**Business Requirement for Nom Nom Express**

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## System Overview

Our web storefront will be created using HTML, CSS and JavaScript utilizing Bootstrap as a framework tool, Apache with PHP support for the web server middle-ware and MySQL for the database backend.

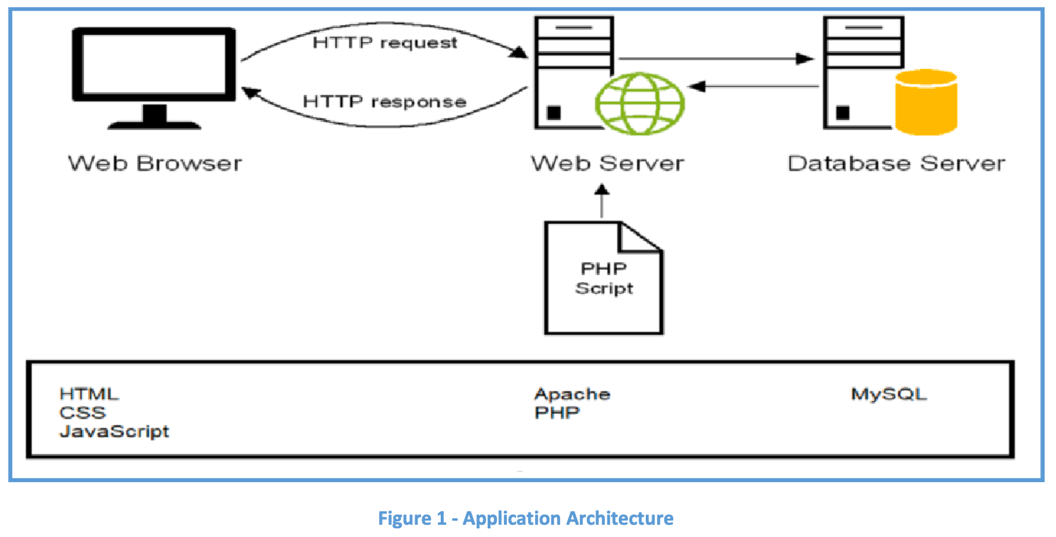


Figure 1 – Application Architecture

## Requirements Scope

### 2.1 In Scope

* R01 – The client must be able to log into an admin account
* R02 – The admin account must be able to add products to the web site
* R03 - Must be able to display products by categories
* R04 - Customers must register to place orders
* Must provide a fully functioning shopping cart utility where a customer can:
  + R05 - display the selected items currently in the cart
  + R06 - add selected products to the cart
  + R07 - delete products (individually or all) from the cart
  + R08 - adjust the quantity of a selected product currently in the cart
  + R09 - preserve the contents of the cart if the user’s session is disconnected accidentally
  + R10 - have the cart accessible regardless from any machine the customer is logging in
  + R11 - provide a confirmation email sent to the client after they place their order
  + R12 - include a secure, online payment process
* R13 - Allow customers to view their order history
* R14 - Provide an intuitive, consistent look and feel to the user interface
* R15 - Use free open-source software
* R16 - Have the system fully tested and up and running in 8 weeks (this is a firm deadline)

If time allows:

* + R29 – Must be mobile friendly
* R24 - Allow customers to provide reviews for any of the products they have purchased
* R25 - Must be able to display the evaluation reviews for any products
* R27 - Provide customers with appropriate product recommendations when they log in

### 2.2 Out of Scope

* R20 - Must provide a search facility for the products
* R28 - allow the order to be shipped to a different address and person other than the user
* R21 - Allow customers to change their order after they have created it
* R22 - Allow customers to search their order history
* R23 - Allow customers to view the status of their orders
* R26 - Allow customers to change their registration information
* R28 - Provide customers with any product recommendations when they look at a particular product

## Functional Requirements

* R01 – The client must be able to log into an admin account
* R02 – The admin account must be able to add products to the web site
* R03 - Must be able to display products by categories
* R04 - Customers must register to place orders
* Must provide a fully functioning shopping cart utility where a customer can:
  + R05 - display the selected items currently in the cart
  + R06 - add selected products to the cart
  + R07 - delete products (individually or all) from the cart
  + R08 - adjust the quantity of a selected product currently in the cart
  + R11 - Create a unique file for each order that contains the order confirmation information so that at a future date, the information in the file can be sent to the client as an email message
  + R12 - include a secure, online payment process
* R13 - Allow customers to view their order history

### 3.1 UML Use Case Diagram

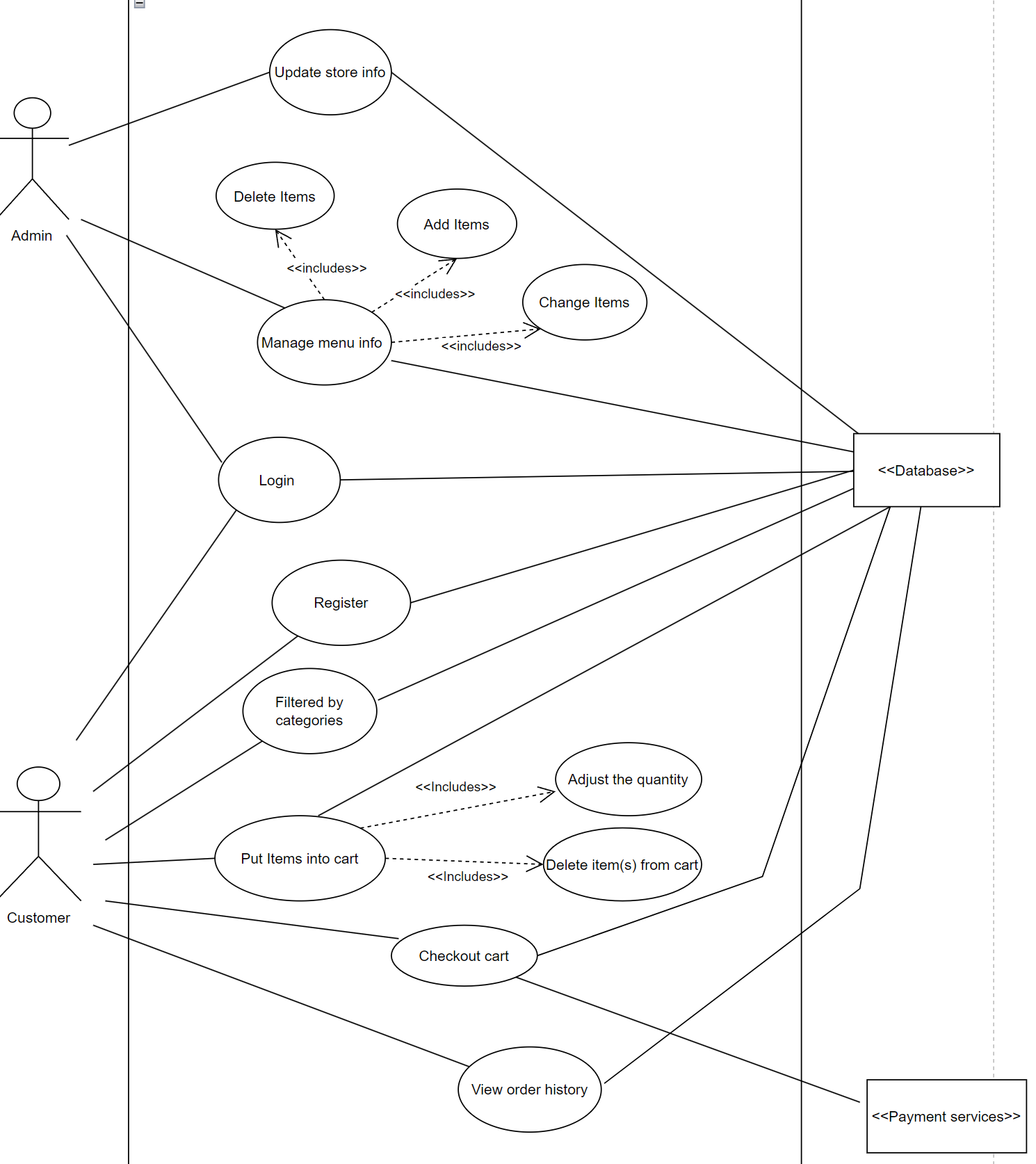


Figure - UML Use Case Diagram 2

### 3.1 UML Use Case Specifications

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Name:** | Login to Admin Account | **Use Case ID:** | **UC-001** |
| **Primary Actor:** | Admin and Customer | | |
| **Description:** | Admin or Customer can log in using special admin credentials to access admin features. | | |
| **Triggering Event:** | The Admin needs to login and change things | | |
| **Steps Performed (Main Path)** | | | |
| Click the login navigation tab to open the login offcanvas | | | |
| Type the admin username | | | |
| Type the admin password | | | |
| click submit login | | | |
| admin specific page loads with store information, add to menu form, and listing of all existing items | | | |
|  | | | |
| **Extensions or Alternate Scenarios** | | | |
|  | | | |
|  | | | |
|  | | | |
|  | | | |
| **Pre-Conditions:** | the admin must have internet access | | |
| **Post-Conditions:** | the admin has logged in | | |
| **Assumptions:** | the administrator has valid credentials | | |
| **Success Guarantee:** | they login to their admin account | | |
| **Outstanding Issues:** | Did their credentials work? Do we break up the page if the menu is very long? | | |
| **Priority:** | Medium | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Name:** | Update store info | **Use Case ID:** | **UC-002** |
| **Primary Actor:** | Admin | | |
| **Description:** | Admin can update the restaurant address and working hours. | | |
| **Triggering Event:** | Admin decides to make changes to the restaurant's information | | |
| **Steps Performed (Main Path)** | | | |
| Admin Navigates to store information | | | |
| Admin updates the information as needed | | | |
| Validate the given information when clicking save, the system saves the changes in the database | | | |
| System updates the restaurant information on the website | | | |
| **Extensions or Alternate Scenarios** | | | |
| If the Admin attempts to save incomplete or invalid information, the website displays an error message and prompts the Admin to correct the information | | | |
|  | | | |
| **Pre-Conditions:** | Admin is logged into their admin account | | |
| **Post-Conditions:** | The restaurant's information is updated and reflected in the Nom Nom Express Food Delivery website | | |
| **Assumptions:** | Changes to restaurant information do not conflict with any ongoing orders or services | | |
| **Success Guarantee:** | Admin can efficiently update restaurant information, ensuring that accurate and up-to-date details are displayed to customers | | |
| **Outstanding Issues:** | What is valid information? | | |
| **Priority:** | Low | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Name:** | Change existing menu item | **Use Case ID:** | **UC-003** |
| **Primary Actor:** | Admin | | |
| **Description:** | Admin changes menu information for a restaurant in the Nom Nom Express Food Delivery website | | |
| **Triggering Event:** | Admin decides to make changes to the restaurant's menu items, descriptions, prices, or availability | | |
| **Steps Performed (Main Path)** | | | |
| Admin Navigates to menu items | | | |
| Admin selects the menu item they want to change | | | |
| Admin edits the relevant menu item information as needed (e.g., updating the description, price, or availability status) | | | |
| The Admin confirms the changes by clicking save | | | |
| The app validates the updated menu item information for accuracy and completeness | | | |
| The system updates the entry | | | |
| **Extensions or Alternate Scenarios** | | | |
| If a menu item is marked as unavailable, the app may automatically remove it from the customer menu until it becomes available again or disabled -to be discussed | | | |
|  | | | |
|  | | | |
| **Pre-Conditions:** | Admin is logged into their admin account | | |
| **Post-Conditions:** | The menu item information is updated and reflected in the Nom Nom Express Food Delivery website. | | |
| **Assumptions:** | There are existing menu items | | |
| **Success Guarantee:** | Admin has successfully updated the menu information | | |
| **Outstanding Issues:** | What is a valid change? | | |
| **Priority:** | Medium/Low | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Name:** | Delete Menu Items | **Use Case ID:** | **UC-004** |
| **Primary Actor:** | Admin | | |
| **Description:** | Delete/disable an item from the menu | | |
| **Triggering Event:** | The item is no longer available for order | | |
| **Steps Performed (Main Path)** | | | |
| Admin Navigates to menu items | | | |
| Admin needs to identify which item to delete | | | |
| Admin checks the delete item checkbox | | | |
| Admin clicks the confirm changes button | | | |
| The system removes the item | | | |
|  | | | |
| **Extensions or Alternate Scenarios** | | | |
| If they do not want to delete the item they can check the disable item checkbox | | | |
| They can delete/disable multiple items at once | | | |
| **Pre-Conditions:** | Admin is logged in | | |
| **Post-Conditions:** | Menu is updated | | |
| **Assumptions:** | There are items on the menu to delete/disable | | |
| **Success Guarantee:** | The item is removed from the menu | | |
| **Outstanding Issues:** | Will disabling the item remove it from the menu? | | |
| **Priority:** | Low | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Name:** | Add items | **Use Case ID:** | **UC-005** |
| **Primary Actor:** | Admin | | |
| **Description:** | Add an item to the menu | | |
| **Triggering Event:** | The admin has a new item to add to the menu | | |
| **Steps Performed (Main Path)** | | | |
| Adin navigates to the add menu item form | | | |
| Admin enters the item information into the add to menu form | | | |
| Admin clicks save button | | | |
| System adds a menu item entry | | | |
|  | | | |
| **Extensions or Alternate Scenarios** | | | |
|  | | | |
|  | | | |
| **Pre-Conditions:** | Admin is logged in | | |
| **Post-Conditions:** | Menu is updated | | |
| **Assumptions:** | There is a new item to add to the menu | | |
| **Success Guarantee:** | Item has been added to the database and website | | |
| **Outstanding Issues:** | What kind of validation is needed? Should we have it be disabled when entered or live immediately? | | |
| **Priority:** | Medium | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Name:** | Customer Login | **Use Case ID:** | **UC-006** |
| **Primary Actor:** | Customer | | |
| **Description:** | Customers log in to their existing accounts in the Nom Nom Express Food Delivery website | | |
| **Triggering Event:** | Customers wish to access the websites features, either by logging in | | |
| **Steps Performed (Main Path)** | | | |
| Customer opens the Nom Nom Express Food Delivery website on their device | | | |
| Clicks on login tab in navigation bar that opens an offcanvas login screen | | | |
| Customer enters their registered unique username | | | |
| The customer enters their password | | | |
| The customer clicks the "Login" button | | | |
| The website verifies the login credentials | | | |
| When valid credentials are added system starts a session for the specific user | | | |
| system grants add to cart and checkout privileges | | | |
| **Extensions or Alternate Scenarios** | | | |
| If the customer's registration information is not valid, the app displays an error message and prompts the customer to correct the information | | | |
|  | | | |
| **Pre-Conditions:** | Customer has a device with internet access | | |
| **Post-Conditions:** | Customer is successfully logged in to their existing account | | |
| **Assumptions:** | Customer has valid credentials | | |
| **Success Guarantee:** | Customer can effectively log in to their existing account | | |
| **Outstanding Issues:** | What are the issues around security? | | |
| **Priority:** | High | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Name:** | Register | **Use Case ID:** | **UC-007** |
| **Primary Actor:** | Customer | | |
| **Description:** | Customers registers for new accounts in the Nom Nom Express Food Delivery website | | |
| **Triggering Event:** | Customers wish to access the websites features by creating a new account | | |
| **Steps Performed (Main Path)** | | | |
| Customer opens the Nom Nom Express Food Delivery website on their device | | | |
| navigate to the websites login offcanvas | | | |
| Customer selects the "Register" or "Sign Up" option | | | |
| The website presents a registration form on another page or modal | | | |
| Customer enters their full name, email address, password, and other required information | | | |
| The system validates the registration information for completeness and uniqueness. | | | |
| When the information is valid, the system creates a new customer account in the database | | | |
| Customer is redirected back to the original view | | | |
| **Extensions or Alternate Scenarios** | | | |
| If the customer's registration information is not valid, the app displays an error message and prompts the customer to correct the information | | | |
|  | | | |
| **Pre-Conditions:** | Customer has a device with internet access | | |
| **Post-Conditions:** | Customer has successfully created a new account | | |
| **Assumptions:** | The customer has the necessary information to register for the service | | |
| **Success Guarantee:** | Customer can effectively log in to their existing account or create a new one | | |
| **Outstanding Issues:** | What are the issues around security? | | |
| **Priority:** | High | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Name:** | Filter by Category | **Use Case ID:** | **UC-008** |
| **Primary Actor:** | Customer | | |
| **Description:** | Customer can filter the current menu page to view items that fit the filtered criteria | | |
| **Triggering Event:** | Customer decides to narrow down their search | | |
| **Steps Performed (Main Path)** | | | |
| Customer navigates to the menu | | | |
| Customer clicks a specific category | | | |
| Page jumps to that section of the menu for that category | | | |
|  | | | |
| **Extensions or Alternate Scenarios** | | | |
|  | | | |
|  | | | |
| **Pre-Conditions:** | Customer can access the website | | |
| **Post-Conditions:** | Customer can now view items based on their specific category choice | | |
| **Assumptions:** | There are items available under the given category | | |
| **Success Guarantee:** | Customer can now view a smaller menu based on their selection | | |
| **Outstanding Issues:** | Are there any items available under that category? What happens when there is nothing in the category? | | |
| **Priority:** | Low | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Name:** | Add to order | **Use Case ID:** | **UC-009** |
| **Primary Actor:** | Customer | | |
| **Description:** | The customer can put items to order | | |
| **Triggering Event:** | The customer decides to order food through Nom Nom express website | | |
| **Steps Performed (Main Path)** | | | |
| navigate to desired item | | | |
| click on add to order | | | |
| System adds the item to the users cart | | | |
|  | | | |
|  | | | |
|  | | | |
| **Extensions or Alternate Scenarios** | | | |
|  | | | |
|  | | | |
| **Pre-Conditions:** | The customer is logged in | | |
| **Post-Conditions:** | The customer has item(s) in their order now | | |
| **Assumptions:** | There are items available to add to the order | | |
| **Success Guarantee:** | Customer now has item(s) in their order | | |
| **Outstanding Issues:** |  | | |
| **Priority:** | High | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Name:** | Adjust the quantity | **Use Case ID:** | **UC-010** |
| **Primary Actor:** | Customer | | |
| **Description:** | The customer can adjust the quantity of item(s) to order | | |
| **Triggering Event:** | The customer wants to increase or decrease the quantity of food | | |
| **Steps Performed (Main Path)** | | | |
| Open order offcanvas | | | |
| Click either the plus or minus button to increase/decrease item(s) | | | |
| System updates the users cart | | | |
|  | | | |
|  | | | |
| **Extensions or Alternate Scenarios** | | | |
| maxim and minimum quantities should be set | | | |
|  | | | |
| **Pre-Conditions:** | There are item(s) in the order | | |
| **Post-Conditions:** | The customer is satisfied with the quantity in their cart | | |
| **Assumptions:** | The cart is not empty | | |
| **Success Guarantee:** | The customer can order desirable amount of food | | |
| **Outstanding Issues:** | How many of one item are they allowed to order? | | |
| **Priority:** | Low | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Name:** | Delete item(s) from order | **Use Case ID:** | **UC-011** |
| **Primary Actor:** | Customer | | |
| **Description:** | The customer can delete item(s) from the order | | |
| **Triggering Event:** | The customer wants to delete item (s) from order for some reason | | |
| **Steps Performed (Main Path)** | | | |
| Open the order offcanvas | | | |
| Click on delete item button to remove all quantities of that specific item | | | |
| System updates the users cart | | | |
|  | | | |
|  | | | |
| **Extensions or Alternate Scenarios** | | | |
| If they want to delete all items click the cancel order button | | | |
|  | | | |
| **Pre-Conditions:** | The customer has item(s) in the order | | |
| **Post-Conditions:** | The item(s) will be deleted from the cart | | |
| **Assumptions:** | The cart is not empty | | |
| **Success Guarantee:** | The customer can remove unnecessary or undesired item from the cart | | |
| **Outstanding Issues:** |  | | |
| **Priority:** | Medium/Low | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Name:** | Checkout Cart | **Use Case ID:** | **UC-012** |
| **Primary Actor:** | Customer | | |
| **Description:** | Customer checks out their order, reviews order details & submits for payment processing.  Once payment is processed the order is complete and an email is sent out to the customer with order confirmation. | | |
| **Triggering Event:** | Customer clicks ‘Checkout’ from cart | | |
| **Steps Performed (Main Path)** | | | |
| From the order, customer selects ‘Checkout’ | | | |
| Modal window pops up with order details displayed including subtotal | | | |
| Customer confirms order details by clicking ‘Next’ | | | |
| Modal window provides form for payment information to be entered | | | |
| Customer enters info; when all fields have valid entries, ‘Next’ button is enabled | | | |
| Customer confirms payment information by clicking ‘Next’ | | | |
| Modal window displays customer billing, phone and email information (per registration) | | | |
| Customer confirms billing details by clicking ‘Next’ | | | |
| Modal window displays customer shipping information (per registration) | | | |
| Customer confirms shipping details by clicking ‘Next’ | | | |
| Modal window displays order details including shipping fees, taxes and total amount to be charged to payment method | | | |
| Customer confirms placing order by clicking ‘Submit Order’ | | | |
| Modal window displays ‘Processing Payment’ while sending order and waiting for payment results | | | |
| Once payment processed successfully modal window displays ‘Order Successful’ | | | |
| System creates a unique file for each order that contains the order confirmation information so that at a future date, the information in the file can be sent to the client as an email message per CR01 | | | |
| System updates the users order history and deletes the current cart | | | |
| **Extensions or Alternate Scenarios** | | | |
| Customer enters invalid information.  The field will display an error message until valid information is entered. | | | |
| Payment is not processed successfully.  The modal window displays ‘Payment invalid’ and an error message if available. Customers can return to payment form and repeat steps 5-13. | | | |
| **Pre-Conditions:** | The Customer must be logged into the system with valid registration information entered (billing/shipping addresses, phone, email) | | |
| **Post-Conditions:** | Modal window displays ‘Order Successful’ and email sent with order confirmation | | |
| **Assumptions:** | Customer is a current user in good standing within the system | | |
| **Success Guarantee:** | Order Completed | | |
| **Outstanding Issues:** | If there is an error during the checkout process, what is the appropriate action? What is the risk of this occurring? How much information specific to payment do we need to retain in the database? | | |
| **Priority:** | High | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Name:** | View Order History | **Use Case ID:** | **UC-013** |
| **Primary Actor:** | Customer | | |
| **Description:** | View history by order number listed in most to least recent order.  May click on order to view order details | | |
| **Triggering Event:** | Customer wishes to view their order history | | |
| **Steps Performed (Main Path)** | | | |
| Customer clicks account tab on navigation | | | |
| Customer scrolls to order history (past registration information) | | | |
| Customer is presented a list of orders with summary info visible, sorted to most recent on top | | | |
| Customer can select any order to expand full order details - transaction number, date, items, price | | | |
| Customer can collapse full details by clicking order again | | | |
| **Extensions or Alternate Scenarios** | | | |
| Customer has not placed any orders to date.  The message “No Orders Yet” will be displayed in lieu of order list. | | | |
| The system is unable to display the order history for some reason.  A system error message is generated, displayed to the Customer and sent to the appropriate authority. | | | |
| **Pre-Conditions:** | The Customer must be logged into the system | | |
| **Post-Conditions:** | The Customer sees displayed order history | | |
| **Assumptions:** | Customer is a current user in good standing within the system | | |
| **Success Guarantee:** | The Customer sees displayed order history | | |
| **Outstanding Issues:** | What to do if there are a lot of orders? | | |
| **Priority:** | Low | | |

## Non-Functional Requirements

* R09 - preserve the contents of the cart if the user’s session is disconnected accidentally
* R10 - have the cart accessible regardless from any machine the customer is logging in
* R14 - Provide an intuitive, consistent look and feel to the user interface
* R15 - Use free open-source software
* R16 - Have the system fully tested and up and running in 8 weeks (this is a firm deadline)

## Data Model

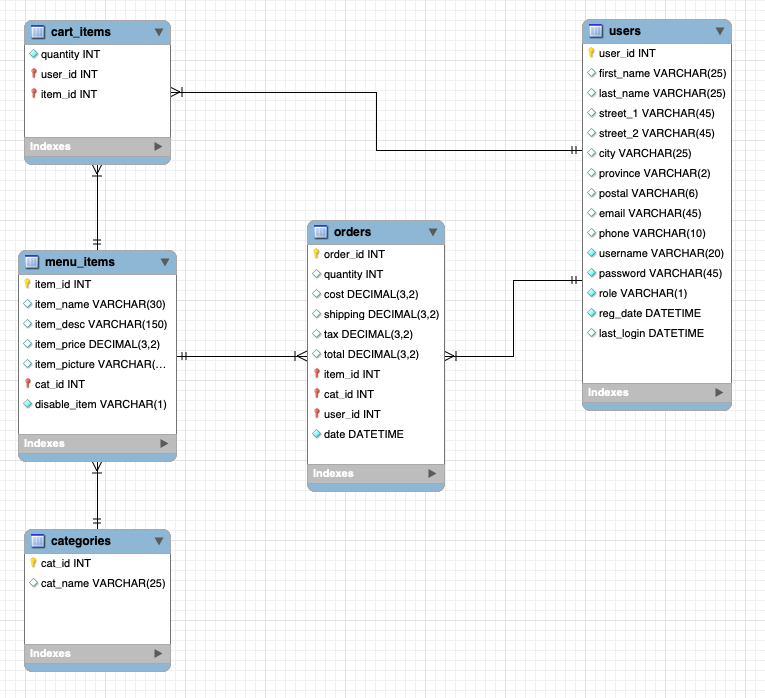


Figure 4 - Data Model Diagram

*>*

## UI Screen Mockups

6.1 The following screen is for UC-010 / UC-011 and shows the current contents of the shopping cart*.*

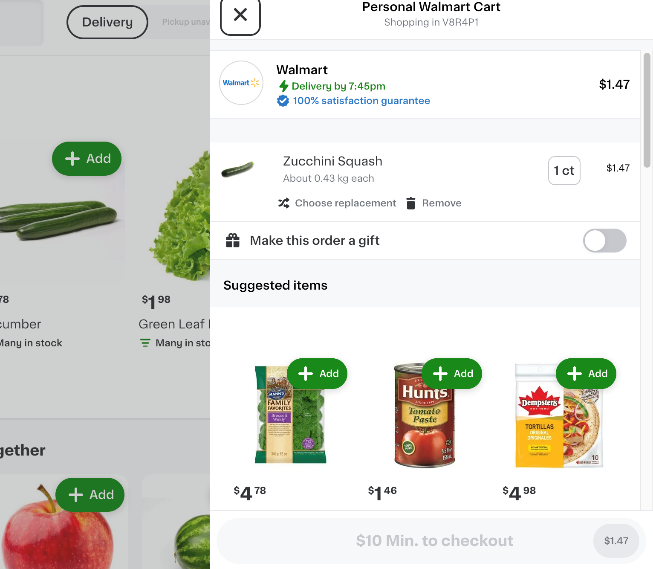


Figure 5 - Cart

6.2 The following screen is the for use case UC-006 and shows the login screen modal/offcanvas.

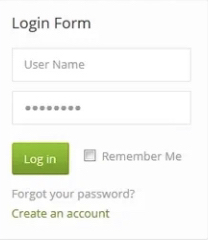
**

Figure 6 - Login Screen

6.3 The following screens are for use case UC-008 / UC-009 and shows a category filter to the left and add to cart buttons on all items. Figure 8 also shows what the website header will look like.

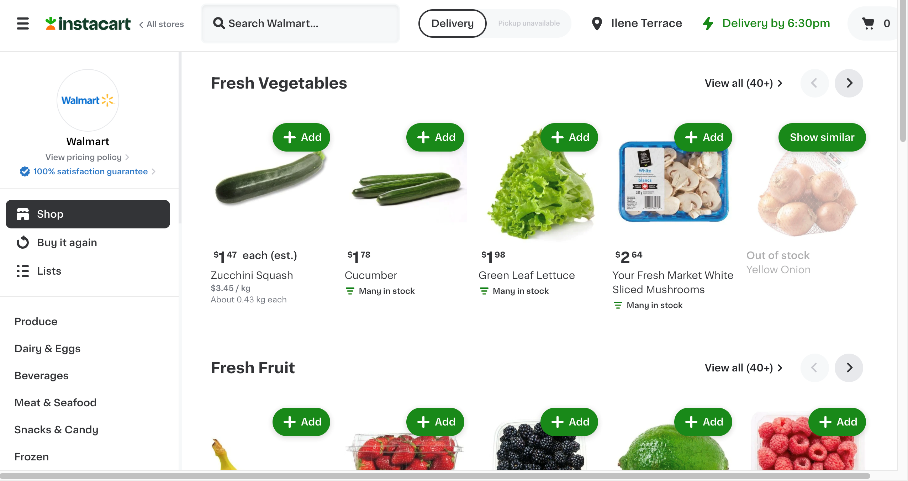


Figure 7 - Menu Items - 1

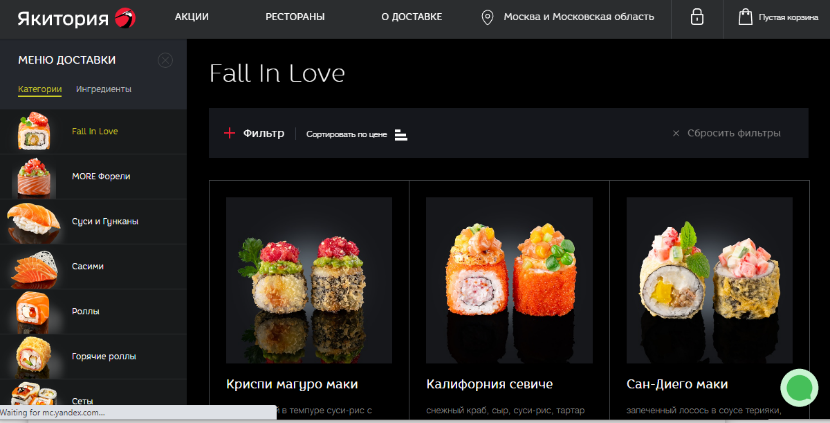


Figure 8 - Menu Items - 2

6.4 The following screen is for use case UC-007 and shows a general customer registration form with name, address, and email fields

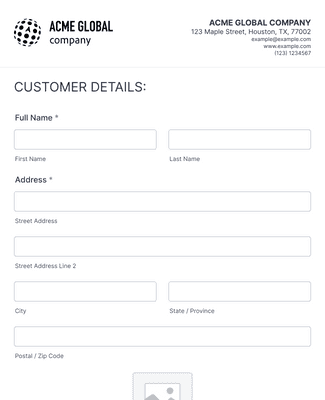


Figure 9 - Customer Registration Form

6.5 The following screen is for use case UC-012 and shows the general checkout process modal

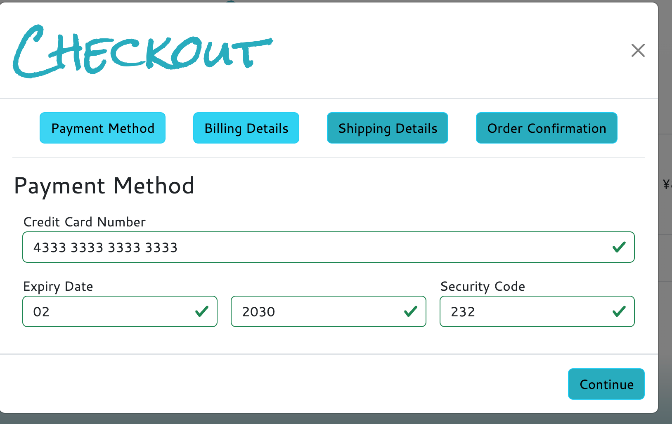


Figure 10 - Checkout Process

6.6 The following screen is for use case UC-002 – UC-005 and shows what the general layout for the admin page menu items will be

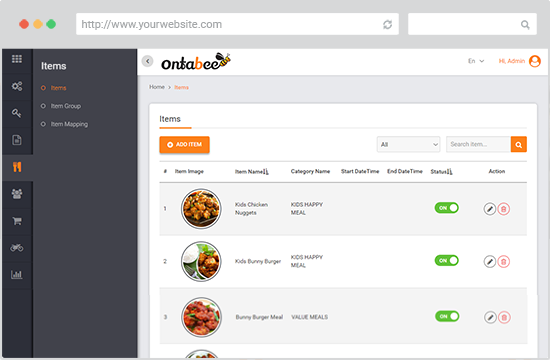


Figure 11 - Admin Page Example

## Change Log

*<Record any changes to the BRD caused by change request orders.>*

|  |  |  |
| --- | --- | --- |
| **Change Request Id** | **Issue Date** | **Description** |
| 01 | 2023-09-26 | Confirmation email was supposed to be sent to the customer when order is complete, however, affected by change request, server need to save unique files containing what the customer ordered for each order and save them. |
|  |  |  |
|  |  |  |