

# **PROJ1C1 (G24)- WolfCafe System**

Sailesh Sridhar (ssridh29)

Adam Myers (ajmyers5)

Swetha Manivasagam (smaniva4)

Akash Ramanarayanan (aramana3)

## **Use-Cases**

### **Use Case 1: Customer Account Creation and Login**

**Preconditions:** User is on the home or login screen; has internet access.

#### **Main Flow:**

- User clicks “Create Account.”;
- Enters the required details: email, password, name, dietary status, etc.;
- System validates data;
- User clicks confirmation link to activate account;
- User logs in by entering email and password.

#### **Subflows:**

- Resend confirmation email upon user request.
- Password reset initiated via “Forgot Password” link.

#### **Alternative Flows:**

- Invalid or missing input data shows a clear error message.
- Email already registered prompts “Account exists” message.

### **Use Case 2: Add Items to Cart and Edit Cart**

**Preconditions:** User is viewing the menu or item detail.

#### **Main Flow:**

- User taps “Add to Cart” on an item;
- Cart icon updates with item count and current total;
- User opens cart to review items;
- User adjusts item quantities or removes items.

#### **Subflows:**

- Cart updates total dynamically with each change.

#### **Alternative Flows:**

- Attempting to add an unavailable item results in a notification.
- Cart persists between sessions until checkout or explicit clearing.

### **Use Case 3: Purchase Item (Customer)**

**Preconditions:** The user is logged in; The user is looking at the home page; The user has a customer status.

#### **Main Flow:**

- The user selects the “Create Order” option;
- The user is redirected to a page with all currently available recipes and items;
- The user selects an item to add to their cart; The order total is shown at the bottom of the webpage including sales tax;
- The user selects “checkout”;
- The user is given the option to leave a 15%, 20%, 25%, or custom tip;
- The user is redirected to the home screen with a prompt that their order was created.

#### **Subflow:**

- **Multiple Quantities of the Same Item:**  
The user adds the same item to their cart multiple times; The system updates the cart accordingly.
- **Adding Several Different Items:**  
The user adds several different items to the cart; The system updates the cart accordingly

#### **Alternative Flow:**

- **Item Unavailable:**  
The user tries to add an item that is unavailable; The system blocks the request; The system notifies the user that the item is currently unavailable.

### **Use Case 4: Fulfilling Orders (Admin)**

**Preconditions:** The user is an admin; The admin is logged into the system and is looking at the main menu

#### **Main Flow:**

- The admin selects the “View Orders” button;
- The admin is shown a page of all currently unfulfilled orders;
- Next to the order that the admin would like to fulfill, the admin selects “fulfill order”;
- The order is removed from the orders page and the customer is notified of their order being fulfilled;
- The admin forwards the request to kitchen staff for item preparation;
- The admin is kept on the orders page with the updated list of unfulfilled orders.

#### **Subflow:**

- **Fulfilling Multiple Orders:** The admin opens the orders page; The admin selects the “fulfill order” button next to several orders; All of the fulfilled orders are removed from the page.

**Alternative Flow:**

- **No Unfulfilled Orders Exist:** The admin opens the orders page; The admin is displayed with the text “No unfulfilled orders”

## **Use Case 5: Manage Item Availability and Visibility (Staff/Admin)**

**Preconditions:** The user is a Staff member or Admin and is logged into the system with permissions to manage the menu.

**Main Flow:**

- The user navigates to the "Menu Management" or "Inventory" dashboard.
- The system displays a list of all available items and recipes.
- The user identifies an item that is temporarily unavailable (e.g., "Sold Out for Today").
- The user clicks a toggle or selects an option to change the item's status from "Available" to "Sold Out."
- The system confirms the change. The item immediately becomes un-orderable on the customer-facing menu, possibly showing a "Sold Out" label.

**Subflow:**

- **Marking Multiple Items as available or unavailable** The user selects several items and selects the “available” or “sold out” button. This changes the status of all items to the specified status

**Alternative Flows:**

- **Conflicting Inventory Levels:** The user tries to mark an item as "Available," but the system's underlying inventory tracking shows that a critical ingredient is at zero. The system prevents the action and displays a notification: "Cannot make available. Required ingredient 'Espresso Beans' is out of stock."
- **Concurrent Modification:** Another staff member simultaneously changes the status of the same item. The system detects the conflict and alerts the user: "This item was just updated by another user. Please refresh the page."

## **Use Case 6: Track Order Status (Customer)**

**Preconditions:** The user is logged in as a **Customer** and has an active, unfulfilled order.

**Main Flow:**

- From the home screen, the customer clicks on the "My Active Order" status banner.

- The system displays the current status of their order (e.g., "Order Received," "In Progress," "Ready for Pickup").
- When a staff member fulfills the order, this screen automatically updates to "Ready for Pickup."
- The customer picks up their order.

**Subflows:**

- **Push Notifications:** The customer receives an automated push notification on their device when their order status changes to "Ready for Pickup."

**Alternative Flows:**

- **No Active Order:** If the customer navigates to the tracking page without an active order, a message is displayed: "You have no active orders."

## **Use Case 7: Manage Inventory (Staff)**

**Preconditions:** The user is logged in as a **Staff** member.

**Main Flow:**

- The staff member selects the "Inventory" option from their dashboard.
- A list of all trackable items/ingredients is displayed with their current quantities.
- The staff member finds the item to update and enters the quantity to add (e.g., after a delivery).
- The staff member clicks "Update Stock."
- The system updates the inventory count and provides a confirmation message.

**Subflows:**

- **Updating Multiple Items:** The staff member can update quantities for several items on the same screen before clicking a single "Update All" button.
- **Reducing Stock:** The staff member can click a subtract button next to an ingredient to reduce its quantity (spoilage or other reason)

**Alternative Flows:**

- **Insufficient Permissions:** A user without staff permissions attempts to access the page and is shown an "Access Denied" message.
- **Invalid Input:** The user enters non-numeric text into a quantity field. The system highlights the error and prevents the update until it is corrected.

## **Use Case 8: Configure System Settings (Admin)**

**Preconditions:** The user is logged in as an **Admin**.

**Main Flow:**

- The admin navigates to the "System Settings" page.
- The admin selects the "Financial" or "Tax" section.
- The admin inputs the new sales tax rate (e.g., 2.0 for 2%).
- The admin saves the changes.
- The system confirms the update and applies the new tax rate to all future orders.

**Subflows:**

- **Editing the Tax Rate:** After inputting the tax rate, the admin can click back on the tax rate button to modify it to a new value.

**Alternative Flows:**

- **Invalid Tax Rate:** If the admin enters a non-numeric or negative value for the tax rate, the system displays an error and prevents saving.

**Use Case 9: User Profile and Dietary Preferences (Customer)****Preconditions:**

- User is logged in.

**Main Flow:**

- User opens profile/preferences page.
- User sets dietary preferences (e.g., vegan, nut-free).
- System saves preferences and applies filters automatically on menu browsing.

**Subflows:**

- System prompts user at first order or periodically to confirm/update preferences.

**Alternative Flows:**

- Invalid preference input results in an error prompt.

**Use Case 10: Manage Users (Admin: Create/ Edit/ Delete Staff & Customers)**

**Preconditions:** Admin logged in with user-management privileges.

**Main Flow:**

- Admin navigates to "User Management."; Admin selects "Create User" and inputs details (name, email, role, permissions);
- Admin assigns role (Staff/ Customer/ Other) and submits; System creates user, sends activation email, and records action in audit log;
- For Edit/Delete, admin selects user, edits fields or selects delete, confirms action, system updates and logs.

### Subflows:

- **Bulk import:** Admin uploads CSV to create multiple users — system validates and reports errors.
- **Password reset:** Admin triggers reset which emails user a reset link.

### Alternative Flows:

- **Duplicate email or invalid data:** System rejects and shows validation errors.
- **Unauthorized admin (insufficient rights):** System denies access and logs attempt.
- **Failed activation email:** Admin can resend activation or manually activate account.

## Reflection document

This set of 10 use cases was carefully selected to create a focused, achievable scope that delivers a complete and functional product.

To start our workflow, we began by each prompting our favorite LLMs to select the best 10 use-cases out of the 30 use-cases. This left us with many different lists of 10 use-cases that we could then narrow down to our overall favorite 10 use-cases. This approach also allowed us to have different perspectives on what use-cases were the most important and which similarities the LLMs had when picking their favorite use-cases. Since each LLM justified its selection, it allowed us to see a variety of viewpoints on what direction to take this project.

### 1) How did you decide what NOT to do?

The process of deciding what **not to include** in the MVP focused on:

- **Core Value and Risk Assessment:** We prioritized features that directly address the primary pain points of users (placing orders, payment, order tracking) to validate basic product-market fit quickly. Some use cases described parts of a larger workflow. We also removed use cases that are important for business management but are not part of the core customer-facing transaction loop.
- **Effort vs Learning:** Features requiring significant development effort but delivering little validated learning or that could be manually handled initially were deferred. This avoids early over-engineering and maximizes resource efficiency.
- **Complexity and Scope Management:** Flows involving complex business processes (e.g., catering, advanced analytics, staff scheduling) were left out to reduce technical risk and allow faster iteration cycles.
- **Regulatory and Compliance Non-essentials:** Although privacy and sustainability are critical, initial lightweight compliance was accepted while delegating exhaustive controls (e.g., comprehensive privacy dashboards) to later releases.
- **User Experience Principle:** Features that might cause user confusion or fragmentation (e.g., anonymous orders, complex promotions) were shelved to maintain a simple, predictable MVP interface.

In sum, the decision was rooted in lean startup principles emphasizing fast feedback loops and addressing the riskiest assumptions first.

## 2) What negative impacts or disappointments could this MVP have for your stakeholders?

- **Limited Feature Set:** Users may find missing advanced features like order modifications, refunds, promotions, personalized recommendations, and detailed analytics limiting, impacting initial satisfaction.
- **Manual Operations:** Staff and admins may need to handle some tasks manually (e.g., financial reconciliation, shift scheduling) causing inefficiencies.
- **Lack of Guest Ordering:** Excluding anonymous ordering may reduce accessibility for new users reluctant to create accounts upfront.
- **Reduced Marketing Capability:** Absence of targeted notifications and campaigns could impact user engagement and retention.
- **Security and Privacy Awareness:** Limited privacy control features could raise concerns for data-sensitive stakeholders until robust policies are integrated.
- **Scalability Constraints:** The MVP may not be architected for high concurrency or multi-region deployments initially, limiting growth speed.

## 3) What changes did you make (and why) to the MVP to appease some stakeholders?

- **Focused Core User Journeys:** Retained and detailed user flows critical to customers (account setup, ordering, status tracking) and staff (inventory and fulfillment) to ensure operational functionality and early stakeholder value.
- **Added Basic Dietary Preferences:** Incorporated simple dietary and allergen info filtering, responding to health-conscious consumers' concerns and regulations.
- **Clear Role Distinction:** Detailed admin and staff use cases for user and menu management to safeguard permissions and operational clarity.
- **Fallback and Error Handling:** Embedded alternative flows across critical functions (payment, tracking) to enhance UX reliability.

## LINK TO LLM PROMPT HISTORY

[https://www.perplexity.ai/search/are-you-able-to-access-the-she-en05vRu\\_T\\_ipoYiIVxEolg](https://www.perplexity.ai/search/are-you-able-to-access-the-she-en05vRu_T_ipoYiIVxEolg)