CSC 510 Project 1 C1

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New Use Cases

UC1: Browse Menu & Add Items to Cart

Preconditions:

- WolfCafe app/web accessible
- Menu published

Main Flow:

1. Customer browses menu categories.
2. System displays item details, prices, availability.
3. Customer selects item and customizations.
4. System validates selection.
5. Customer adds item to cart with specified quantity.
6. System updates cart subtotal and item count.

Subflows:

- [Quantity Adjustment] Inline "+ / –" control.
- [Item Customization] Customer selects modifications.

Alternative Flows:

- [Item Unavailable] Disabled; system suggests alternatives.
- [Invalid Customization] System prevents incompatible selections.
- [Invalid Quantity] Zero/excessive quantity rejected.

UC2: Cart Review & Edit

Preconditions:

- Cart contains ≥1 item

Main Flow:

1. Customer opens cart.
2. System lists items, options, qty, totals.
3. Customer edits qty or removes item.
4. System recalculates subtotal and tax estimate.

Subflows:

- [Clear Cart] One-click “Empty cart.”
- [Edit Options] Remove + re-add flow.

Alternative Flows:

- [Item Now OOS] System prompts removal.

UC3: Checkout & Payment

Preconditions:

- Items in cart
- Payment method available

Main Flow:

1. Customer proceeds to checkout.
2. System displays order summary and totals.
3. Customer enters contact and payment details.
4. System validates inputs.
5. Customer confirms purchase.
6. System processes payment and creates order record.
7. Customer receives confirmation.

Subflows:

- [Saved Method] Use stored card.
- [Guest Checkout] Email/phone input.

Alternative Flows:

- [Payment Declined] Retry/alternate method.
- [Gateway Timeout] Order pending until retry.
- [Invalid Info] System prompts correction.

UC4: Price, Tax, Fees & Discounts

Preconditions:

- Items in cart
- Tax rules and promotions configured

Main Flow:

1. System calculates item subtotals.
2. System applies taxes by jurisdiction/category.
3. System adds service fees if applicable.
4. System validates discount codes.
5. System applies discounts and updates total.
6. System displays breakdown to customer.

Subflows:

- [Exempt Items] Flagged items excluded from tax.
- [Stacked Discounts] Handle multiple valid promos.

Alternative Flows:

- [Tax Lookup Error] Apply default rate, log error.
- [Invalid Code] Error shown to customer.

UC5: Order Confirmation & Digital Receipt

Preconditions:

- Payment successful

Main Flow:

1. System generates order confirmation with # and pickup details.
2. System sends digital receipt via email.
3. System stores receipt in account order history.

Subflows:

- [Resend Receipt] Customer requests duplicate.
- [Audit Trail] Records kept for compliance.

Alternative Flows:

- [Email Failed] Receipt only in-app.
- [Duplicate Prevention] System blocks multiple resends.

UC6: Order Tracking

Preconditions:

- Paid order exists

Main Flow:

1. Customer opens “Track Order.”
2. System displays current status (Confirmed → Preparing → Ready).
3. System shows ETA and pickup instructions.
4. System sends notifications for status changes.

Subflows:

- [Prep Updates] Staff mark statuses.
- [Pickup Reminder] Sent if order sits ready too long.

Alternative Flows:

- [Notification Failure] Customer refreshes manually.
- [Delay] System updates ETA and informs customer.

UC7: Staff Order Management (Accept & Prepare)

Preconditions:

- Paid order exists in system
- Staff logged into KDS

Main Flow:

1. New order appears in staff dashboard/KDS.
2. Staff reviews items and notes.
3. Staff accepts order and starts preparation.
4. Staff prepare ordered items.
5. Staff confirm completion.
6. System updates status to “Ready for Pickup.”
7. Customer notified.

Subflows:

- [Partial Completion] Items marked ready individually.
- [Quality Check] Accuracy verified before completion.

Alternative Flows:

- [Network Error] Local fallback ticket printed.
- [Mistaken Acceptance] Staff revert/reassign.
- [Delay] Pickup time extended.

UC8: Customer Pickup

Preconditions:

- Order marked “Ready for Pickup”

Main Flow:

1. Customer arrives at pickup area.
2. Staff verify customer/order ID.
3. Staff hand over completed order.
4. System updates status to “Picked Up.”

Subflows:

- [Identity Verification] Confirm phone/email digits.

Alternative Flows:

- [Late Arrival] Order held for grace period.
- [No Show] Order cancelled; refund/credit applied.

UC9: Menu & Availability Management (Staff)

Preconditions:

- Staff logged in with management permissions

Main Flow:

1. Staff open menu management interface.
2. System displays current menu with availability.
3. Staff add, edit, or disable items.
4. Staff set pricing, descriptions, categories.
5. System validates and publishes changes.
6. Updates instantly visible to customers.

Subflows:

- [Bulk Updates] Edit multiple items.
- [Scheduled Changes] Future-dated updates.

Alternative Flows:

- [Invalid Data] Publish blocked until fixed.
- [Stockout Toggle] Staff mark “86” for item; removed from cart.
- [Restore] Item re-enabled.

UC10: Refunds & Cancellations (Staff)

Preconditions:

- Paid order exists

Main Flow:

1. Staff open refund/cancellation screen.
2. Staff review customer request.
3. Staff approve or deny.
4. If approved, system processes refund.
5. Order status updated.
6. Customer notified.

Subflows:

- [Partial Refund] Refund item subset.
- [Store Credit] Refund issued as credit.

Alternative Flows:

- [Refund Failure] Retry and notify manager.
- [Refund Denied] Reason communicated to customer.

Reflection

Deciding What Not to Do

In order to reduce our number of use cases to 10 to create the MVP, we had to decide which use cases were critical to the basic functionality of the food delivery application. We prioritized core functionality, minimizing complexity, and focusing on a seamless user experience for the primary use of the app. Therefore, we kept the use cases that were important to the most basic user flow including ordering food, restaurant staff preparing food, and finally the user picking up their order. Most of the use cases we chose to remove from our MVP mapped functionality were nice to have and expanded the diversity of the user base that could use our product, but were not necessary in creation of the most basic version of the application. For example, use cases related to saving previous orders, applying discount codes, and creating a reward system are functionalities that would add to the user experience but are not necessary for the basic purpose of the application.

Negative Impacts of MVP on Stakeholders

In the original identification of new use cases to represent the MVP, ChatGPT did not include functionality related to the fulfillment or pickup of orders. This is a critical feature that allows for a record of fulfilled orders to be maintained, which is essential for multiple groups of stakeholders: customers (to know when their order has been fulfilled), staff (to know what orders have not yet been fulfilled), and restaurant managers (to keep a record of all orders received and fulfilled).

In the original identification of new use cases to represent the MVP, the features related to allergens were removed on both LLMs used, ChatGPT and Gemini. While these features may not be useful or essential for customers with no allergies, they are incredibly useful and important to customers with food related allergies to make educated decisions. This feature is therefore essential to multiple groups of stakeholders: customers (to know what allergens and potential cross contaminations exist in the menu items) and restaurant managers (to ensure the restaurant is following all legal policies related to displaying food allergen information).

In the original identification of new use cases to represent the MVP, the feature related to multiple language support was removed on both LLMs used, ChatGPT and Gemini. This feature is essential to the customer group of stakeholders (to allow non-English speaking customers the ability to use the application).

Changes to MVP to Appease Stakeholders

We specifically had to ask our LLMs to add an appropriate use case for preparing food, to appease our most important stakeholders and to retain an important feature of the app. The main stakeholders that were appeased with our new changes are the customers and the staff. Customers now have more core functions aside from browsing such as tracking order status and getting an order confirmation and receipt. The restaurant staff has retained the ability to receive and complete orders, and now has the ability to manage menu items and cancellations more efficiently. App managers may now be more pleased with a simpler, concise application without added complexity like multi-language support or allergen/nutrition information.

Prompt History

Gemini: https://g.co/gemini/share/59c04882466a
Chat - https://chatgpt.com/share/68c1a771-cdf8-8006-a07c-f5b8327a686d
Chat+ - **https://chatgpt.com/share/68c1a860-5758-8001-9b61-26349bce1ae9**