

Eclectic Eats Haven

Zachary Short and Katy Shi

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# Software requirements

## Basics

* Home Page
* Sign Up Page
* Login Page
* Forgot Password Page
* Menu Page
* Cart Page
* Payment Page
* Receipt Page
* Manager Menu
* Merchandise Menu

## Customer Controls

* View list of items
* Select items
* Add/remove items
* Choose/remove sides & toppings
* Delivery/preparation time
* Get notifications about order status
* Name/phone number for order identification
* Card, cash, PayPal, Samsung Pay, Google Pay Apple Pay payment methods
* Save card info
* Add optional tip
* View order history with ability to cancel pending orders and reorder previous orders

## Manager Controls

* Change item availability
* Add/remove new/old items
* Add/remove new/old sides & toppings
* Change item prices
* View list of pending orders
* Cancel pending orders
* View order information
* Notify customers of order status change

# Inception

## Stakeholders

* + Restaurant for which the website is built
  + Customers of said restaurant
  + Web developers

## Multiple Viewpoints

* + Easy to use by end users
  + Maintainable for developers

## First Questions

* + Who is behind the request for this work?
    - Restaurant owner
  + Who will use the solution?
    - Restaurant owner
    - Customers of the restaurant
  + What will be the economic benefit of a successful solution?
    - The restaurant may gain more customers which will result in them earning more money.
  + Is there another source for the solution that you need?
    - No.
  + How would you characterize “good’ output that would be generated by a successful solution?
    - Restaurant owner is satisfied with the website and will use it daily. A lot of customers will use this website to order.
  + What problems will this solution address?
    - Customers can now order online as well besides calling in or walking in to order.
  + Describe the business environment in which the solution will be used.
    - The business environment in which the website will be used is the restaurant for which the website is built.
  + Will special performance issues or constraints affect the way the solution is approached?
    - No.

## Nonfunctional Requirements

* + Maintainable – The website should be easy to maintain and update as needed.
  + Portable – The website should be able to adapt to different browsers and screen sizes.
  + Reliable – The website should be reliable so that customers will want to order from the website, and the manager will use the website and want to update the menu.
  + Secure – the website should be secure. The user password will be hashed.

# Elicitation

## Objectives of the Website

* + Provide a website for a restaurant where the manager can manage the menu and notify customers of their order status.
  + Customers can place orders from the online menu, pay for their order online, and view their order status. They can also print their order information.
  + Provide basic login and sign-up screen as well as reset-password screen.

## Needs of the Business

* + Customers can easily place orders online instead of needing to call or place the order in person.
  + The restaurant manager can easily edit the online menu unlike needing to re-print their menu after making a change. This ensures that the menu is up to date.

## Day-to-Day Basis

* + With a large clientele, there will be many hungry customers placing orders, and this website can facilitate that.

## Business Goals

* + Provide a restaurant website that can be used by customers to place orders daily.

## Priorities

* + Provide customers with the ability to add to or remove from the cart.
  + Allow the manager to manage the menu.
  + Allow sign-ups and logins so that customers can save their information and customize their experience.

## Design Rationale

* + User-friendly layout to navigate through the website.

# Elaboration

## Analysis Classes

* + User – Customers that place orders
  + Order – Selection of items from the menu that customers create
  + Items – Food choices on the menu
  + Payment – Payment methods such as card, cash, PayPal, Samsung Pay, Google Pay, Apple Pay

## Attributes

* + Customer Name – Identifies the customer
  + Order Date – Date and time of when the order is placed
  + Price – The monetary value of each item
  + Items – Food on the menu that customers can select
  + Order Number – Unique number identifies the order of a customer
  + Order Status – Processing status of the order
  + Shipping Address – Address of where the food will be delivered
  + Total – The total monetary value of an order
  + Receipt – Printable page containing order information

## Services

* + Menu Management
    - **addItem(item)** – Customer can add item to the cart. Manager can add item to the menu
    - **removeItem(item)** – Customer can remove item from the cart. Manager can remove item from the menu
    - **addSides(side)** – Customer can add sides to item. Manager can add side options to item
    - **removeSides(side)** – Customer can remove sides to item. Manager can remove side options from item
    - **setItemAvailability(item)** - Manager can enable/disable item on the menu based on availability
    - **setSidesAvailability(side, item)** - Manager can enable/disable sides of the item based on availability
    - **changePrice(item, price)** – Manager can change the price of an item on the menu
    - **viewMenu()** – Customer and manager can view the menu
    - **closeMenu()** – Customer and manager can close/hide the menu after finished with viewing
  + Order Management
    - **setOrderType(type)** – Customer can set order type as delivery or pick-up
    - **setStatus(status)** – Manager can set the status of the order
    - **viewStatus()** – Customer can view the status of the order
    - **cancelOrder(orderNumber)** – Customer or manager can cancel an order using the order number
    - **setOrderTime(time?)** – Customer can set the time of when the order is to be ready. This time cannot override the minimum prep time required. Otherwise, this is used by the system to set the prep time.
    - **placeOrder()** – Customer can place the order
    - **viewOrder(orderNumber)** – Customer and manager can view the order
    - **reorder(orderNumber)** – When viewing past orders, the customer can choose to reorder. The items on the provided order number will be added to the cart so that the customer can choose to modify the order
    - **setOrderNumber()** – Used by the system to generate a number for an order
    - **setTip(amount)** – Customer can set tip in a dollar amount or a percentage amount
  + Other
    - **printReceipt()** – Customer and manager can view and print the receipt of the order
    - **setPaymentMethod(payment)** – Customer can set the payment method
    - **viewOrderHistory()** – Customer can view past orders
    - **viewPendingOrders()** – Manager can view all the orders that are still in progress
    - **viewCompletedOrders()** – Manager can view all the orders that have been completed

## Constraints

* + Cost
    - GitHub pages (free)
    - Developers (free)
  + Business Rules
    - Finish by December 13, 2023
  + Technical/Performance Criteria
    - User-friendly
    - Hosted on GitHub
    - Fast

## Mini-Specifications

* + No hardware required except for a device that can access the internet. Everything is online as this is a website.

## Normal Requirements

* + Login screen – Users should be able to log into the website as either a customer or the manager.
  + Sign-up screen – Customers should be able to create an account.
  + Reset password screen – Users should be able to recover their account if they forgot their password.
  + Order tracking – Users should be able to receive notifications regarding order status.
  + Menu browsing – Users should be able to browse the menu. They should be able to see the categories, item names under the categories, prices, images, and toppings.
  + Payment Option – Users should be able to select payment option such as cash or card.
  + Add/remove to cart – Users should be able to add or remove items and toppings from the cart.
  + Order type – Users should be able to choose pick-up or delivery as their order type.
  + Prep Time – Users should be able to set the prep time for an order. This time cannot be less than the minimum prep time.
  + Delivery address – Users should be able to input or select a delivery address and multiple addresses can be saved on their account.
  + Print receipt – Users should be able to access a printable receipt.

## Expected Requirements

* + Secure login – Logging in should be secure. Passwords are hashed to achieve this.
  + Search – Users should be able to search items on the menu.
  + View order history – Users should be able to view a history of their orders.

## Exciting Requirements

* + Merchandise shop – Users can purchase merchandise such as gift cards.
  + Payment Options – Users can select payment options besides cash or card such as PayPal, Samsung Pay, Google Pay Apple Pay.
  + Reorder – Customers should be able to reorder a past order simply with a click of a button.

A screenshot of a diagram

Description automatically generated

## Use Case Diagram

## A diagram of a company Description automatically generatedActivity Diagram

# Validation

* + The website should be user-friendly. Simply add/remove items from the cart with the press of a button. Search up an item for quick browsing of the menu.