# 1. Introduction

## 1.1 Purpose

The purpose of this document is to describe the intended functionality that would be needed to meet the needs of this project.

## 1.2 Glossary

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| --- | --- |
| **Term** | **Meaning** |
| DogDollars | Sunny’s Bites internal accounting system |
| Store | Sunny’s Bites Online Store |
| Vendor | Store or wholesale customer that orders Sunny’s Bites Dog Food. |
| Payments | Third-party payment system, such as PayPal |

## 1.3 References

The following documents were used in the creation of this white paper:

* Sunny’s Bites Online Store Project Proposal

# 2. Executive Overview

## 2.1 Customer

With nearly 55 million dog owners in the United States, dog food has become a $15B per year industry. One great success story in this market is the rapid growth of the once small start-up company, Sunny’s Bites Dry Dog Food, into an industry leader.

Sunny’s Bites, located in Pupland, Ohio is a manufacturer of premium dog food. Established in 1999, Sunny’s has successfully grown their annual sales from $300K in year one to $2.6B in 2014 and hold a 17% market share. Sunny’s currently produces the following four flavors of dry dog food: Ham Happiness, Chunky Chicken, Salty Salmon and Bold Beef. All four flavors are available in five-pound and twenty-pound bags.

## 2.2 Project Summary

Sunny’s Bites has had a company website since 2008 as a marketing tool to introduce the company and its values to consumers. In 2010, they expanded the website to include career information and nutritional information on their products. Historically, the company has been using a homegrown accounting system (DogDollars) to manage the sales of dog food to pet stores and wholesale customers and report on sales.

The intent of this project is to expand the functionality of [www.sunnysbites.com](http://www.sunnysbites.com) to include an ecommerce solution that will:

* Allow pet stores and wholesale vendors to easily place and track orders
* Allow individual consumers the ability to find stores that carry Sunny’s Bites dog food

## 2.3 Business Goals

Sunny’s Bites would like to achieve the following goals through the implementation of an online store, listed in order of priority:

1. 30% decrease in outstanding invoices to vendors
2. 10% increase in sales to vendors
3. Facilitation of order intake and tracking
   1. 30% decrease in call volume

# 3. Project Overview

## 3.1 Scope

The following features are considered in scope for this project:

* Creation of an ecommerce store
* Security requirement for vendor access (Log In to restricted area)
* Integration to Sunny’s Bites accounting system for vendor invoicing
* Integration to a third-party payment system (such as PayPal)
* Integration with a Store Locator plugin

The following features are considered out of scope for this project:

* The ability to take credit card payments directly through Sunny’s Bites
* Customer reviews
* Sales and/or discount codes
* Recurring / Scheduled standing orders
* Creation of a Search for Store algorithm
* Individual sales to consumers

## 3.2 Risks

The following risks have been identified for this project:

* As Sunny’s Bites is sold at small, independent stores, some vendors may not be able to access ecommerce easily. To mitigate this, Sunny’s Bites will continue to offer order placement and tracking through their call center.

## 3.3 Assumptions

The following assumptions have been made for this project:

* The hosting service for Sunny’s Bites website is able to host an ecommerce solution.

# 4. General Functionality

## 4.1 User Classes

The Sunny’s Bites Online Store will be used by the following user classes:

|  |  |
| --- | --- |
| **Role** | **Summary of Usage** |
| *Administrator* | Management of products and accounts |
| *Vendor* | Create/manage account, place orders, track orders, view invoices, payment |
| *Consumer* | Find store, create/manage account, place orders, track orders, payment |
| *Guest* | Find store, place orders, payment |

## 4.2 Interfaces

|  |  |
| --- | --- |
| **Program** | **Summary of Usage** |
| *DogDollars* | Fulfill orders, track payments, post payments, provide information to Sunny’s Bites CSRs, provide order status information to Online Store |
| *Third-party Payment System* | Provide payment means for invoices and individual orders |

## 4.3 Supported Browsers

Sunny’s Bites Online Store should be supported on

* Internet Explorer 9+
* Chrome
* Firefox
* Safari

# 5. Feature Descriptions

## 5.1 Account Creation

Both existing vendors and new vendors will have access to create an account. Vendor accounts should include the following information:

* Contact Details, such as the name of a designated contact, a phone number or extension and email for that person, etc.
* Store Details, including
  + Address
  + Public Phone Number
  + Hours of Operation, etc
* The account number of the vendor’s existing account in DogDollars, if applicable.

If a vendor account does not exist in DogDollars, the vendor should be able to open an account in the Online Store to create an account in DogDollars.

### 5.1.1 Account Status

A new vendor that creates an account online should have an account in pending status so that Sunny’s Bites can detail payment terms in DogDollars. This status should be managed within DogDollars and reflected in the Online Store.

If a vendor account is in bad standing or in Pending status in DogDollars, the Online Store should not allow that account to place orders. In this case, the account details page should show information about the account status, and product listings should refer users to the account details page.

## 5.2 Find Stores

A user should be able to access an area of Sunny’s Bites website to search for local stores that carry Sunny’s Bites products. This is important both to drive sales of Sunny’s Bites product and to offer this service to stores that have vendor accounts with Sunny’s Bites.

As development of a store search from scratch is out of scope, Sunny’s Bites is looking into solutions offered by third parties to include in the Online Store. The functionality of the third party solution that is chosen should be fully supported by the Online Store.

## 5.3 Product Listing

Sunny’s currently produces the following four flavors of dry dog food: Ham Happiness, Chunky Chicken, Salty Salmon and Bold Beef. All four flavors are available in five-pound and twenty-pound bags. However, there is currently a separate project under way to develop a new flavor of dog food, and Sunny’s Bites is interested in expanding the product line in the future.

An administrator will manage the product listings on the Online Store, and should be able to update the following information:

* Pricing Levels
* Product Name
* Short Description
* Long Description
* Photos

There is currently no plan to include nutritional information or customer reviews in product listings, unless this information is included by hand in the long description.

An administrator should also be able to add or delete product listings based on availability of the item.

Any user should be able to view the product listings, but only vendors that are logged in should have access to pricing information and placing orders.

### 5.3.1 Pricing

Vendors will select a quantity that falls into a pricing tier for wholesale sales. The Online Store should recognize the quantity and apply the correct pricing tier to the order. Currently, Sunny’s Bites uses a three-tier pricing scheme per product ordered:

* Small orders - 0 - 20 bags
* Mid Size orders - 21 - 50 bags
* Large orders - 51+ bags

## 5.4 Sales and Invoicing

When a vendor places an order, the Online Store should interface with DogDollars to create the invoice for the customer. A vendor can place an order as small as one bag, or as large as 51+ bags of each flavor and size.

Once an invoice is created, DogDollars will email the customer with the detailed invoice and delivery details. DogDollars should interface with the Online Store so that the invoice history can be seen online when a vendor logs into his account.

### 5.4.1 Invoices

Invoices should be listed in the vendor’s account in reverse chronological order. Any invoice that is unpaid should be easily distinguishable by the user. Any invoice that is late should be highlighted for the user.

The invoice page should include the account balance and an option to pay for invoices via a third-party payment systems (like PayPal).

If an invoice is updated in DogDollars (ie, if a Vendor makes a payment by check or if the product has been delivered), the invoice should be updated in the Online Store. All information on the store should be up to date and reflect information in DogDollars (as DogDollars is the system of record for invoices). If a customer places an order offline, the invoice for that order should still be displayed in the Online Store.

## 5.5 Payments

Vendors should be able to pay for part or all of their account balance using the Online Store. As development of a payment system from scratch is out of scope, Sunny’s Bites is looking into solutions offered by third parties to include in the Online Store. The functionality of the third party solution that is chosen should be fully supported by the Online Store.

# 6. Use Cases

## 6.1 Create Account

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| --- | --- |
| **Description** | Steps for a vendor to create an account for the Online Store. |
| **Actors** | Vendor, Store, DogDollars, Store Locator plugin |
| **Preconditions** | * Vendor has all information needed to open an account. * Vendor email does not have an associated account. * Vendor has accessed the Store site. |
| **Success Scenario** | 1. Vendor clicks Create Account button. 2. Vendor enters appropriate information, including:    1. Contact Details - Responsible party, email, etc.    2. Store Details - Name, Location, Hours, Phone, etc.    3. An option to be listed as a store that carry’s Sunny’s Bites (yes/no)    4. The vendor’s existing account number in DogDollars, or that the vendor is a new account.    5. A username 3. Vendor clicks on Save Account button. 4. Store emails the contact email a verification link with a temporary password. 5. Vendor goes to email and clicks the link. 6. Vendor web browser opens a page with the Vendor Login. 7. Vendor successfully logs in with temporary password. 8. Store loads a password reset page. 9. Vendor resets password to user-selected password. 10. Store adds vendor store details to the Store Locator plugin. 11. Store sends message to DogDollars to verify the account number, if given, or create a new account. 12. DogDollars returns the account number. 13. Store updates the account with the account number.   End Use Case.  **Note**: Any information entered into the Online Store for an existing vendor account in DogDollars that differs from the existing information in the account should overwrite the information in DogDollars. |
| **Postconditions** | * Vendor account is created. * Vendor is logged into the Store. |

## 6.2 Search for Stores

|  |  |
| --- | --- |
| **Description** | Steps for a user to search for stores that offer Sunny’s Bites dog food. |
| **Actors** | User, Store Locator plugin |
| **Preconditions** | * Vendors have established accounts with valid addresses and contact information. * Store Locator plugin has access to all vendor store information. * User has accessed the Sunny’s Bites - Search for a Store page. |
| **Scenario** | 1. User enters an address or zip code and clicks Search. 2. Store accesses a store locator plugin to find nearest stores.    1. Store Locator plugin searches for stores.    2. Store Locator plugin displays results.   End Use Case. |
| **Postconditions** | * User is presented with a list of store locations, or * Store Locator plugin notifies user that no stores are in radius. |

## 6.3 Order Placement

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| --- | --- |
| **Description** | Steps for a Vendor to place an order on Sunny’s Bites Online Store. |
| **Actors** | Vendor, Store, DogDollars |
| **Preconditions** | * Vendor has an account in good standing |
| **Scenario A - Main Scenario** | 1. Vendor logs into his account. 2. Store displays My Account. 3. Vendor clicks Place Order button. 4. Store displays Product Listings. 5. Vendor selects a product. 6. Store display Product Details. 7. Vendor enters an amount into a quantity field. 8. Store verifies the pricing tier. 9. Store updates the price. 10. Vendor clicks Add to Cart button. 11. Store updates Cart with quantity and product.     1. If vendor would like to order more items, go to Step 4.     2. If vendor is done selecting products, continue. 12. Vendor clicks Check Out button. 13. Store displays a summary of the order.     1. If order is incorrect, go to Scenario B.     2. If Vendor would like to order more items, Vendor clicks Keep Shopping button. Go to Step 5. 14. Vendor clicks Place Order button. 15. Store sends message with account number and order details to DogDollars. 16. DogDollars creates an invoice. 17. Store displays Invoices page.   End Use Case. |
| **Scenario B - Update Cart** | 1. Vendor updates quantity in Cart of appropriate item. 2. Store verifies the pricing tier. 3. Store updates the price. 4. Go to Scenario A, Step 12. |
| **Postconditions** | * An order for the vendor is created in DogDollars |

## 6.4 Order Details / View Invoice

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| --- | --- |
| **Description** | Vendor views Invoices and order details on invoice. |
| **Actors** | Vendor, Store, DogDollars |
| **Preconditions** | * Vendor order exists in Dog Dollars. * Vendor has account in Online Store. |
| **Scenario A - View Account Information (List of Invoices)** | 1. Vendor logs into Store. 2. Store displays My Account. 3. Vendor clicks View Invoices button. 4. Store sends a request for account information to DogDollars with account number. 5. DogDollars returns the following information:    1. Account Status    2. Account Balance    3. Invoice List with the following information:       1. Invoice Number       2. Date       3. Amount       4. Status (Paid, Unpaid, Late) 6. Store displays account information on Invoices page.    1. If Vendor wants to see order details, go to Scenario B.    2. If Vendor wants to make a payment, go to Use Case 6.6.   End Use Case. |
| **Scenario B - View Invoice Details** | 1. Vendor clicks on an Invoice Number. 2. Store sends a request for invoice details to DogDollars with account number and invoice number. 3. DogDollars returns the following information:    1. Invoice Number    2. Date    3. Amount    4. Status    5. Amount Due    6. Date of Payment (if applicable)    7. Delivery Status (‘Delivered’ or Estimated Date of Delivery)    8. Product List with the following information:       1. Product       2. Amount       3. Price    9. Subtotal    10. Tax    11. Shipping and Handling    12. Total 4. Store displays invoice information on Invoice Details page.    1. If Vendor wants to make a payment for this invoice, go to Use Case 6.6.    2. If Vendor wants to see a different invoice, go to Scenario A, Step 4.   End Use Case. |
| **Postconditions** | * Vendor views information on Online Store. |

## 6.5 Pay Invoice

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| **Description** | Steps for Vendor to make a payment |
| **Actors** | Vendor, Store, DogDollars, Payment |
| **Preconditions** | * Vendor account (with existing order) exists in DogDollars. * Vendor has account in Online Store. * Vendor is logged in and on Invoices page or Invoice Details page. |
| **Scenario** | 1. Vendor clicks Make Payment button. 2. Store sends a request for balance information to DogDollars with account number. 3. DogDollars returns the following information:    1. Account Status    2. Account Balance    3. Overdue Balance    4. Invoice List of Unpaid Invoices only with the following information:       1. Invoice Number       2. Date       3. Amount 4. Store displays Payments page. 5. Vendor selects amount to pay from the following:    1. Account Balance    2. Overdue Balance    3. One or more unpaid invoices    4. Other (Vendor enters amount) 6. Vendor clicks Make Payment button. 7. Store sends information to Payment system. 8. Payment system page is displayed on Store. 9. Vendor completes payment.    1. If payment is declined, go to Step 4. 10. Payment system returns a payment successful message. 11. Store sends message to DogDollars with the following information:     1. Date     2. Payment Amount     3. Payment Authorization     4. If the payment was made against specific invoices, the Invoice number(s) 12. DogDollars updates customer account. 13. Store displays Invoices page (See Use Case 6.5).   End Use Case. |
| **Postconditions** | * Vendor payment is recorded in DogDollars. |

# 6a. User Stories

This section is provided as an alternative example to use cases.

## 6a.1 Account Creation

* As an administrator, I need to manage accounts so that:
  + I can support customers that order online.
  + I can support account access issues (ie. password resets).
* As a vendor, I need to create an account so that:
  + I can easily place orders for my store.
  + I can log in to see the status of my order.
  + I can view invoices associated with my store.
  + I can track orders I have placed.
  + I can pay invoices by credit card.
  + I can list my store in a directory.

## 6a.2 Find Stores

* As a vendor, I need to list my store in a directory so that:
  + Local customers can come to my store to purchase dog food.
* As a consumer, I need to locate a store so that:
  + I can purchase dog food without waiting for shipping.
  + I can know about pet stores in my area.

## 6a.3 Product Listing

* As an administrator, I need to manage product listings so that:
  + I can update product descriptions.
  + I can update product pricing.
  + I can add new products when they become available.
  + I can remove products if they are no longer available.
* As a company, I need to have pricing tiers for vendors so that:
  + Vendors are encouraged to purchase larger orders
  + The current pricing scheme can be matched online

## 6a.4 Orders

* As a vendor, I need to place an order so that:
  + I can receive products to be sold at my store.
  + I can order the products and quantities I want without waiting for a call center representative.
  + I can ensure order accuracy at the time of order.
* As a vendor, I need to track an order so that:
  + I can be aware of when orders will be delivered.
* As a vendor, I need to view an invoice so that:
  + I can manage my accounts for my store.
  + I can view invoices quickly and easily.
  + I can view history of orders and invoices.
  + I can view the status of an invoice (ordered, fulfilled, paid, late, etc).
* As a vendor, I need to make a payment so that:
  + I can pay for an invoice.
  + I can maintain my account in good standing.
* As an account manager, I need to have payments posted in DogDollars reflected on invoices in the Online Store so that:
  + Payments made offline (i.e. by check or by phone) can be reflected in the customers’ account in the Online Store.