems that would be needed, interviews and information were collected from SLOFMA associated vendor(s) who were available for comment; in this case the vendor interviewed was Whalebird Kombucha—who is locally based out of San Luis Obispo and has been selling with the SLOFMA for the past three years.

Opportunity for Business Process Automation

As the system currently stands, manual input and effort is required to maintain a current and active list of vendors who are present at the five weekly markets; it is not uncommon for the available information online to be outdated and not include vendors who are present at the markets. This is especially problematic and damaging for newly established vendors who interact with the organization. Even vendors such as Whalebird Kombucha do not appear on the online vendors list, and as a result many vendors are at times deprived of critical market and consumer awareness despite paying required and mandatory fees associated with being a vendor just as any other would. This could easily be negated through the implementation of an in an online registration process that automatically saves active vendors and places them on a database that is updated yearly (fees are paid on a yearly basis).

Opportunities for Business Process Improvements

1. Registration processes are handled through a single Market Manager and Farmers' Market Certified Producers (mandatory requirement obtained through

SLO County) must contact the Market Manager directly via cell or email and schedule and in-person appointment to acquire approval.

   a. Lengthy, arduous process could be condensed through online registration.

2. Reservation processes are currently conducted and managed entirely through one Reservation Coordinator. This Coordinator is responsible for every single vendor and this leads to latency in communications, and it can be hard for vendors to get feedback and up to date information as to if they have been approved for requested reservation locations.

   a. Improvement: Create an automated Reservation & Booking system through the website to manage vendor reservations.

3. Customers have little to no information regarding vendors on the SLOFMA website. The purchasing process can be improved for the consumers by making more information readily available online—such as product listing and payment types accepted by vendors.

   a. Vendors have the ability to post and maintain product offerings and what forms of payment are accepted. (This helps consumers know whether or not they can buy what they need/discover new items, and helps them adequately prepare to bring proper payment forms; it is not uncommon for vendors to have to turn people away because they don't accept a certain form of payment—thus cutting into revenues.

Content Awareness, Communications, and Engagement

1. Consumers don't always feel safe or confident when navigating the farmers market in person, and never quite know which vendors to try good and services from.

   a. Having the ability to post and additionally access vendor reviews is beneficial to consumers *and* vendors. Consumers are reassured by other's past experiences when trying to explore new consumption options;

additionally satisfied and happy consumers can highlight their positive experiences, thus attracting even more business.

2. Consumers would like to feel more engaged in the farmers market community, currently only the SLOFMA is permitted to make blog posts, increasing the breadth of this function would benefit the organization.
    a. Blog posts, and recipe sharing are great ways to develop connections between consumers and producers, allowing for them to build natural relationships and additionally generate organic marketing and product awareness for vendors.

4. SYSTEM REQUEST

System Request - SLO Farmers Market Association

Project sponsor - Diane Boyd & Peter Jankay, Market Manager & Executive Director
Business Need - The project has been initiated to help the San Luis Obispo Farmers Market Association to improve an organized list about the vendors, to help customers find wanted information and create a clearer navigation path to information for any users. Currently, ● There are 5 markets with many vendors' information on the website which is hard for a customer to locate what product each vendor sell ● Customers are unable to find more information about the vendors ● Locating which vendor sells what product is not easily identified
Business requirements - Administrators (SLOFMA) can make updates to market information. Customers will be able to easily identify the direct navigation to SLOFMA Blog. Using this system over a website, customers will be able to: ● Search for products to find the specific market they are sold ● Access a list of vendors ● Access market details (time and place) ● Access maps detailing vendor locations ● Share recipes created from farmers market goods ● Rate vendors/leave reviews Vendors will be able to: ● Sign up and reserve a spot at a market ● Input inventory information (product, price) into product database
Business Value - There will be improvements in the following: ● Increase in 5% sales efficiency for vendors by streamlining product acquisition ● Increase in accessibility for customers and vendors ● 8% increase of customers attend SLO farmers market ● Reduction in management costs through system's resource management
Special issues or constraints - The system needs to be implemented by the start of Cal Poly's Fall Quarter 2021 for the return of Cal Poly students (the majority of SLOFMA customers).

5. ANALYSIS

Requirements Document

User Requirements
Customers need the ability to search for a product
Customers need the ability to search for a vendor
Customers need the ability to find the location of a vendor at a market
Customers need the ability to find where each market is located
Customers need the ability to find market details (time/place)
Customer need the ability to leave reviews and ratings of vendors
Customers need the ability to share recipes
Customers need the ability to view the SLOFMA Blog
Customers need the ability to find calendar of market dates/times
Vendors need the ability to edit their inventory
Vendors need the ability to add new inventory
Vendors need the ability to reserve a spot at the markets
Vendors need the ability to input their own biographies/mission statement
Vendors need the ability to register with SLO Farmers Market Association
Administrators need the ability to add and edit market information

Functional Requirements
The system must display inventory/vendor products for sale
The system should store a list of all vendors in a database
The system must save new vendor registrations in a database

The system should display the list of all vendors
The system should display a vendor calendar/market availability
The system must display a market map
The system must record new to edits in inventory
The system must record new additions to inventory
The system must have a login/log out to portal
The system must update reservations of vender spaces
The system must identify active and inactive markets
The system must save new mission statements
The system should display all matching information based on search
The system must display notifications of confirmations

Non-Functional Requirements
Only vendors should have access to their own inventory
Only SLOFMA administration have access to create and update market information
New vendor registration information will only be shown to the vendors themselves and SLOFMA
The system should be compatible with any Web Browser (Safari, Chrome, Firefox, etc.)
The system must be accessible through mobile devices in its standard format
The system should have safeguards from viruses and malware
The system should be user friendly and navigable
Search speed will be kept at an acceptable level

Use Cases (1-19)

(1) Add Market Information

Title:	Add Market Information
Description:	The goal of this use case is for SLOFMA to add market information including location and time.
Primary Actor:	SLOFMA
Trigger:	A new market needs to be added to SLO Farmers Market Association records
Preconditions:	1. Website must be active and running 2. Must be an authorized user
Normal Course:	1. User selects “Add Market Information” option 2. System displays Market Information dialogue 3. User inputs market information (market name location and time) 4. User selects “Save” option 5. System displays inputted market information
Postconditions:	1. New market information is added to database
Alternative Courses:	User selects “Add Market Information Entry” option (Step 3) 3a. System displays market information dialogue 3b. User input market information (market name location and time) Continue at Step 4
Exceptions:	User selects “Cancel” (Occurs at any time): 1. System displays “Are you sure”message 2. User selects “Yes” option Terminate Use Case 2a. User selects “No” option Continue Use Case
Priority:	High

(2) Edit Market Information

Title:	Edit Market Information
Description:	The goal of this use case is for SLOFMA to edit existing market information.
Primary Actor:	SLOFMA
Trigger:	SLOFMA wants to edit existing market information
Preconditions:	1. Website must be active and running 2. Must be an authorized user
Normal Course:	1. User selects “Edit Market Information” option 2. System identifies existing Market Information from database 3. System displays all market information list 4. User selects a market 5. System displays the market’s information (market name location and time) 6. User edits the information 7. User selects “Save” option 8. System saves updated market information 9. System displays confirmation
Postconditions:	1. System updates database with market information changes
Alternative Courses:	User selects Archive/Unarchive (occurs at step 6) 6a. User selects “Archive/Unarchive” option 6b. System displays “Are you sure?” message 6b1. User selects “Yes” option 6b-1 System detects if item is Archived or Unarchived 6b-1a. System confirms item is Archived 6b-1a. System marks item as Unarchived 6b-1a. System flags item as “Active” 6b-1b. System confirms item is Unarchived 6b-1b. System marks item as Archived 6b-1b. System flags item as “Inactive” 6b2. User selects “No” option 6c. System displays Archive/Unarchive status change Continue at step 7

Exceptions:	User selects “Cancel” (Occurs at any time): 1. System displays “Are you sure”message 2. User selects “Yes” option Terminate Use Case 2a. User selects “No” option Continue Use Case
Priority:	Low

(3) Register with SLOFMA

Title:	Register with SLOFMA
Description:	This use case describes the process of vendors creating an account and registering their booth for a farmers market location.
Primary Actor:	Vendor
Trigger:	The vendor would like to have a booth at a SLO farmers market location to sell goods
Preconditions:	1. Website must be active and running
Normal Course:	1. User selects “Register with SLOFMA” option 2. System displays Registration Dialogue 3. User inputs information (vendor name, email contact information, and create password) 4. User selects “Okay” option 5. System displays terms of agreement 6. User selects “agree” option 7. System saves the registration 8. System sends confirmation of registration to vendor
Postconditions:	1. New user information is added to the database 2. System saves registration 3. User receives register confirmation
Alternative Courses:	N/A
Exceptions:	User inputs Vender name already registered (Step 3) 1. System displays “This name is already registered with SLOFMA” message 2. System prompts user to log in page Terminate Use Case User selects “Cancel” (Occurs at any time): 1. System displays “Are you sure” message 2. User selects “Yes” option Terminate Use Case 2a. User selects “No” option Continue Use Case
Priority:	Low

(4) Reserve Vendor Space

Title:	Reserve Vendor Space
Description:	This use case describes the process of a vendor reserving a space in a SLOFMA's markets.
Primary Actor:	Vendor
Trigger:	The vendor needs a specific location in the market to sell their products
Preconditions:	1. Website must be active and running 2. The Vendor must be registered with the SLOFMA
Normal Course:	1. User selects "Reserve Vendor Space" option 2. The system displays a list of markets with available spaces 3. User selects a market 4. The system displays a list of spaces available for reservation 5. The user selects a space 6. The system retrieve reservation costs information 7. The system displays the total cost of selected space and booth payment info options 8. User selects booth payment info option 9. The system asks the user "Would you like to reserve this space?" 10. The user selects "confirm" option 11. The system forwards the user to Paypal
Postconditions:	1. The system updates the corresponding market's map 2. New registration space has been saved to database
Alternative Courses:	N/A
Exceptions:	User selects "Cancel" option (Step 10) 1. The system prompts user to make a new selection Continue at Step 2
Priority:	High

(5) Add Mission Statement

Title:	Add Mission Statement
Description:	This use case describes the process of a vendor entering their mission statement into the SLOFMA's system. In this use case, the Vendor includes information such as the Vendor's bio and "About Us" statements.
Primary Actor:	Vendor
Trigger:	The vendor needs to inform potential customers about their business and the history behind it
Preconditions:	1. Website must be active and running 2. User must be registered with the SLOFMA 3. User must be logged in
Normal Course:	1. User selects "Add Mission Statement" option 2. System displays "Mission Statement" Dialogue 3. User inputs Mission Statement 4. User selects "Save" option 5. System saves the Mission Statement to database 6. System displays a confirmation message "Your mission statement has been added!" 7. System publishes the user's Mission Statement to Vendor Profile
Postconditions:	1. System saves mission statement to Vendor Profile 2. Mission statement saved to database
Alternative Courses:	N/A
Exceptions:	User selects "Cancel" option (Step 4): 1. System displays "Are you sure" message 2. User selects "Yes" option Terminate Use Case 2a. User selects "No" option Continue Use Case
Priority:	Medium

(6) Edit Mission Statement

Title:	Edit Mission Statement
Description:	This use case describes the process of a vendor editing their mission statement on their profile.
Primary Actor:	Vendor
Trigger:	The vendor wants to edit their existing mission statement
Preconditions:	1. Website must be active and running 2. User must be registered with the SLOFMA 3. User must be logged in
Normal Course:	1. User selects “Edit Mission Statement” option 2. System identifies user’s Mission Statement 3. System displays user’s Mission Statement 4. User edits Mission Statement 5. User selects “Save” option 6. System saves the updated Mission Statement 7. System displays a confirmation message “Your mission statement has been updated!” 1. System publishes the user’s Mission Statement to Vendor Profile
Postconditions:	1. System saves updated mission statement to Vendor Profile 2. Updated mission statement saved to database
Alternative Courses:	N/A
Exceptions:	User selects “Cancel” (Occurs at any time): 1. System displays “Are you sure” message 2. User selects “Yes” option Terminate Use Case 2a. User selects “No” option Continue Use Case
Priority:	Medium

(7) Add Inventory

Title:	Add Inventory
Description:	The goal of this use case is for the vendors to add their inventory to their vendor information.
Primary Actor:	Vendor
Trigger:	Vendors get new inventory that will be sold at farmers markets
Preconditions:	1. Website must be active and running 2. The vendor must be registered with the SLOFMA 3. The vendor must be logged in
Normal Course:	1. User selects “Add Inventory” option 2. System displays inventory dialogue 3. User inputs inventory information (item name, selling price) 4. User selects “Save” option 5. System displays “Is this Correct?” message 6. User selects “Yes” option 7. System sends confirmation message “Your inventory has been added” to user
Postconditions:	1. New inventory is added to database 2. System sends confirmation to user
Alternative Courses:	User selects “Add Inventory Entry” option (Step 3) 3a. System displays more inventory dialogue 3b. User input inventory information (product name, selling price) Continue to step 4
Exceptions:	User selects “Cancel” (Occurs at any time): 1. System displays “Are you sure”message 2. User selects “Yes” option Terminate Use Case 2a. User selects “No” option Continue Use Case
Priority:	High

(8) Edit Inventory

Title:	Edit Inventory
Description:	This use case describes the process for vendors to edit their existing inventory.
Primary Actor:	Vendor
Trigger:	Vendor wants to edit their existing inventory
Preconditions:	1. Website must be active and running 2. The vendor must be registered with the SLOFMA 3. The vendor must be logged in
Normal Course:	1. User selects “Edit Inventory” option 2. System identifies inventory list for Vendor 3. System displays all inventory listed for Vendor 4. User selects an inventory 5. System displays the inventory’s information (product name, selling price) 6. User edits the information 7. User selects “Save” option 8. System saves the inventory update 9. System displays confirmation 10. System sends “Your inventory has been updated” notification message to user
Postconditions:	1. System updates database with inventory changes 2. Notification message has been sent to user
Alternative Courses:	User selects Archive/Unarchive (occurs at step 6) 6a. User selects “Archive/Unarchive” option 6b. System displays “Are you sure?” message 6b1. User selects “Yes” option 6b-1 System detects if item is Archived or Unarchived 6b-1a. System confirms item is Archived 6b-1a. System marks item as Unarchived 6b-1a. System flags item as “Active” 6b-1b. System confirms item is Unarchived 6b-1b. System marks item as Archived 6b-1b. System flags item as “Inactive” 6b2. User selects “No” option 6c. System displays Archive/Unarchive status change

	Continue at step 7
Exceptions:	User selects “Cancel” (Occurs at any time) 1. System displays “Are you sure?” message 2. User selects “Yes” option Terminate Use Case 2a. User selects “No” option Continue Use Case
Priority:	Medium

(9) Access Market Information

Title:	Access Market Information
Description:	This use case describes the process of how a user accesses market information such as time and location.
Primary Actor:	Customer
Trigger:	A customer wants to find the time and location for a specific market
Preconditions:	1. Market information is stored for each market location
Normal Course:	1. User selects “Market Information” option 2. System displays all five markets by location 3. User selects a specific market 4. System confirms market selection 5. System retrieves market information from database 6. System displays the market’s time, location, and vendor map
Postconditions:	None
Alternative Courses:	N/A
Exceptions:	N/A
Priority:	Low

(10) Access Map of All Market Locations

Title:	Access map of All Market Locations
Description:	This use case describes the process of locating where all the markets are in relation to each other.
Primary Actor:	Customer
Trigger:	User wants to know where all markets are located
Preconditions:	1. At least one market must be in database 2. All markets must have location data
Normal Course:	1. User selects “View Map” option 2. System displays all the markets through SLO Farmers Market Association
Postconditions:	None
Alternative Courses:	N/A
Exceptions:	N/A
Priority:	Low

(11) View Calendar

Title:	View Calendar
Description:	This use case describes the process of a customer viewing when markets open on a calendar.
Primary Actor:	Customer
Trigger:	Customer wants to know what markets are open on a calendar
Preconditions:	1. Website must be up and running
Normal Course:	1. User selects “View Calendar” option 2. System displays set weekly calendar 3. System displays “Times and Dates are subject to weather/holidays” message
Postconditions:	None
Alternative Courses:	N/A
Exceptions:	N/A
Priority:	Low

(12) Search Product

Title:	Search Product
Description:	This use case describes the process of how customers search a product that will be sold at the farmers market(s).
Primary Actor:	Customer
Trigger:	Customer wants to find a certain product at the farmers market(s)
Preconditions:	1. At least one market must be open 2. Updated product information is available and online 3. Website is active and running
Normal Course:	1. User selects “Search Product” 2. System displays “Search” dialogue 3. User inputs product search criteria into search function 4. System identifies qualifying items with matching criteria 5. System displays search results 6. User selects a product 7. System retrieves product availability from database 8. System retrieves product prices from database 9. System retrieves product Vendor(s) from database 10. System displays product information (availability, prices, & vendor(s))
Postconditions:	None
Alternative Courses:	N/A
Exceptions:	System does not identify product with search criteria (Step 3) 1. System displays “Product Not Found” Message 2. System Prompts user to perform another search Continue to Step 4
Priority:	Medium

(13) Search Vendor

Title:	Search Vendor
Description:	This use case describes the process of searching for a vendor and includes specific vendor information such as contact information, products offered, and payment types accepted.
Primary Actor:	Customer
Trigger:	A customer wants more information on vendors at the farmers market(s)
Preconditions:	1. Website is active and running 2. Updated vendor information is available and online
Normal Course:	1. User selects “Search Vendor” option 2. System displays “Search” dialogue 3. User inputs Vendor search criteria into search function 4. System verifies Vendor search criteria from database identifying qualifying results 5. System displays search result(s) of Vendor(s) 6. User selects a Vendor 7. System accesses Vendor Information database 8. System retrieves Vendor Information (Bio, Contact info, products offered,vendor market schedule, and payment types accepted) 9. System displays Vendor Information to user
Postconditions:	None
Alternative Courses:	User wants to view all Vendors (Step 1) 1a. User selects “View all Vendors” option 1b. System displays a list of all Vendor names 1c. User selects a specific Vendor Continue at Step 7
Exceptions:	Search criteria is invalid (Step 3): 1. System flags the search as invalid 2. System displays “Your search was invalid. Please try again.” message 3. System prompts user to a new search Continue at Step 2
Priority:	Medium

(14) Create Vendor Reviews

Title:	Create Vendor Reviews
Description:	This use case gives customers the opportunity to rate vendors and leave reviews. In this use case, customers provide details such as a 1-5 star rating and experience message.
Primary Actor:	Customer
Trigger:	Customers of a SLO farmers market would like to share their experience at the market
Preconditions:	1. Website must be active and running
Normal Course:	1. User selects “Share Review” option 2. System displays list of vendors 3. User selects specific vendor 4. System displays message “email address will not be shared to public” message 5. User inputs user information (First Name, Last Initial, and email address) 6. User inputs review information (1-5 stars and experience message) 7. User selects “Done” option 8. System displays all inputted information 9. System displays “Is this correct” option 10. User selects “Yes” option 11. System saves new review to vendor information database 12. System sends notification to user 13. System publishes review on SLOFMA blog page
Postconditions:	1. New review is saved to database 2. New review is published to blog page 3. Notification sent to users 4. User information is saved to database
Alternative Courses:	N/A
Exceptions:	User selects the “Cancel” option (occurs at any time): 1. System presents the user “Are you sure?” message 2. User selects “yes” option Terminate Use Case 2a. User selects “no” option

	Continue Use Case
Priority:	Medium

(15) View Vendor Reviews

Title:	View Vendor Reviews
Description:	This use case describes how the customer finds and views reviews of vendors.
Primary Actor:	Customer
Trigger:	Customer wants to access the reviews of SLOFMA Vendors
Preconditions:	1. There must be at least one vendor in the database
Normal Course:	1. User selects “View Reviews” option 2. System displays “Vendors” dialogue 3. User selects desired Vendor 4. System identifies reviews attributed to selected Vendor 5. System retrieves customer reviews and ratings from database 6. System displays customer reviews and ratings to user
Postconditions:	None
Alternative Courses:	N/A
Exceptions:	There are no reviews for selected Vendor (Step 3) 1. System displays “There are no reviews” message 2. System prompts user to do a new selection Continue to Step 4
Priority:	Low

(16) Share Recipes

Title:	Share Recipes
Description:	This use case describes the process of customers sharing recipes including farmers market products to the community. In this use case the customer provides the details of a recipe, including the title, ingredients, and instructions.
Primary Actor:	Customer
Trigger:	Customer has a recipe using farmer markets products that they want to share to the public
Preconditions:	1. Website must be active and running
Normal Course:	1. User selects “Share Recipe” option 2. System displays “Input Recipe information” dialogue 3. System displays “name and email address will not be shared to public” message 4. User inputs name (Name and email address) 5. User inputs recipe basic information (title, ingredients, instructions, photo) 6. User selects “Done” option 7. System displays all inputted information 8. System displays “Is this correct” option 9. User selects “Yes” option 10. System publishes recipe on SLO Farmers Market Blog 11. System saves recipe to database 12. System generates a link for recipe 13. System sends a notification with generated link to user
Postconditions:	1. A new recipe is published 2. A new recipe is saved to database 3. Recipe link is generated 4. Notification is sent to user 5. User information is saved to database
Alternative Courses:	User wants to share multiple recipes (Step 5) 5a. System displays “Input Recipe information” dialogue 5b.User inputs recipe basic information (title, ingredients, instructions) 5c. User selects “Ok” option 5d. System display list of all recipes user inputted

	5e. User selects “Done” option Continue to step 7 User selects “no” (Step 9) 9a. System prompts user back to input recipe dialogue Continue to Step 5
Exceptions:	User selects “cancel” option (Occurs at any time): 1. System displays “Are you Sure?” message 2. User selects “Yes” option Terminate Use Case 2a. User selects “No” option Continue Use Case
Priority:	Medium

(17) View Blog

Title:	View Blog
Description:	This use case describes the process of customers viewing reviews and recipes made by other patrons on the SLOFMA blog.
Primary Actor:	Customer
Trigger:	Customer wants to open and browse the SLOFMA consumer blog
Preconditions:	1. Website must be up and running 2. At least one blog post must be posted
Normal Course:	1. User selects “Blog” option 2. System confirms selection 3. System retrieves Blog webpage information (Reviews & Recipes) 4. System displays Blog information
Postconditions:	None
Alternative Courses:	N/A
Exceptions:	N/A
Priority:	Low

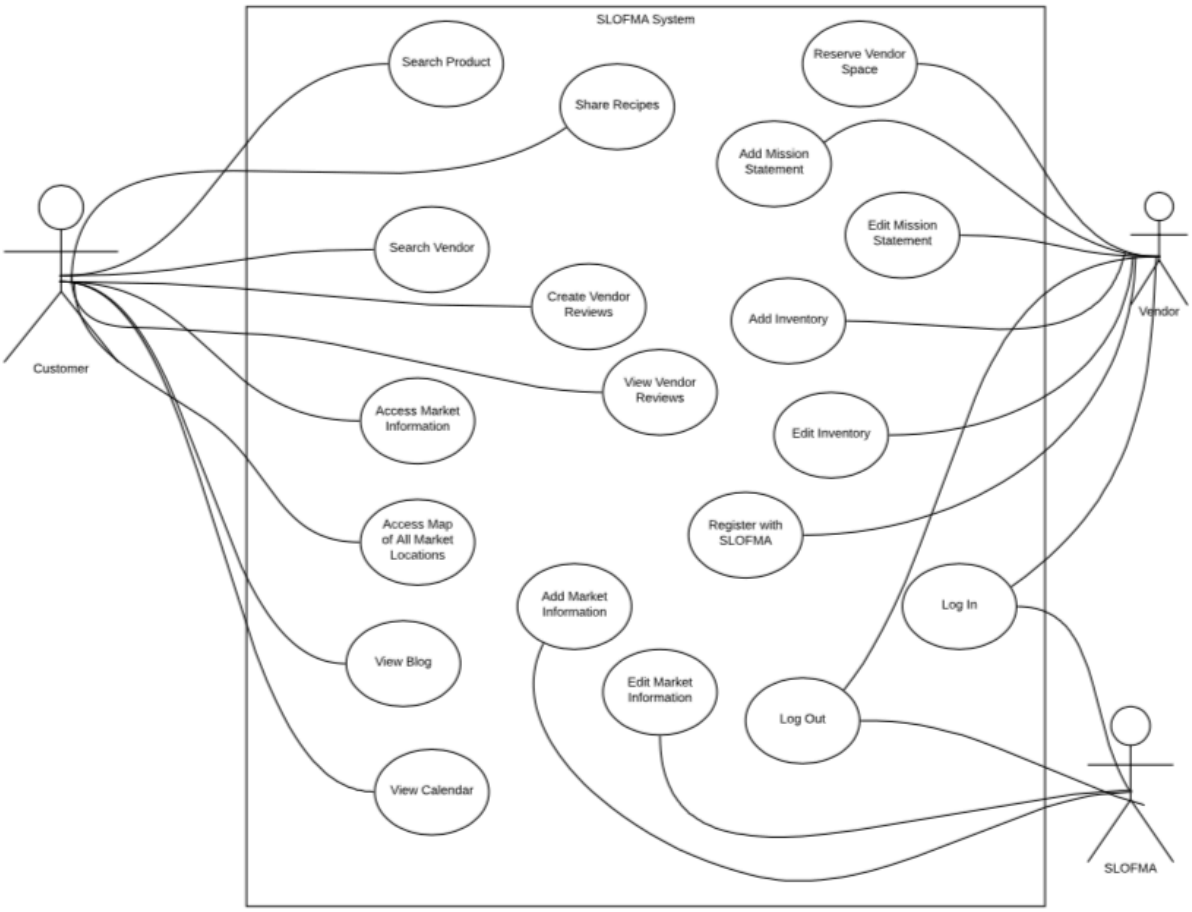
(18) Log In

Title:	Log In
Description:	This use case describes the process of vendors or the SLOFMA System Administrator logging into the system to access the Portal and its respective authorized functions.
Primary Actor:	Vendors, SLOFMA
Trigger:	User wants to log into their Portal
Preconditions:	1. User must have registered with SLOFMA
Normal Course:	1. User selects “Portal” option 2. System displays “Log In” dialogue 3. User inputs login information (Vendor Name/SLOFMA Username and Password) 4. User selects “Go” option 5. System validates login information 6. System displays portal homepage
Postconditions:	1. User has been logged into system
Alternative Courses:	N/A
Exceptions:	Login information is invalid (occurs at Step 5) 1. System displays error message “Login Information Invalid” 2. The system prompts the user to try again Continue at step 3
Priority:	High

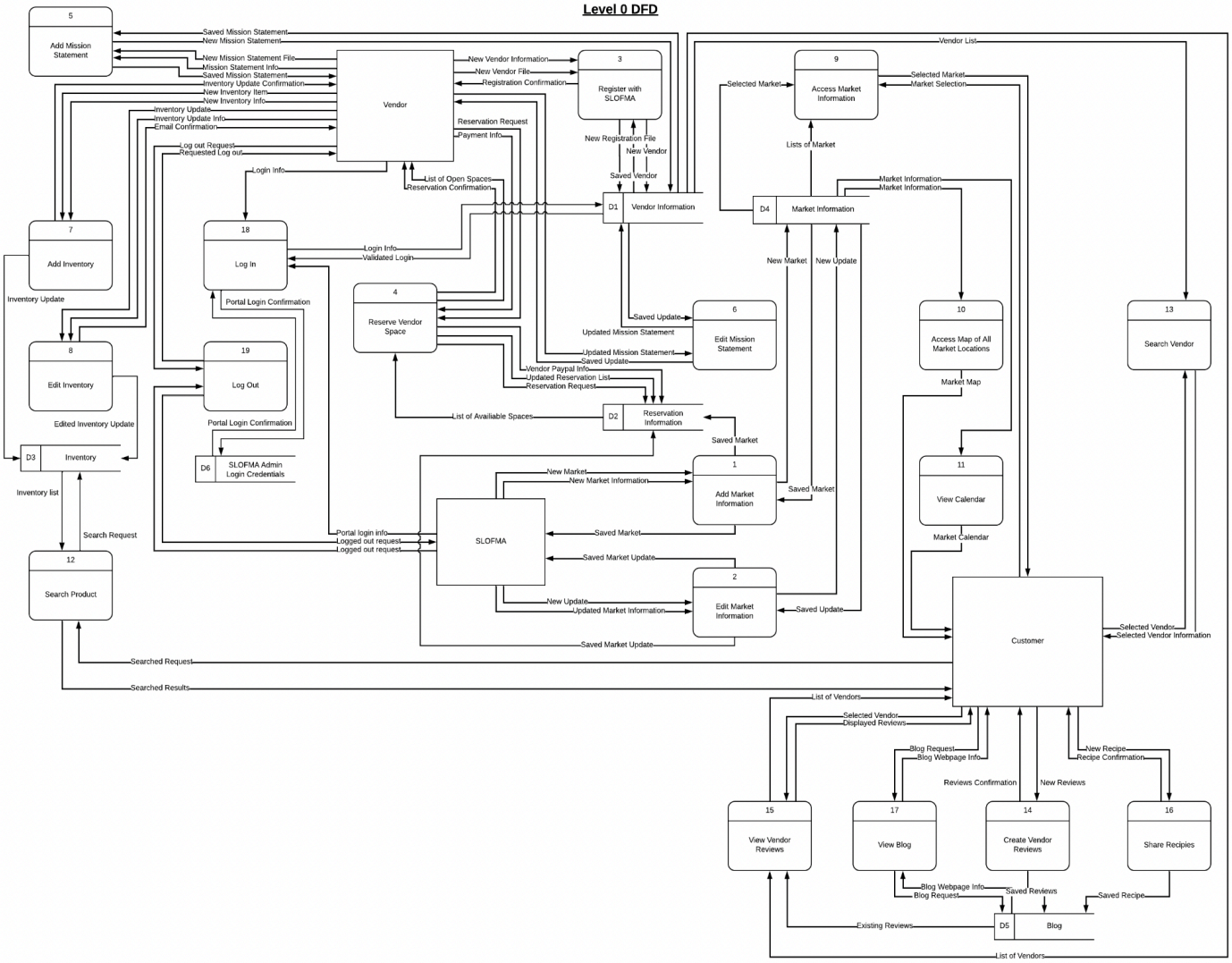
(19) Log Out

Title:	Log Out
Description:	This use case describes the process of vendors and the SLOFMA System Administrator logging out of the system to sign out of their Portal.
Primary Actor:	Vendors, SLOFMA
Trigger:	User want to log out of their Portal
Preconditions:	1. User must have registered with SLOFMA 2. User must have already logged into their Portal
Normal Course:	1. User selects “Log Out” option 2. System displays “Are you sure?” alert 3. System displays dialogue “Yes/No” 4. User selects “Yes” option 5. System confirms selection 6. System displays confirmation message “Logout Successful” 1. System displays “Log In” page
Postconditions:	1. User is logged out of the system
Alternative Courses:	N/A
Exceptions:	N/A
Priority:	High

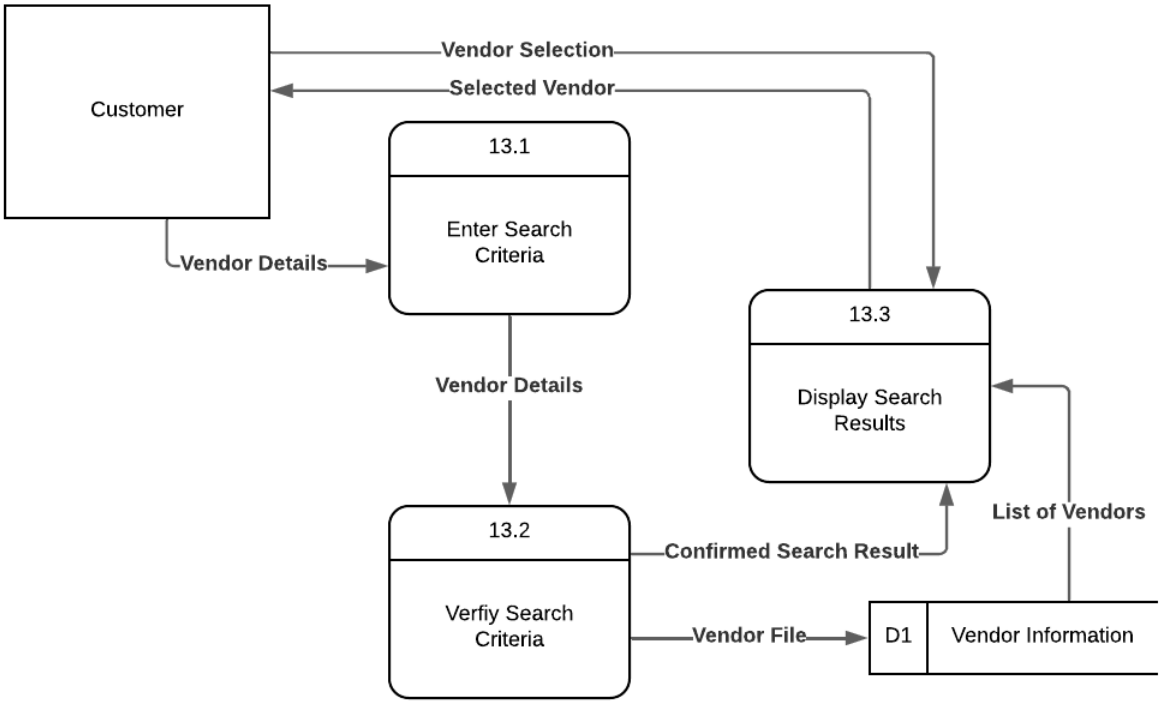
Use Case Diagram


SLOFMA System
Search Product
Share Recipes
Search Vendor
Create Vendor Reviews
View Vendor Reviews
Access Market Information
Access Map of All Market Locations
View Blog
View Calendar
Reserve Vendor Space
Add Mission Statement
Edit Mission Statement
Add Inventory
Edit Inventory
Register with SLOFMA
Add Market Information
Edit Market Information
Log In
Log Out
Customer
Vendor
SLOFMA

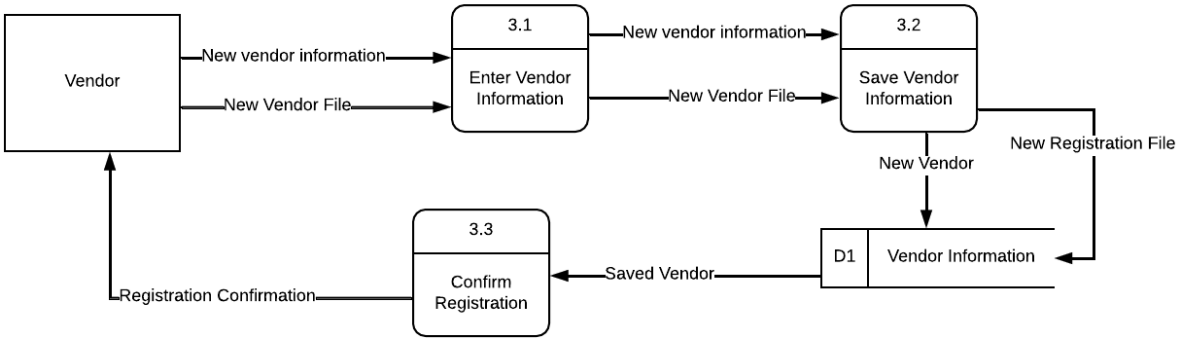
Data Flow Diagrams

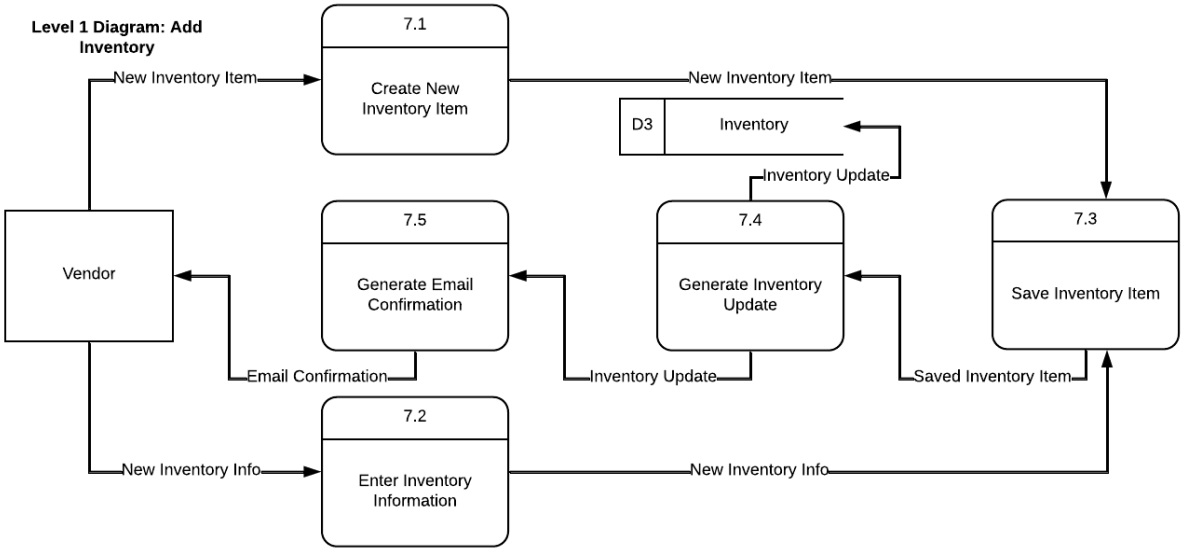

Level 0 DFD
5
Add Mission Statement
Saved Mission Statement
New Mission Statement
New Mission Statement File
Mission Statement Info
Saved Mission Statement
Inventory Update Confirmation
New Inventory Item
New Inventory Info
Inventory Update
Inventory Update Info
Email Confirmation
Log out Request
Requested Log out
Vendor
New Vendor Information
New Vendor File
Registration Confirmation
Reservation Request
Payment Info
Login Info
List of Open Spaces
Reservation Confirmation
3
Register with SLOFMA
New Registration File
New Vendor
Saved Vendor
D1
Vendor Information
Vendor List
9
Access Market Information
Selected Market
Selected Market
Market Selection
Lists of Market
D4
Market Information
Market Information
Market Information
7
Add Inventory
Inventory Update
18
Log In
Login Info
Validated Login
Portal Login Confirmation
4
Reserve Vendor Space
Saved Update
Updated Mission Statement
6
Edit Mission Statement
Updated Mission Statement
Saved Update
Vendor Paypal Info
Updated Reservation List
Reservation Request
List of Availiable Spaces
D2
Reservation Information
Saved Market
New Market
New Update
10
Access Map of All Market Locations
Market Map
13
Search Vendor
8
Edit Inventory
Edited Inventory Update
19
Log Out
Portal Login Confirmation
D6
SLOFMA Admin Login Credentials
D3
Inventory
Inventory list
Search Request
12
Search Product
1
Add Market Information
New Market
New Market Information
Saved Market
SLOFMA
Portal login info
Logged out request
Logged out request
Saved Market
Saved Market Update
2
Edit Market Information
New Update
Updated Market Information
Saved Update
Saved Market Update
11
View Calendar
Market Calendar
Customer
Selected Vendor
Selected Vendor Information
Searched Request
Searched Results
List of Vendors
Selected Vendor
Displayed Reviews
Blog Request
Blog Webpage Info
New Recipe
Recipe Confirmation
Reviews Confirmation
New Reviews
15
View Vendor Reviews
17
View Blog
14
Create Vendor Reviews
16
Share Recipies
Blog Webpage Info
Blog Request
Saved Reviews
Saved Recipe
Existing Reviews
D5
Blog
List of Vendors

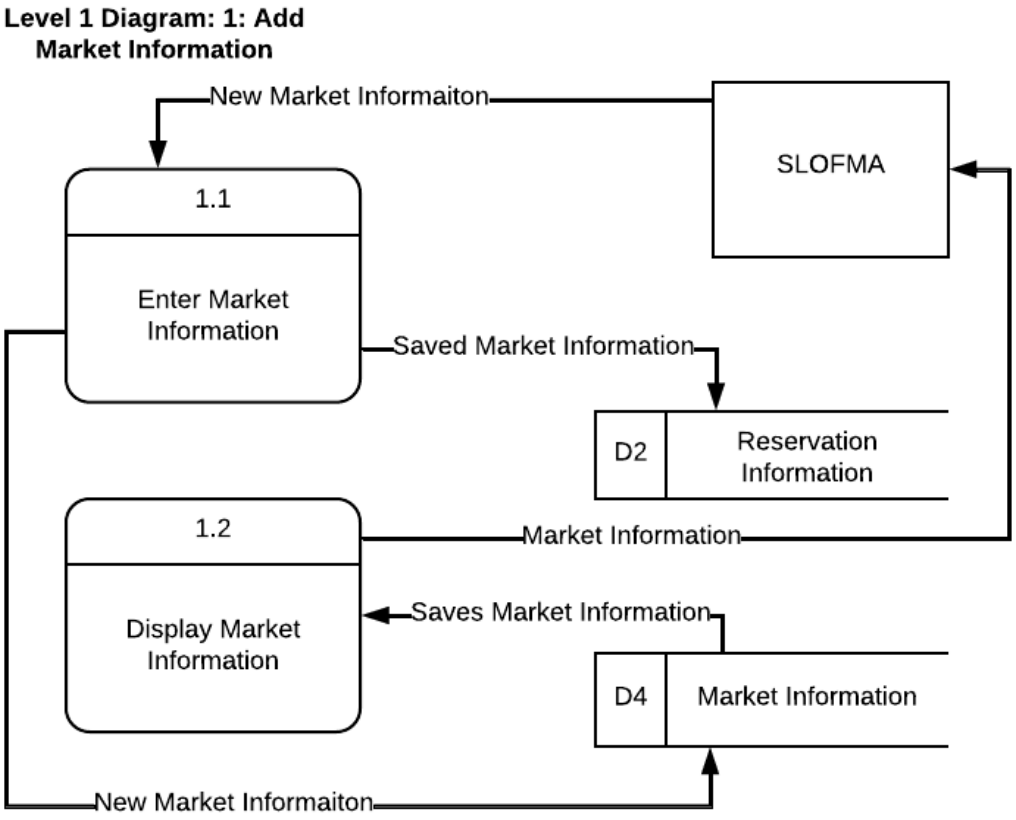
Level 1 Diagram: Search Vendor



Level 1 Diagram: Register with SLOFMA




Level 1 Diagram: Add Inventory
7.1
Create New Inventory Item
New Inventory Item
New Inventory Item
D3
Inventory
Inventory Update
Vendor
7.5
Generate Email Confirmation
7.4
Generate Inventory Update
7.3
Save Inventory Item
Email Confirmation
Inventory Update
Saved Inventory Item
7.2
Enter Inventory Information
New Inventory Info
New Inventory Info


Level 1 Diagram: 1: Add Market Information
New Market Informaiton
SLOFMA
1.1
Enter Market Information
Saved Market Information
D2
Reservation Information
1.2
Market Information
Display Market Information
Saves Market Information
D4
Market Information
New Market Informaiton

6. DISCUSSION OF PROPOSED SOLUTION

Acquisition Strategy

SLOFMA is encouraged to use custom development as an acquisition strategy. Due to the competency of SLOFMA's existing system and the current pandemic putting a halt to the physical aspects of a farmers market, the time frame for creating a new system is very flexible. SLOFMA possesses in-house experience through employment of people with technical and functional expertise. It would be beneficial to SLOFMA if they could build their system, which would be a website, because it will be more personalized towards their needs.

Requirements and Solutions

The nonfunctional requirement of SLOFMA's new system calls for an array of operational, performance, security, and cultural requirements. The use of both the Web and a customer's Web browser indicates that the SLOFMA needs a client-system architecture. More specifically, it is recommended that the organization uses thin client architecture to facilitate centralized computing capabilities for all of the user functions will be performed through the SLOFMA website. The type of system being proposed will create an efficient way for SLOFMA to incorporate processes that it lacks into the new system.

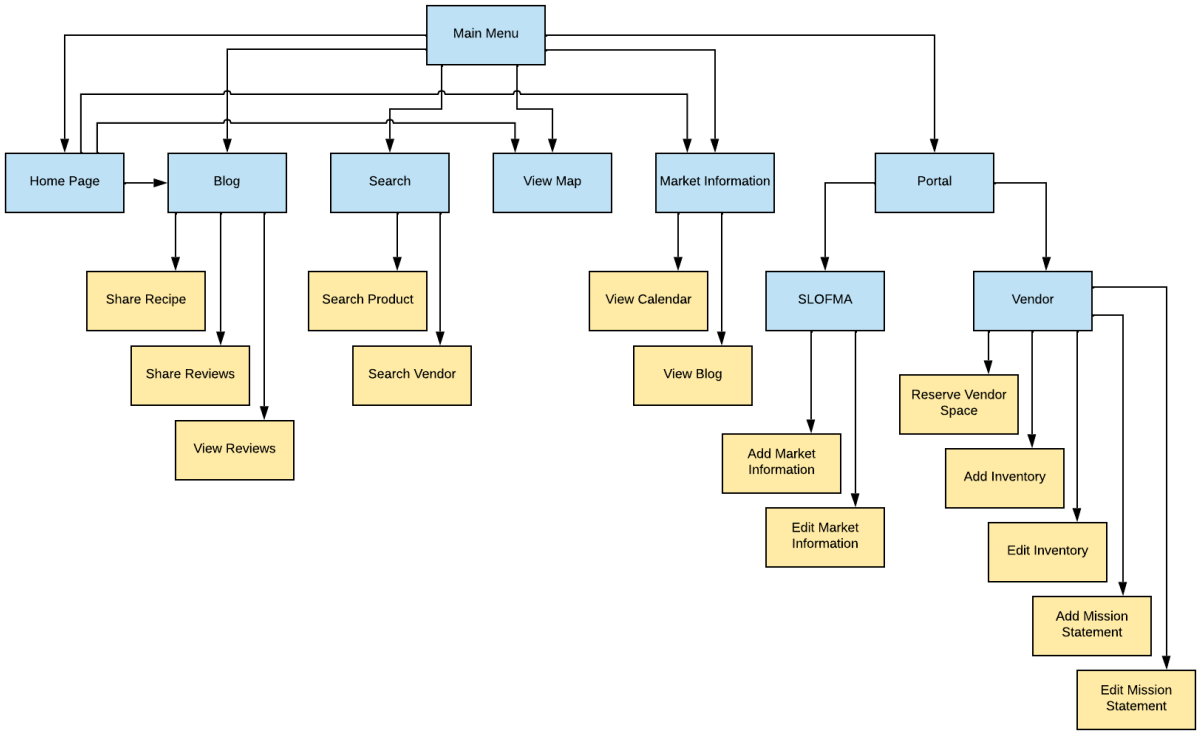
These new processes include a variety of business process improvements such as vendor registration and spot reservations. This condenses the current, lengthy process for vendors into an efficient online activity. It also benefits the SLOFMA customers by providing access to more market information such as the vendor map. The system should be in the form of a website because it is more accessible to most users. A user only needs to type the link into the web and the system will show the user what they are looking for. This helps with a larger reach of users where many can access this website through their personal devices. The proposed system allows the website to be available via mobile devices as well, as a significant fraction of the customer base is on-the-go. It is unnecessary and troublesome to create a desktop application, where

every user would have to download this application to access SLOFMA's information. Using a website system with thin client architecture creates a simple solution to separating presentation logic, application logic, and data access logic and design without the client having to be heavily involved. This allows the client to feel more confident navigating the farmers market.

7. DESIGN

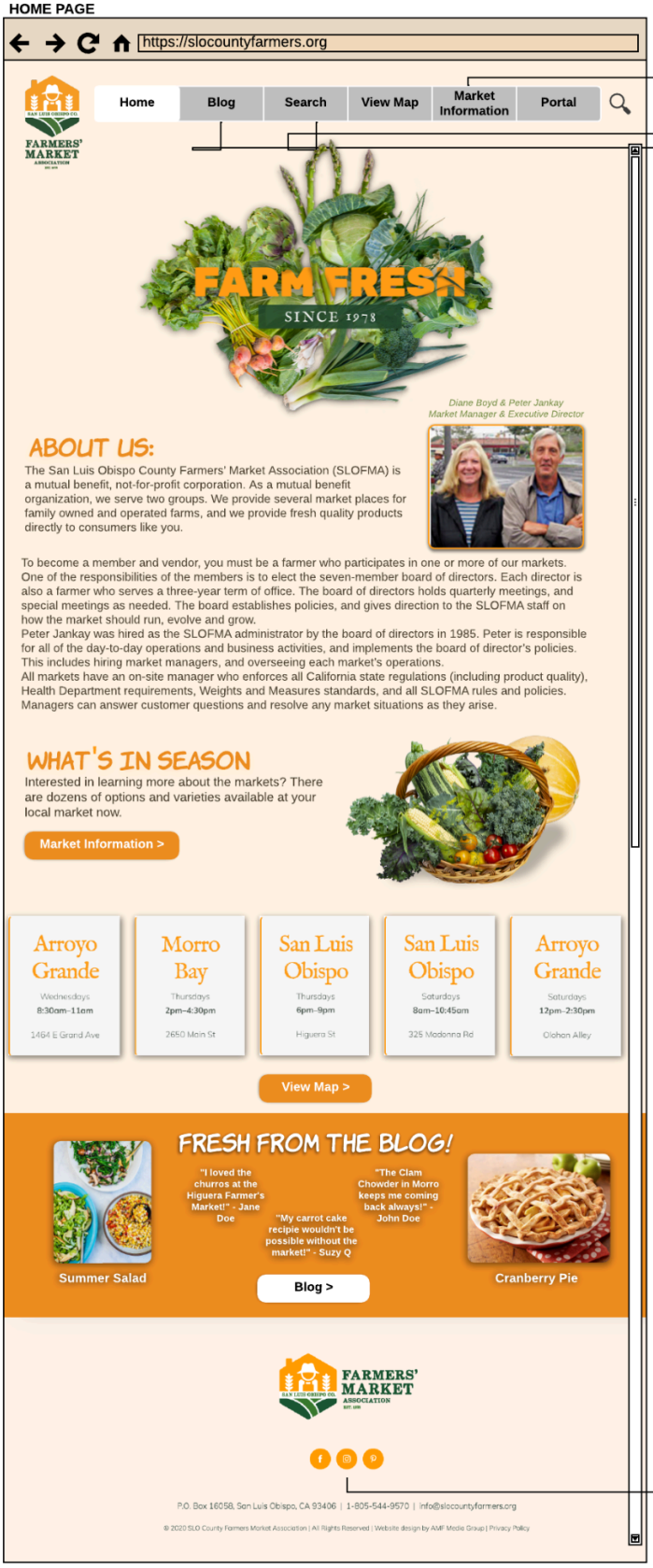
Navigation Map

Navigation Map

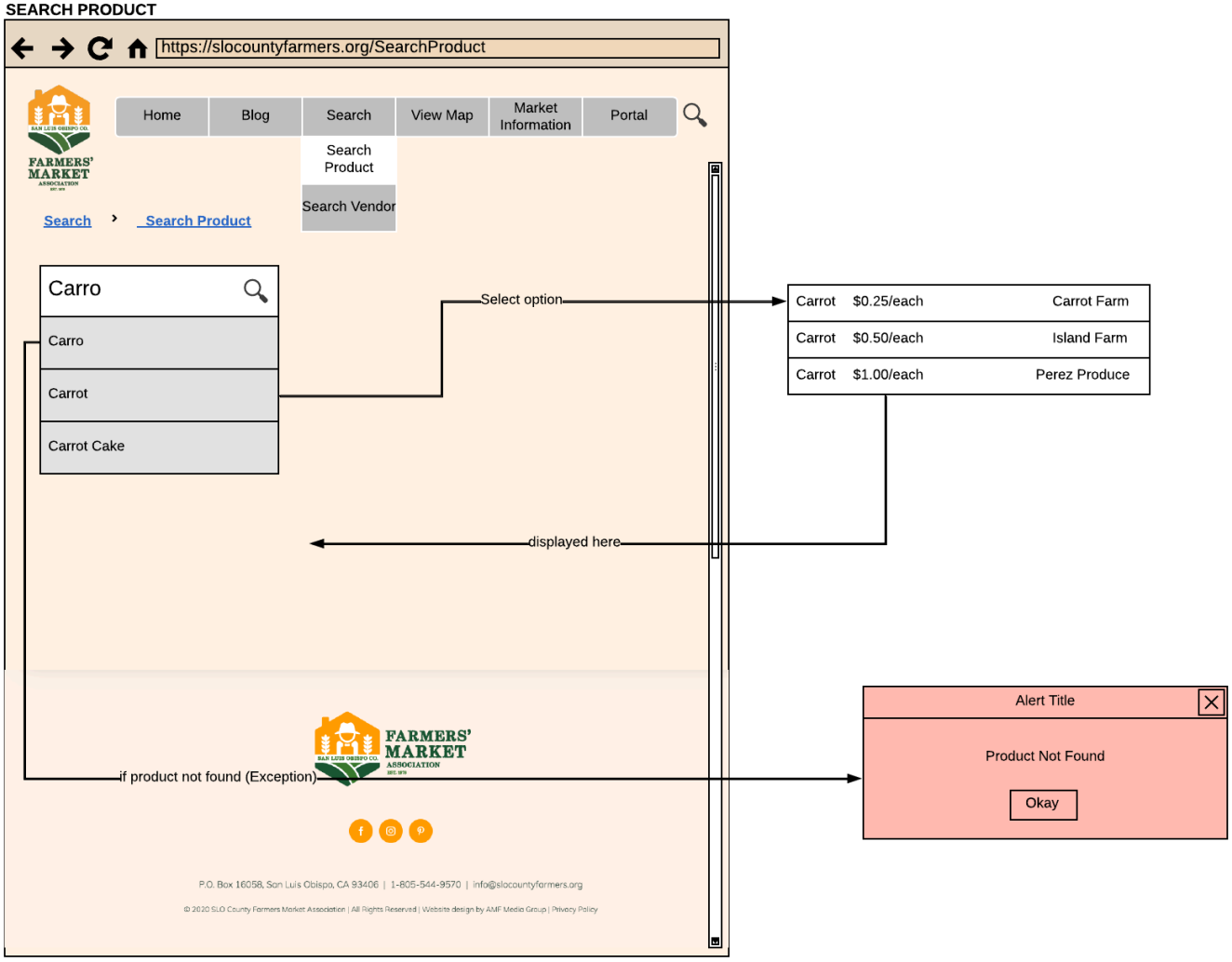


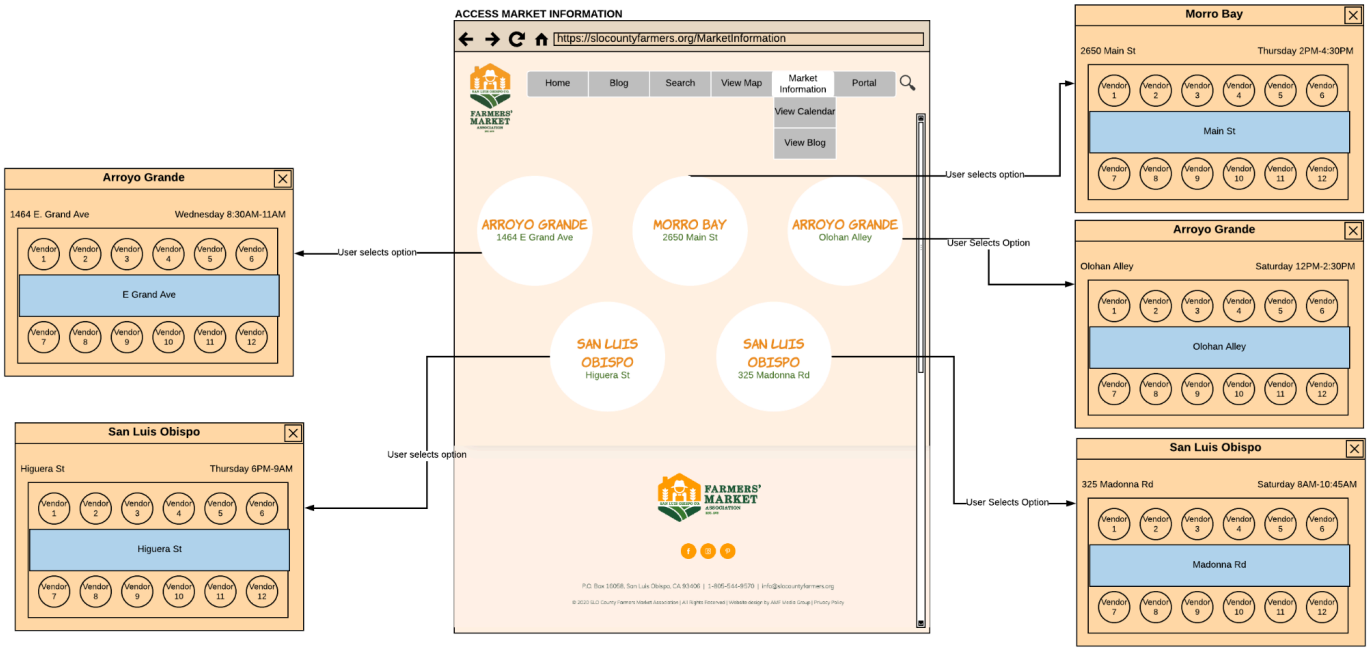
User Interface Mockups

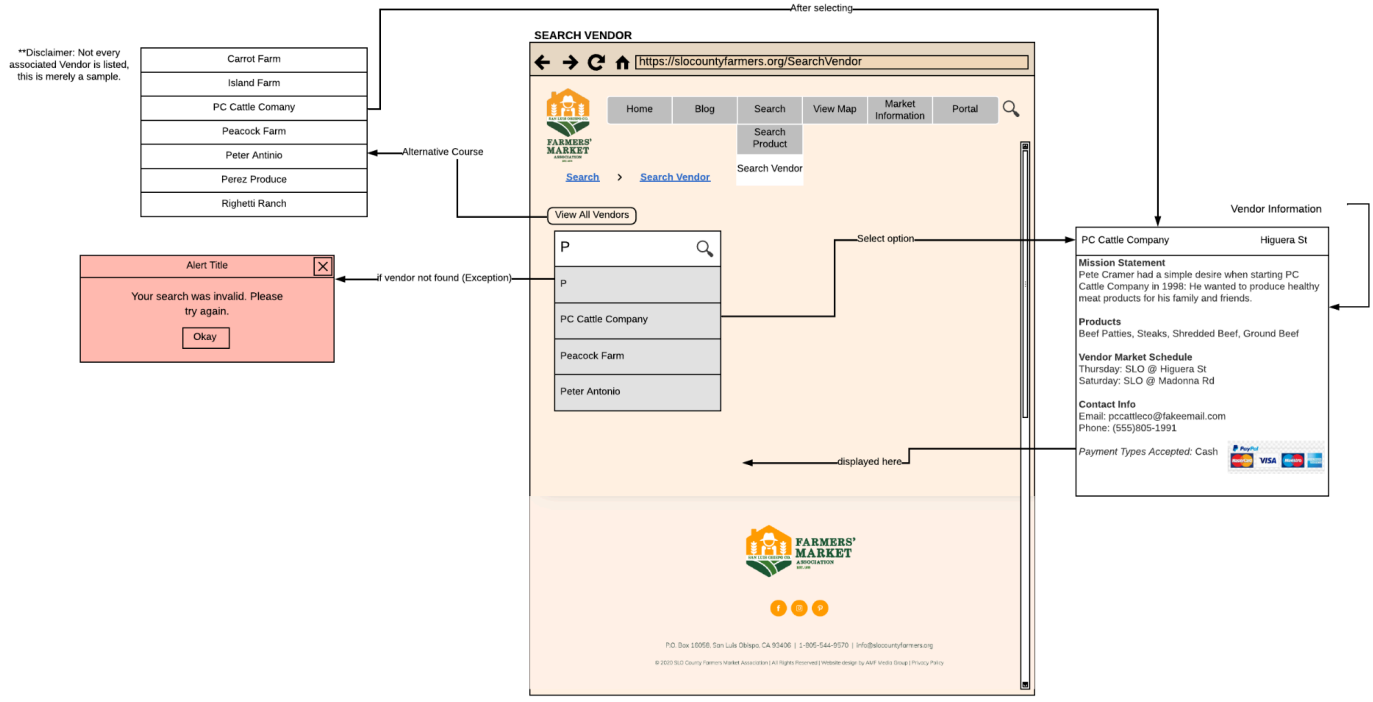
HOME PAGE


https://slocountyfarmers.org
Home
Blog
Search
View Map
Market Information
Portal
FARM FRESH
SINCE 1978
Diane Boyd & Peter Jankay
Market Manager & Executive Director
ABOUT US:
The San Luis Obispo County Farmers' Market Association (SLOFMA) is a mutual benefit, not-for-profit corporation. As a mutual benefit organization, we serve two groups. We provide several market places for family owned and operated farms, and we provide fresh quality products directly to consumers like you.
To become a member and vendor, you must be a farmer who participates in one or more of our markets. One of the responsibilities of the members is to elect the seven-member board of directors. Each director is also a farmer who serves a three-year term of office. The board of directors holds quarterly meetings, and special meetings as needed. The board establishes policies, and gives direction to the SLOFMA staff on how the market should run, evolve and grow.
Peter Jankay was hired as the SLOFMA administrator by the board of directors in 1985. Peter is responsible for all of the day-to-day operations and business activities, and implements the board of director's policies. This includes hiring market managers, and overseeing each market's operations.
All markets have an on-site manager who enforces all California state regulations (including product quality), Health Department requirements, Weights and Measures standards, and all SLOFMA rules and policies. Managers can answer customer questions and resolve any market situations as they arise.
WHAT'S IN SEASON
Interested in learning more about the markets? There are dozens of options and varieties available at your local market now.
Market Information >
Arroyo Grande
Wednesdays
8:30am-11am
1464 E Grand Ave
Morro Bay
Thursdays
2pm-4:30pm
2650 Main St
San Luis Obispo
Thursdays
6pm-9pm
Higuera St
San Luis Obispo
Saturdays
8am-10:45am
325 Madonna Rd
Arroyo Grande
Saturdays
12pm-2:30pm
Oshon Alley
View Map >
FRESH FROM THE BLOG!
"I loved the churros at the Higuera Farmer's Market!" - Jane Doe
"My carrot cake recipie wouldn't be possible without the market!" - Suzy Q
"The Clam Chowder in Morro keeps me coming back always!" - John Doe
Summer Salad
Cranberry Pie
Blog >
FARMERS' MARKET ASSOCIATION
P.O. Box 16058, San Luis Obispo, CA 93406 | 1-805-544-9570 | info@slocountyfarmers.org
© 2020 SLO County Farmers Market Association | All Rights Reserved | Website design by AMF Media Group | Privacy Policy
Market Information
View Calendar
View Blog
Search
Search Product
Search Vendor
Blog
Share Recipe
Share Review
View Reviews
(After) Login
Reserve Vendor Space
Add Inventory
Edit Inventory
Add Mission Statement
Edit Mission Statement
Takes user to external social media site

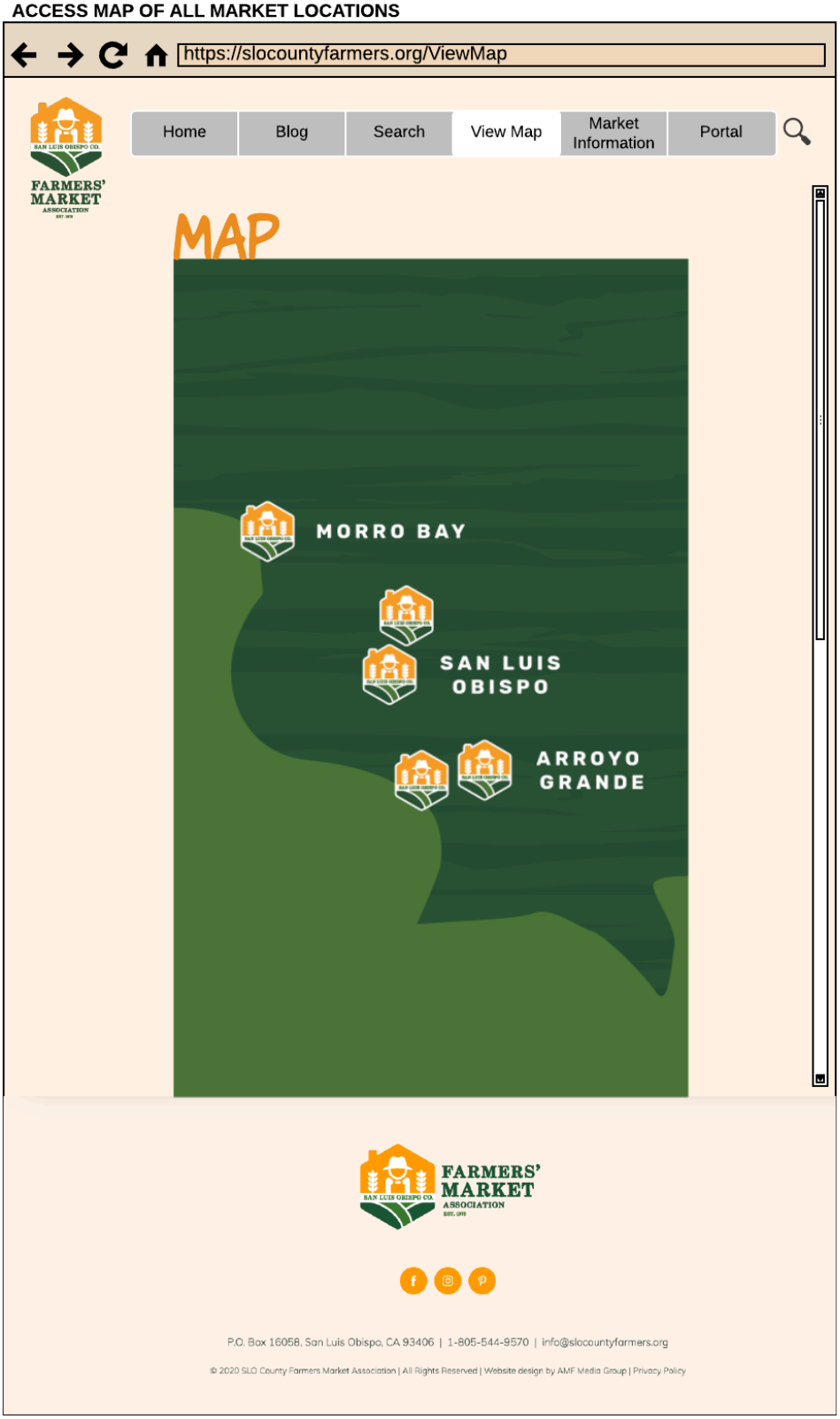
SEARCH PRODUCT

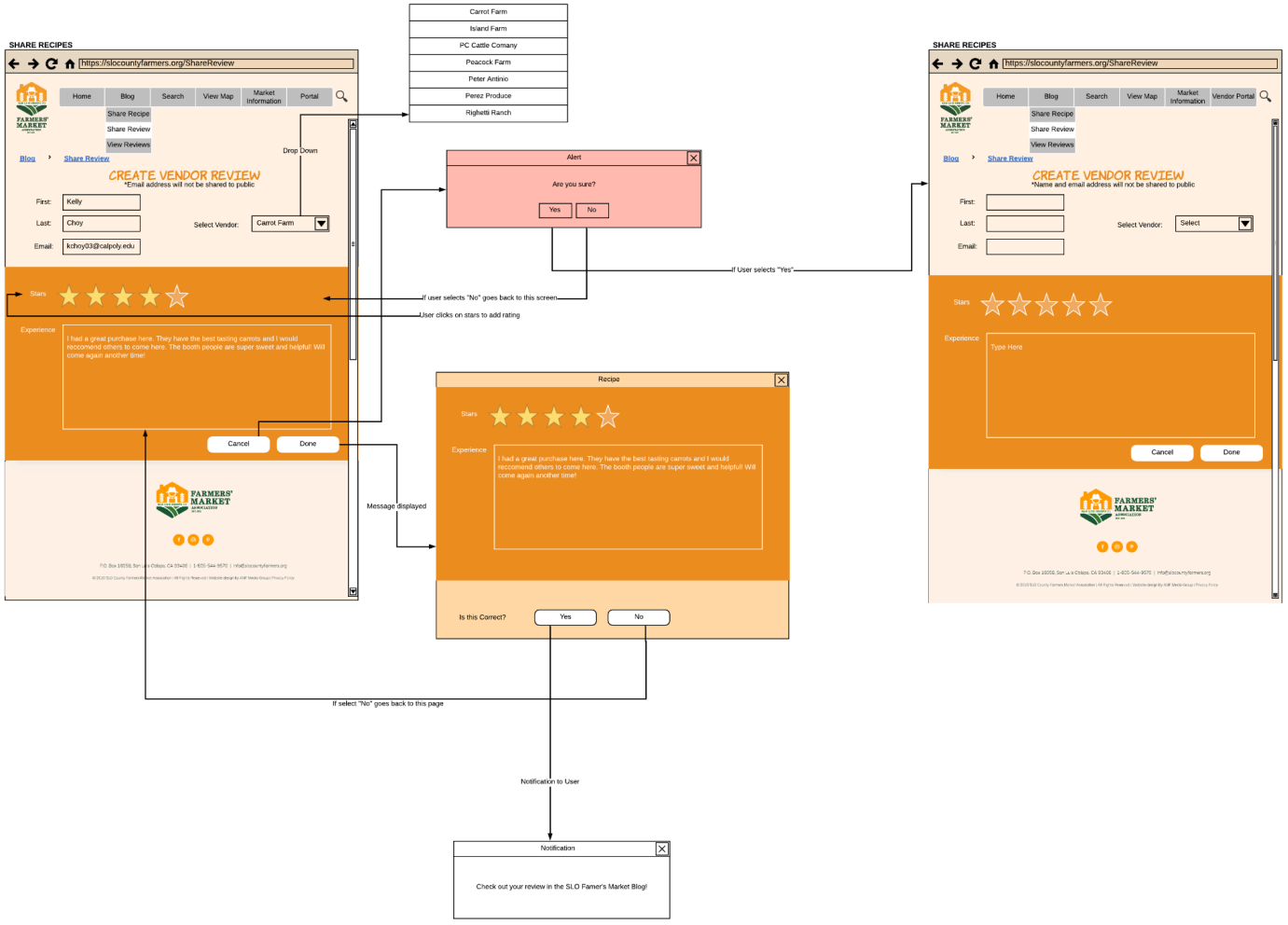


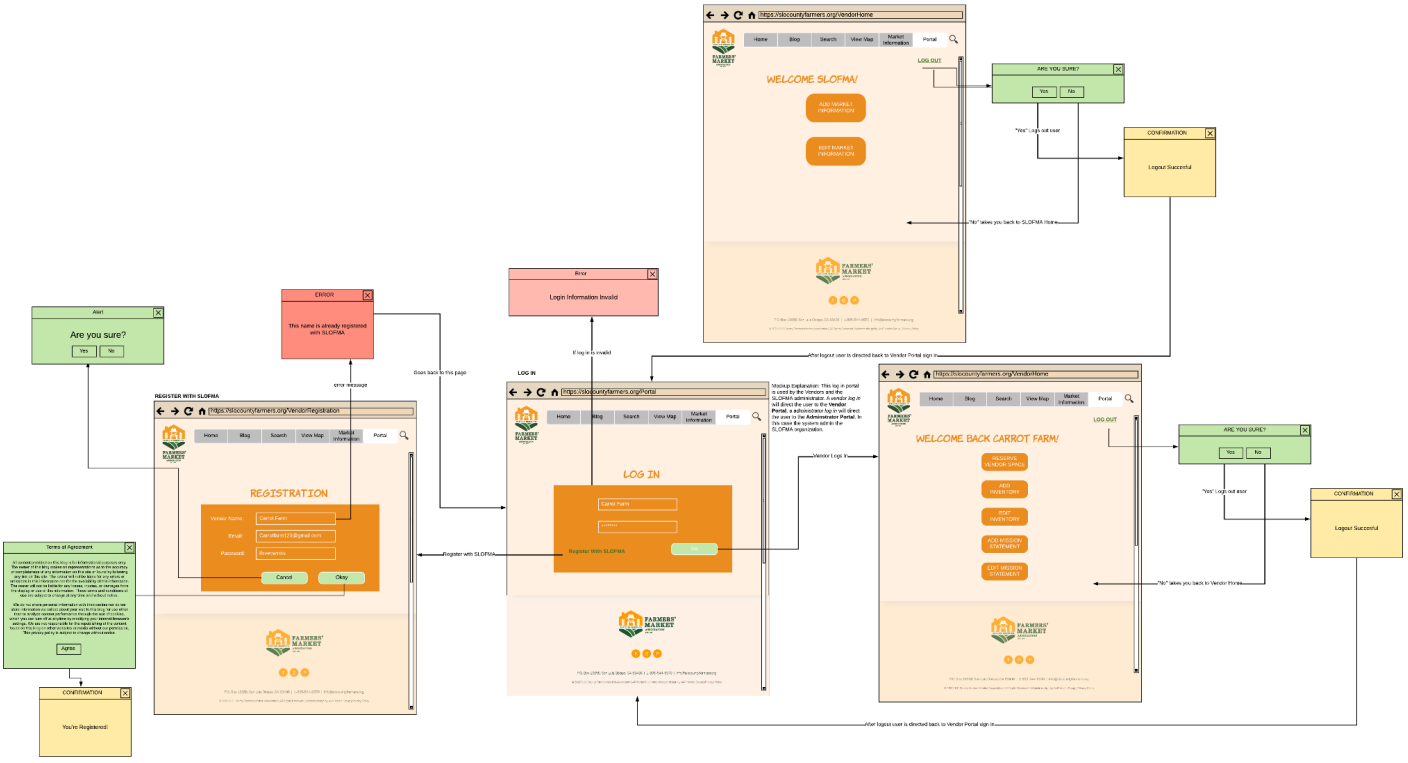

ACCESS MARKET INFORMATION
https://slocountyfarmers.org/MarketInformation
Home
Blog
Search
View Map
Market Information
Portal
View Calendar
View Blog
ARROYO GRANDE
1464 E Grand Ave
MORRO BAY
2650 Main St
ARROYO GRANDE
Olohan Alley
SAN LUIS OBISPO
Higuera St
SAN LUIS OBISPO
325 Madonna Rd
User selects option
User Selects Option
Morro Bay
2650 Main St
Thursday 2PM-4:30PM
Main St
Arroyo Grande
1464 E. Grand Ave
Wednesday 8:30AM-11AM
E Grand Ave
Arroyo Grande
Olohan Alley
Saturday 12PM-2:30PM
Olohan Alley
San Luis Obispo
Higuera St
Thursday 6PM-9AM
Higuera St
San Luis Obispo
325 Madonna Rd
Saturday 8AM-10:45AM
Madonna Rd
Vendor 1
Vendor 2
Vendor 3
Vendor 4
Vendor 5
Vendor 6
Vendor 7
Vendor 8
Vendor 9
Vendor 10
Vendor 11
Vendor 12

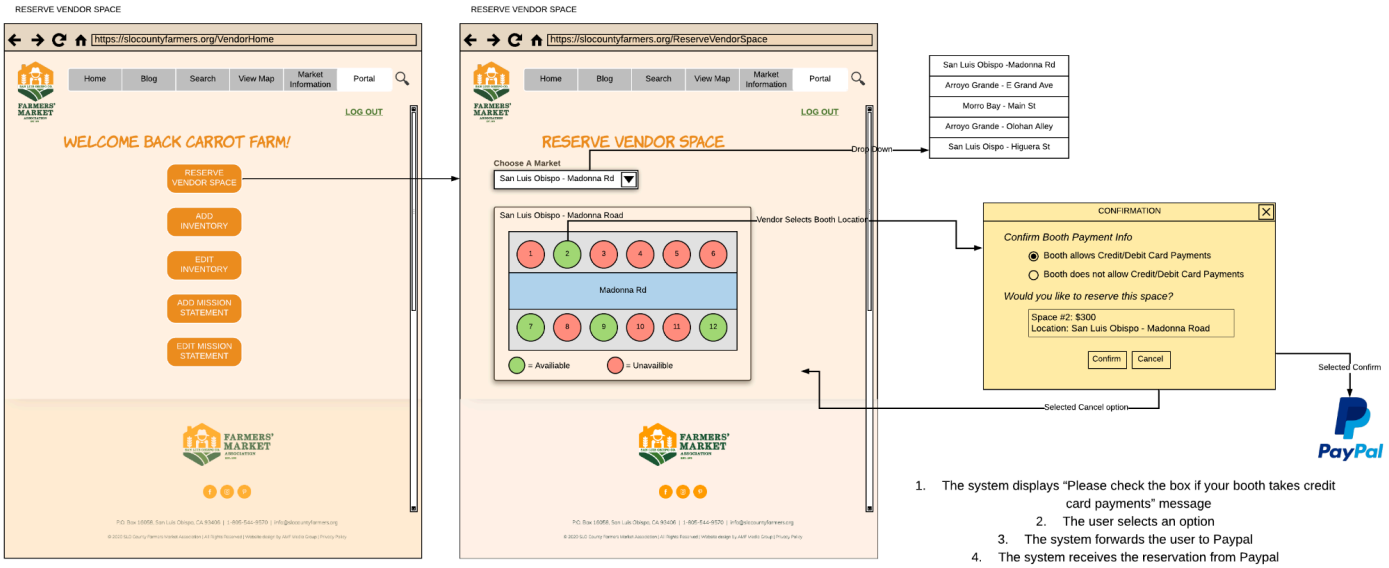

After selecting
**Disclaimer: Not every associated Vendor is listed, this is merely a sample.
Carrot Farm
Island Farm
PC Cattle Comany
Peacock Farm
Peter Antinio
Perez Produce
Righetti Ranch
Alternative Course
SEARCH VENDOR
https://slocountyfarmers.org/SearchVendor
Home
Blog
Search
View Map
Market Information
Portal
Search Product
Search Vendor
Search
Search Vendor
View All Vendors
P
P
PC Cattle Company
Peacock Farm
Peter Antonio
Select option
Vendor Information
PC Cattle Company
Higuera St
Mission Statement
Pete Cramer had a simple desire when starting PC Cattle Company in 1998: He wanted to produce healthy meat products for his family and friends.
Products
Beef Patties, Steaks, Shredded Beef, Ground Beef
Vendor Market Schedule
Thursday: SLO @ Higuera St
Saturday: SLO @ Madonna Rd
Contact Info
Email: pccattleco@fakeemail.com
Phone: (555)805-1991
Payment Types Accepted: Cash
displayed here
Alert Title
Your search was invalid. Please try again.
Okay
if vendor not found (Exception)

ACCESS MAP OF ALL MARKET LOCATIONS



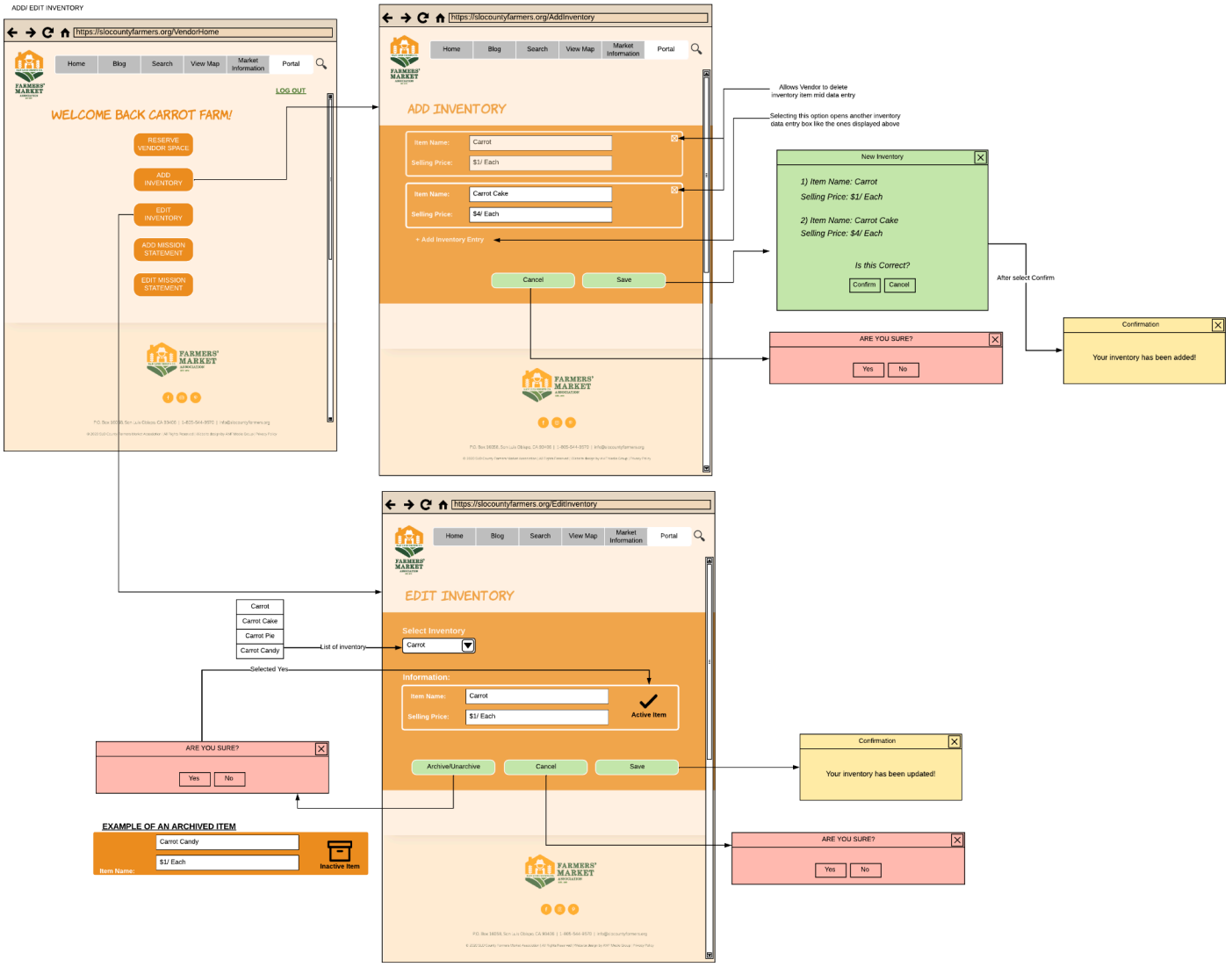

SHARE RECIPES
https://slocountyfarmers.org/ShareReview
Home
Blog
Search
View Map
Market Information
Portal
Share Recipe
Share Review
View Reviews
Blog
Share Review
CREATE VENDOR REVIEW
*Email address will not be shared to public
First:
Kelly
Last:
Choy
Email:
kchoy03@calpoly.edu
Select Vendor:
Carrot Farm
Drop Down
Stars
Experience
I had a great purchase here. They have the best tasting carrots and I would reccomend others to come here. The booth people are super sweet and helpful! Will come again another time!
Cancel
Done
Carrot Farm
Island Farm
PC Cattle Comany
Peacock Farm
Peter Antinio
Perez Produce
Righetti Ranch
Alert
Are you sure?
Yes
No
If user selects "No" goes back to this screen
User clicks on stars to add rating
If User selects "Yes"
Recipe
Stars
Experience
I had a great purchase here. They have the best tasting carrots and I would reccomend others to come here. The booth people are super sweet and helpful! Will come again another time!
Is this Correct?
Yes
No
Message displayed
If select "No" goes back to this page
Notification to User
Notification
Check out your review in the SLO Famer's Market Blog!
SHARE RECIPES
https://slocountyfarmers.org/ShareReview
Home
Blog
Search
View Map
Market Information
Vendor Portal
Share Recipe
Share Review
View Reviews
Blog
Share Review
CREATE VENDOR REVIEW
*Name and email address will not be shared to public
First:
Last:
Email:
Select Vendor:
Select
Stars
Experience
Type Here
Cancel
Done



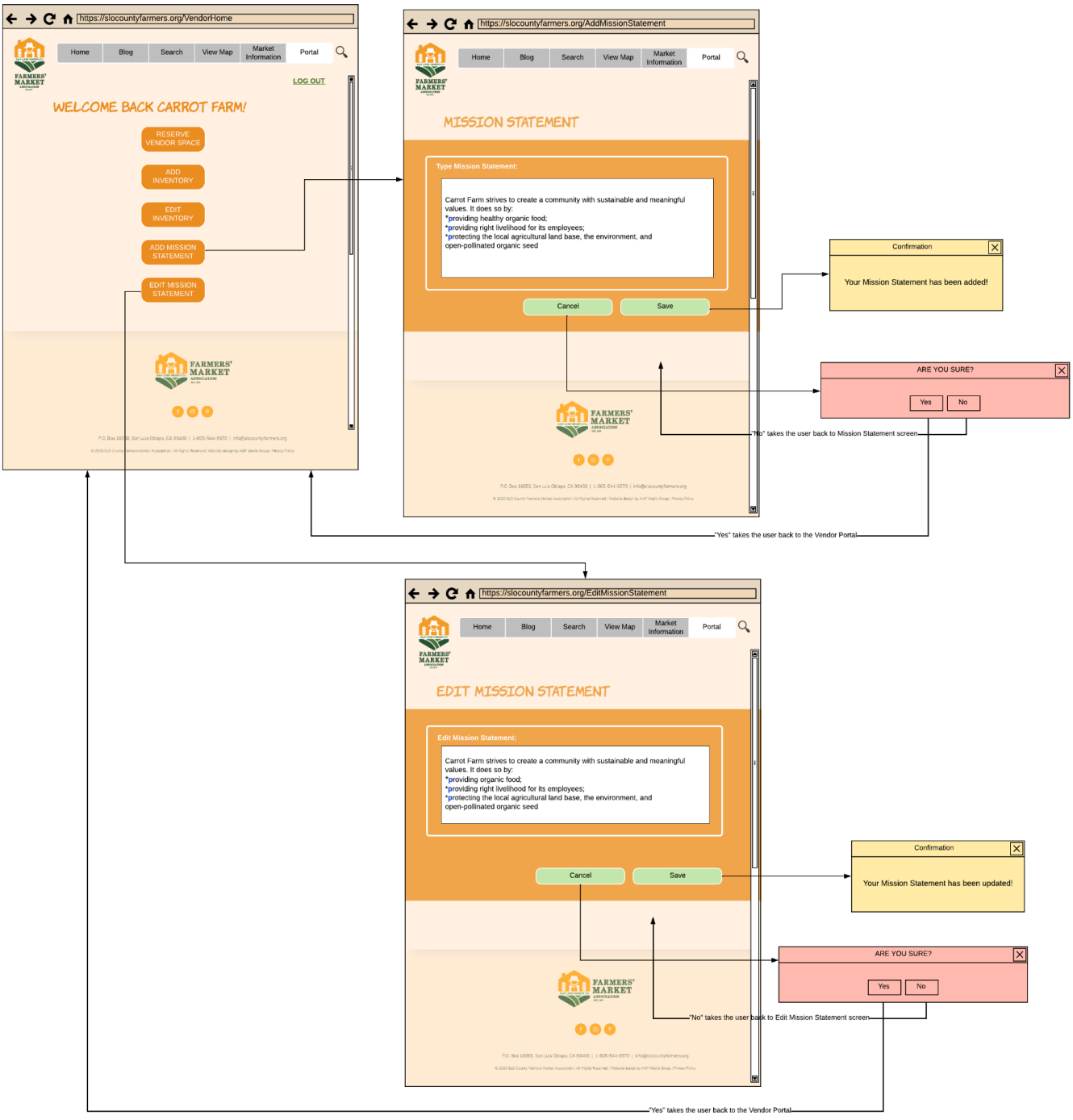


1. The system displays “Please check the box if your booth takes credit card payments” message
2. The user selects an option
3. The system forwards the user to Paypal
4. The system receives the reservation from Paypal
5. The system displays the reservation confirmation number

ADD/ EDIT INVENTORY



ADD/ EDIT MISSION STATEMENT



8. APPENDIX

**Disclaimer: Throughout the course of this project multiple attempts were made to contact the San Luis Obispo Farmers Market Association (SLOFMA) to no avail. To gain insight regarding the function of the SLOFMA and their business needs we contacted a well known and connected vendor who utilizes the services of the SLOFMA. Group member Lila Bell has a connection to this vendor through a mutual colleague known through the Orfalea College of Business.

1. Interaction #1: *"Whalebird Kombucha"*
    a. Date of the interaction: August 10th, 2020
    b. Type of interaction: Phonecall
    c. Employee(s)/Member(s) of the organization involved: Matias Illic
2. Interaction #2: *"Whalebird Kombucha"*
    a. Date of the interaction: August 13th, 2020
    b. Type of interaction: Survey
    c. Employee(s)/Member(s) of the organization involved: Matias Illic