Project 1b1

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Use Cases

1. Use Case 1: Customer Places Order

1.1 Preconditions

1.1.1 The customer is logged into their WolfCafe account or ordering as a guest.

1.2 Main Flow

1.2.1 The Customer views the menu.
1.2.2 The system displays the menu items and their availability.
1.2.3 The customer selects items and adds them to their cart. [1.4.1]
1.2.4 The customer clicks on "View Cart" and views the total price and tipping option. [1.3.2]
1.2.5 The customer checks out by picking a tip and payment method.
1.2.6 The system places the order successfully. [1.3.1] [1.4.2]

1.3 Subflows

1.3.1 If the customer placed an order on an account, the order details will be added to the associated account.
1.3.2 The sales tax will be calculated when the customer views the cart.
1.3.3 If the order is placed successfully, the customer will get an order confirmation.

1.4 Alternative Flows

1.4.1 If an item is out of stock, the customer will not be able to select it.
1.4.2 If the payment does not get authorized, the order will not be placed.

2. Use Case 2: Staff Prepares Order

2.1 Preconditions

2.1.1 A staff member is logged in as a staff member on WolfCafe.
2.1.2 The customer successfully placed the order. (UC1)
2.1.3 The order has not been completed yet.

2.2 Main Flow

2.2.1 A staff member views the order details. [2.3.2]
2.2.2 The details are sent to the kitchen.
2.2.3 The kitchen prepares the items on the order. [2.4.2]
2.2.4 A staff member packages the items and sets the order status to "Ready". [2.3.1] [2.3.3]

2.3 Subflows

2.3.1 The inventory is adjusted according to the order.
2.3.2 The staff reviews any special instructions. [2.4.1]

2.3.3 The system sends a pickup notification to the customer.

2.4 Alternative Flows

2.4.1 If the special instructions can't be fulfilled, the staff notifies the customer through the WolfCafe system.
2.4.2 If the customer cancels the order during prep, the system notifies the staff and adjusts the inventory. The order status changes to "Cancelled" and the customer is refunded.

3. Use Case 3: Customer Retrieves Order

3.1. Preconditions

3.1.1 The customer is logged into the WolfCafe system as Guest or Account Holder.
3.1.2. A staff member has logged into the WolfCafe portal as a Staff Member.
3.1.3. The customer has placed and paid for an order via the WolfCafe system. (UC1)
3.1.4. The order status has been updated to "Ready" and the customer has received a pickup notification. (UC2)

3.2. *Main Flow*

3.2.1. The customer displays their order confirmation to the staff member. [3.3.1] [3.3.2]
3.2.2. The staff member enters the customer's confirmation details under "Active Orders" in the WolfCafe system for verification.
3.2.3. The WolfCafe system successfully matches the customer's order details with an order in the system. [3.3.3] [3.3.4]
3.2.4. The staff member retrieves the items attached to the order and delivers them to the customer. [3.4.1] [3.4.2]
3.2.4. The staff member marks the order as "completed" in the WolfCafe system, and the order is added to "Completed Orders" in the system. [3.3.5]

3.3. *Sub-Flows*

3.3.1. If the order was placed online, the customer must access the WolfCafe system/app to display their order confirmation number to the staff member.
3.3.2 If the order was placed in-store, the customer must provide the confirmation number they were given after placing their order to the staff member.
3.3.3. If the customer checked out as a guest, their order will not be linked to them in the WolfCafe database.
3.3.4. If the customer checked out using their WolfCafe account, their order will be linked to their WolfCafe Customer profile and saved in a list of their "Previous Orders".
3.3.5. If the order was placed online, the customer will receive a virtual notification from the WolfCafe system/app once their order has been fulfilled.

3.4. *Alternative Flows*

3.4.1. If the customer is unable to retrieve their order by close-of-business, the order will be cancelled and added to "Archived Orders" in the system.
3.4.2. If the staff member finds errors in the customer's order (the order was added incorrectly, incorrect items were made, items are missing from the order, there is insufficient inventory to fulfill the order, etc.), a cancellation or refund must be initiated (UC4).

4. Use Case 4: Staff Cancels Order/Refunds Item(s)

4.1. *Preconditions*

4.1.1. The customer is logged into the WolfCafe system as Guest or Account Holder.
4.1.2. A staff member has logged into the WolfCafe portal as a Staff Member.
4.1.3. The customer has placed and paid for an order via the WolfCafe system. (UC1)
4.1.4. The order status has been updated to "Ready" and the customer has received a pickup notification. (UC2)
4.1.5. The order has not yet been fulfilled/marked as completed in the WolfCafe system.
4.1.6. Main Flows [3.2.1], [3.2.2], and [3.2.3] in UC3 must be complete.

4.2. *Main Flow*

4.2.1. The staff member navigates to the "Initiate Refund" button on the customer's order.
4.2.2. The staff member selects the specific items to be refunded and the total refund amount is loaded into the "Amount" tab. [4.3.1] [4.3.2]
4.2.3. The staff member selects the customer's chosen refund method. [4.3.3] [4.3.4]
4.2.4. The staff member selects the "Process Refund" button.
4.2.5. The customer's order status is updated to "Cancelled" or "Partially Refunded" and added to "Archived Orders" in the system, and WolfCafe billing logs are automatically updated to reflect the transaction. [4.3.5] [4.3.6]
4.2.6. The customer is notified of the cancellation/refund. [4.3.7]

4.3. *Sub-Flows*

4.3.1. If only part of the order is being refunded, the staff member selects the specific items to be refunded back to the customer.
4.3.2. If the entire order is being cancelled, the staff member selects all items associated with the given order.
4.3.3. If the customer checked out using their WolfCafe account, they may receive either a refund back to their original payment method, or a credit back to their account for later use at WolfCafe.
4.3.4. If the customer checked out as a Guest User, they may receive either a refund back to their original payment method, or a WolfCafe giftcard voucher with the refunded amount applied.
4.3.5. If the customer checked out using their WolfCafe account, the order will be marked as "Cancelled" and updated in their list of "Previous Orders" in their WolfCafe profile.
4.3.6. If the items refunded can be returned/restocked, the WolfCafe inventory logs must be updated.
4.3.7. If the cancellation/refund was caused by a system/staff error, compensation via a free item, discount code, or gift card voucher can be offered.

4.4. *Alternative Flows*

4.4.1. If the order cannot be cancelled/returned due to WolfCafe policy or order timeframe, staff must notify the customer and offer reasonable compensation if possible.

5. Use Case 5: Staff Creates New Recipe

5.1. *Preconditions*

5.1.1. A staff member has logged into the WolfCafe Portal with a Staff Account.

5.2. *Main Flow*

5.2.1. The staff member navigates to the "Recipes" Section of the WolfCafe Portal.
5.2.2. The staff member selects the "Create New Recipe" option from the user interface. [5.4.4]
5.2.3. An item creation form is displayed, allowing the user to enter recipe details.
5.2.4. The staff member fills the item name, price, and list of ingredients and quantities. [5.3.1] [5.3.2] [5.3.3] [5.4.2]
5.2.5. The staff member clicks the "Save Recipe" button below the form. [5.4.1] [5.4.2] [5.4.3]
5.2.6. The recipe is saved and listed in the menu.

5.3. *Subflows*

5.3.1 The staff member selects ingredients from a dropdown menu populated with existing inventory items. [5.4.1]
5.3.2 For each ingredient, the staff member enters the required quantity, which is validated by the system before allowing form submission. [5.4.3]
5.3.3 If the required ingredient does not exist in the inventory, the staff member clicks the "Add New Item" button, which redirects them to the Add Ingredient screen, where they can create the ingredient and add it to the inventory.

5.4. *Alternative Flows*

5.4.1. If a required field is missing, the form displays an error message and does not save the recipe.

5.4.2. If a recipe with the same name already exists, an error message prompts the user to choose a different name.
5.4.3. If invalid values are entered in fields (invalid name, negative value for price etc.), the form displays an error message and does not save the recipe.
5.4.4. If the page is accessed without proper permissions (Customer Account), they see an error stating "Permission denied".

6. Use Case 6: Staff Adds New Ingredient

6.1. *Preconditions*

6.1.1. A staff member has logged into the WolfCafe Portal with a Staff Account.

6.2. *Main Flow*

6.2.1. The staff member navigates to the "Inventory" Section of the WolfCafe Portal.
6.2.2. The staff member selects the "Add New Ingredient" option from the user interface. [6.4.4]
6.2.3. An ingredient creation form is displayed.
6.2.4. The staff member fills the ingredient name and amount in inventory. [6.3.1] [6.3.2] [6.4.1]
6.2.5. The staff member clicks the "Save Ingredient" button below the form. [6.4.1] [6.4.2] [6.4.3]
6.2.6. The ingredient is saved and appears in the list of available ingredients.

6.3. *Subflows*

6.3.1 The ingredient name is validated to ensure it does not already exist. [6.4.2]
6.3.2 The staff member enters the amount in inventory, which is validated by the system before allowing form submission. [6.4.3]

6.4. *Alternative Flows*

6.4.1. If a required field is missing, the form displays an error message and does not save the ingredient.
6.4.2. If an ingredient with the same name already exists when adding a new item, an error message prompts the user to update inventory instead.
6.4.3. If invalid values are entered in fields (invalid name, invalid quantities etc.), the form displays an error message and does not save the ingredient.
6.4.4 If the page is accessed without proper permissions (Customer Account), they see an error stating "Permission denied".

7. Use Case 7: Customer Tracks Order Status

7.1. *Preconditions*

7.1.1. The customer is logged into the WolfCafe system as Guest or Account Holder.
7.1.2. The customer has successfully placed an order. (UC1)
7.1.3. The order has not yet been marked as "Completed" or "Cancelled."

7.2. *Main Flow*

7.2.1. The customer navigates to the "My Orders" or "Track Order" section in the WolfCafe app/portal.
7.2.2. The system displays the current status of the order (e.g., Placed, In Preparation, Ready for Pickup, Completed). [7.3.1]
7.2.3. The customer can view the estimated wait time or pickup window.
7.2.4. The system updates the status automatically as staff update the order in real time.
7.2.5. Once the order is marked "Ready", the customer receives a push/app notification. [7.3.2]

7.3. *Subflows*

7.3.1. If the order includes special instructions, these are displayed alongside the order details.
7.3.2. If the customer enables notifications, the system sends updates at each stage (Placed → Preparing → Ready → Completed).

7.4. *Alternative Flows*

7.4.1. If the customer cancels the order mid-way, the status is updated to "Cancelled," and refund processes follow. (UC4)

7.4.2. If the system cannot fetch live status updates due to connectivity issues, the customer sees the last known status with a warning like "Updates unavailable, please refresh later."

8. Use Case 8: Customer Reorders a Previous Order

8.1. *Preconditions*

8.1.1. The customer is logged into the WolfCafe system as Guest or Account Holder.

8.1.2. The customer has at least one past completed order in their account history. (UC3)

8.2. *Main Flow*

8.2.1. The customer navigates to the "Previous Orders" section of the WolfCafe app/portal.

8.2.2. The system displays a list of the customer's past orders with dates and details. [8.3.1]

8.2.3. The customer selects a past order they wish to reorder.

8.2.4. The system auto-fills the cart with the items, quantities, and special instructions from the selected order. [8.3.2]

8.2.5. The customer reviews the cart and can edit items, quantities, or instructions.

8.2.6. The customer proceeds to checkout and completes payment. (UC1)

8.3. *Subflows*

8.3.1. If the order included unavailable items, the system highlights those items as "Unavailable."

8.3.2. If the customer wants to customize the reorder, they can modify the cart before checkout.

8.3.3. If the customer applied a discount code in the original order, the system does not auto-apply it to the reorder (requires fresh entry).

8.4. *Alternative Flows*

8.4.1. If no past orders exist, the system shows a message like "No previous orders found."

8.4.2. If the system cannot retrieve order history due to technical error, the customer is notified and may need to place a new order manually.

9. Use Case 9: Manage Staff and Customer Accounts

9.1. Preconditions

9.1.1. You are logged into the WolfCafe Portal with an Administrator Account.

9.2. Main Flow

9.2.1. Navigate to the 'User Management' tab. [9.4.1]

9.2.2. A list of users should be shown.

9.2.3. To create a new user, scroll to the bottom of the list and click the '+' button. [9.3.1]

9.2.4. To edit a user, go to the user and click the edit button near their name. [9.3.2] [9.4.3]

9.2.5. To delete a user, go to the user and click the delete button near their name. [9.3.3] [9.4.3]

9.3. Subflows

9.3.1. Enter the user's info, such as name or email, and click 'Create' to create the user. [9.4.2]

9.3.2. Enter the user's information, such as name or email and click 'Edit' to edit the user. [9.4.3]

9.3.3. The user is deleted from the view. If the user is logged in, they are logged out. [9.4.3]

9.4. Alternative Flows

9.4.1. If you are not logged into an Administrator account, an error screen will be displayed, showing that you do not have sufficient permissions to access this feature.

9.4.2. If you attempt to create a user that already exists, an error message is displayed.

9.4.3. If you attempt to edit/delete a user that doesn't exist, an error message is displayed.

10. Use Case 10: Set Global System Tax

10.1. Preconditions
10.1.1. You are logged into the WolfCafe Portal with an Administrator Account.

10.2. Main Flow
10.2.1. Navigate to the 'Tax Management' tab. [10.4.1]
10.2.2. The current tax rate that applies to all purchases should be displayed, along with a text box to edit the tax of the system. Input the new tax rate and click 'update'. [10.3.1] [10.4.2]

10.3. Subflows
10.3.1. If the tax rate is input in a format other than a percent, it will be formatted to a percent.

10.4. Alternative Flows
10.4.1. If you are not logged into an Administrator account, an error screen will be displayed, showing that you do not have sufficient permissions to access this feature.
10.4.2. If you do not input a recognized numerical format, an error will be shown, and you can edit the same text box to correct this error.

11. Use Case 11: Admin Generates Quarterly Sales Tax Report

11.1 Preconditions
11.1.1 The admin is logged into the WolfCafe system with Administrator privileges.
11.1.2 The system has logged taxable sales transactions for the quarter.

11.2 Main Flow
11.2.1 The admin navigates to the "Reports" section of the portal.
11.2.2 The system provides an option to generate a "Quarterly Sales Tax Report."
11.2.3 The admin selects the relevant quarter and jurisdiction (state/county). [11.3.1]
11.2.4 The system calculates taxable vs. exempt items (e.g., WIC, EBT from UC17).
11.2.5 The system generates the report in IRS/state-compliant format (CSV/PDF).

11.3 Subflows
11.3.1 Admin can filter by jurisdiction if multiple tax rates apply (multi-state).
11.3.2 Admin can include/exclude exempt transactions (e.g., WIC, EBT).

11.4 Alternative Flows
11.4.1 If no data exists for the selected quarter, the system shows "No records available."
11.4.2 If report generation fails, the system prompts the admin to retry.

12. Use Case 12: Staff Completes An In-System Food Safety Training Module

12.1 Preconditions
12.1.1 Staff is logged into the WolfCafe system with a Staff Account.
12.1.2 A valid training module is uploaded and assigned by Admin.

12.2 Main Flow

12.2.1 Staff navigates to "Training" in their dashboard.
12.2.2 The system displays the "Food Safety Training Module." [12.3.1]
12.2.3 Staff completes training content (slides, videos, quizzes).
12.2.4 System records completion and updates staff profile.

12.3 Subflows

12.3.1 If a staff member fails the quiz, the system prompts them to retry until passing.
12.3.2 If training is updated, staff is notified to re-complete it.

12.4 Alternative Flows

12.4.1 If staff lose connection mid-training, progress is saved.
12.4.2 If staff lack access rights, an error is displayed.

13. Use Case 13: Health Inspector Conducts a Digital Audit Using the System

13.1 Preconditions

13.1.1 Health Inspector has temporary authorized access credentials
13.1.2 System contains logs of food safety, sanitation, and inventory practices
13.1.3 UC22 (Food Recall Alerts), UC12 (Staff Training), and UC29 (Supplier Restocks) provide data for the audit.

13.2 Main Flow

13.2.1 Inspector logs in with secure credentials
13.2.2 Inspector navigates to the "Audit" section.
13.2.3 System displays records of temperature logs, recall responses, and sanitation checklists. [13.3.1]
13.2.4 Inspector reviews compliance records against regulations.
13.2.5 System generates an "Audit Results" report, exportable as PDF

13.3 Subflows

13.3.1 Inspector can filter by date, staff member, or compliance category
13.3.2 Inspector can flag violations, which notify the Admin

13.4 Alternative Flows

13.4.1 If inspector login fails, access is denied.
13.4.2 If system data is incomplete, inspector notes "Data Missing" in audit results

14. Use Case 14: Customer Manages Consent for Health Data Usage

14.1 Preconditions

14.1.1. Customer is logged into the WolfCafe system as Guest or Account Holder.
14.1.2. System is configured to collect optional health-related data (allergies, dietary preferences, calorie tracking).
14.1.3 UC26 (Display Nutrition and Allergen Information) and UC16/UC18 (Health Nudges) may depend on this consent.

14.2 Main Flow

14.2.1. Customer navigates to "Privacy & Consent Settings."
14.2.2. System displays options for health data usage (e.g., storing allergens, sharing with integrations like Apple Health). [14.3.1]

14.2.3. Customer toggles consent ON or OFF for each category.
14.2.4. System updates consent records in compliance with HIPAA/consumer rights.

14.3 Subflows

14.3.1. Customers can download a log of past consent changes.
14.3.2. If consent is revoked, the system deletes associated health data.

14.4 Alternative Flows

14.4.1. If a customer does not respond to a consent request, the system defaults to minimum data collection.
14.4.2. If a customer revokes consent mid-session, features tied to that data are disabled.

15. Use Case 15: Customer Filters Menu by Dietary Preference

15.1 Preconditions

15.1.1. Customer is logged into the WolfCafe system as Guest or Account Holder.
15.1.2. Menu items contain metadata for dietary preferences (vegan, gluten-free, halal, kosher, etc.).
15.1.3 UC26 (Display Nutrition and Allergen Information) provides the metadata used in filtering.

15.2 Main Flow

15.2.1. Customer navigates to the "View Menu" screen.
15.2.2. Customer selects one or more dietary filters (e.g., Vegan, Gluten-Free). [15.3.1]
15.2.3. System filters and displays only items matching those criteria.
15.2.4. Customer adds filtered items to the cart.

15.3 Subflows

15.3.1. Customer can combine multiple filters (e.g., Vegan + Gluten-Free).
15.3.2. If no items match, the system displays "No items available."

15.4 Alternative Flows

15.4.1. If dietary metadata is missing, the system shows items without a tag.
15.4.2. If a customer removes filters, the full menu is displayed again.

16. Use Case 16: System Highlights Healthier Default Options

16.1. Preconditions

16.1.1. The customer is logged into the WolfCafe system as Guest or Account Holder.
16.1.2. The WolfCafe menu has at least one item flagged as a "healthier option".

16.2. Main Flow

16.2.1. The customer clicks on the "View Menu" icon to navigate to the WolfCafe menu.
16.2.2. The system marks items flagged as a "healthier option" with a green icon. [16.3.2] [16.4.1]
16.2.3. The customer clicks on an item. [16.3.1]
16.2.3. The system automatically includes healthier replacements for menu items/ingredients. [16.4.2]
16.2.4. The customer proceeds with their order as normal (UC1).

16.3. Subflows

16.3.1. If a nutrition label is available for a given menu item, a "View Nutrition and Allergens" button is displayed (UC26).
16.3.2. If an item flagged as a "healthier option" is part of an active promotion, they will appear on a banner at the top of the page with the green icon attached.

16.4. Alternative Flows

16.4.1. If no healthier options are available, the system does not mark any items with a green icon.
16.4.2. If no healthier options/ingredients are available for a given menu item, no replacements will be available for that item.

17. Use Case 17: Customer Places Subsidy Order (e.g., WIC, EBT)

17.1. Preconditions

17.1.1. The customer is logged into the WolfCafe system as Guest or Account Holder.
17.1.2. The customer has a valid subsidy account (WIC, EBT, etc.) linked to their WolfCafe account under "Payment Methods".

17.2. Main Flow

17.2.1. The customer clicks on the "View Menu" button to navigate to the WolfCafe menu.
17.2.2. The system automatically filters eligible items and displays them with a "Subsidy" icon.
17.2.3. The customer selects items from the menu and clicks the "Shopping Cart" icon.
17.2.4. The customer proceeds to payment with their subsidy account pre-loaded as their payment method. [17.3.1]
17.2.5. The order is placed successfully. (UC1.6.2) [17.4.2]

17.3. Subflows

17.3.1. The customer may choose the "Split Payment" button to pay part of their order with another payment method.

17.4. Alternative Flows

17.4.1. If the customer's subsidy payment fails, the customer is prompted to use another payment method.
17.4.2. If the customer attempts to pay for ineligible items with their subsidy payment method, an error message will appear.

18. Use Case 18: System Adds Health Warning to High-Calorie Item

18.1. Preconditions

18.1.1. The customer is logged into the WolfCafe system as Guest or Account Holder.
18.1.2. Nutrition data for WolfCafe menu items is stored in the system. (UC26)

18.2. Main Flow

18.2.1. The customer clicks on the "View Menu" button to navigate to the WolfCafe menu.
18.2.2. The customer selects an item that exceeds daily calorie or nutrition requirements.
18.2.3. The system displays a health warning message and asks the customer to proceed. [18.3.1] [18.4.2]
18.2.4. The customer acknowledges the warning and proceeds to add the item to their cart. [18.3.2] [18.4.1]

18.3. Subflows

18.3.1. The health warning includes a link to healthier alternatives for that item that redirects the customer to the healthier option when clicked.

18.3.2. The system tracks the frequency at which the customer accepts/declines the healthier alternative to allow for/prevent future health warnings for that item.

18.4. Alternative Flows

18.4.1. If the customer heeds the health warning, the item is not added to their cart and they are redirected back to the main WolfCafe menu.
18.4.2. If no nutrition data is available for that item, no health warning message is displayed.

19. Use Case 19: Customer Orders via Voice Accessibility Feature

19.1. Preconditions

19.1.1. The customer is logged into the WolfCafe system as Guest or Account Holder.
19.1.2. The customer has "Voice Order" toggled on under "Accessibility" in their WolfCafe account profile.

19.2. Main Flow

19.2.1. The system asks the customer "How can I help you today?". [19.4.1]
19.2.2. The customer responds by asking to "View Menu". [19.4.2] [19.4.3]
19.2.3. The system asks "Are you ready to order?" and listens until the customer gives a Yes/No answer. [19.3.1] [19.4.2] [19.4.3]
19.2.4. The system asks for the name of the desired item and the customer responds with an item name. [19.4.2] [19.4.3]
19.2.5. The system prompts the customer for the item quantity and the customer responds with their desired quantity. [19.3.2] [19.4.2] [19.4.3]
19.2.6. The system confirms the total price, asks the customer "Add to Cart?", and the customer responds with a Yes/No answer. [19.3.3] [19.4.2] [19.4.3]
19.2.7. The system asks "Are you ready to checkout?" and listens for the customer's Yes/No answer. [19.3.4] [19.3.5] [19.4.2] [19.4.3]

19.3. Subflows

19.3.1. If the customer responds "No" to "Are you ready to order?", the system remains idle until the customer says "I am ready to order".
19.3.2. If the item quantity given by the customer appears excessive, the system confirms the quantity with the customer and updates it if another, reasonable quantity is provided.
19.3.3. If the customer responds "No" to "Add to Cart?", the system reverts back to flow [19.2.3].
19.3.4. If the customer responds "No" to "Are you ready to checkout?", the system reverts back to flow [19.2.3].
19.3.5. If the customer responds "Yes" to "Are you ready to checkout?", the system proceeds to payment via Voice Order.

19.4. Alternative Flows

19.4.1. If "Voice Order" is not supported on the customer's device, the system informs the customer and suggests switching to text input.
19.4.2. If the system is unable to process the customer's responses after repeated attempts or excessive idle time, the system suggests switching to text input.
19.4.3. If the customer asks to "Exit Menu" at any point, the customer's cart is emptied and the system reverts back to flow [19.2.1].

20. Use Case 20: Customer Adds Tip After Checkout

20.1. Preconditions

20.1.1. The customer is logged into the WolfCafe system as Guest or Account Holder.
20.1.2. The customer has successfully placed an order (UC1).
20.1.3. The customer has retrieved their order (UC3).
20.1.4. The order is not yet under "Archived Orders" and has an active tipping window.

20.2. Main Flow

20.2.1. The customer navigates to the "Order History" section of their WolfCafe account.
20.2.2. The customer selects an active order under "Completed Orders" in their profile. [20.4.1]
20.2.3. The customer selects the "Add Tip" button on the order, enters their desired tip amount, and clicks the "Save Tip" button. [20.3.1] [20.4.4]
20.2.4. The customer is prompted to select a payment method for the tip. [20.4.2] [20.4.4]
20.2.5. The customer clicks "Submit Tip" and the order is updated with the tip amount included. [20.4.3] [20.4.4]

20.3. Subflows

20.3.1. If the entered amount is invalid, the tip is not saved and the customer is prompted for a valid tip amount.

20.4. Alternative Flows

20.4.1. If there are no completed orders eligible for tipping (the tipping window has expired), the customer exits the "Order History" section of their account and returns to the WolfCafe homepage.
20.4.2. If there are no payment methods attached to the customer's account, the customer must enter a new payment method to proceed.
20.4.3. If the customer's chosen payment method has insufficient funds to add the tip, the tip is cancelled and the customer is prompted to enter an alternate payment method.
20.4.4. The customer may choose to "Cancel" their transaction at any time.

21. Use Case 21: Customer Leaves Feedback

21.1 Preconditions

21.1.1 The customer is logged into the WolfCafe system as Guest or Account Holder.
21.1.2 The customer has placed and picked up an order (UC3).

21.2 Main Flow

21.2.1 The customer navigates to the "Leave Feedback" section in the WolfCafe portal.
21.2.2 The system displays a list of completed orders. [21.3.1] [21.4.1]
21.2.3 The customer selects an order and rates it (e.g., 1–5 stars) and optionally adds comments.[21.3.1] [21.3.2] [21.4.2]
21.2.4 The system stores the feedback and associates it with the order. [21.4.2]

21.3 Subflows

21.3.1 If the customer is a Guest, feedback is stored anonymously. [21.4.2]
21.3.2 If the customer is logged in, feedback is tied to their profile. [21.4.2]

21.4 Alternative Flows

21.4.1 If no completed orders are available, the system shows "No orders available for feedback."
21.4.2 If feedback submission fails, the customer is prompted to retry.

22. Use Case 22: Staff Handles Food Recall Alerts

22.1 Preconditions

22.1.1 A staff member is logged into the WolfCafe portal with a Staff Account.
22.1.2 A recall notice has been received for an ingredient or item in inventory.

22.2 Main Flow

22.2.1 The system flags recalled items in the inventory dashboard. [22.3.1] [22.3.2]
22.2.2 The staff member navigates to the "Recall Alerts" section. [22.4.1]
22.2.3 The staff member marks the recalled item as "Unavailable." [22.3.1] [22.3.2] [22.4.2]
22.2.4 The item is removed from the customer-facing menu. [22.4.2]

22.3 Subflows

22.3.1 If multiple items use the recalled ingredient, all related recipes are flagged. [22.4.1]
22.3.2 If replacement ingredients are available, the system suggests substitutions. [22.4.2]

22.4 Alternative Flows

22.4.1 If the staff member ignores the alert, the system auto-disables recalled items.
22.4.2 If the recall is later lifted, the staff member can reactivate the item.

23. Use Case 23: Customer Chooses Eco-Friendly Packaging

23.1 Preconditions

23.1.1 The customer is logged into the WolfCafe system as Guest or Account Holder.
23.1.2 The customer has added items to the cart. (UC1)

23.2 Main Flow

23.2.1 The system prompts the customer to select packaging preferences at checkout. [23.3.1] [23.3.2] [23.4.1]
23.2.2 The customer selects "Standard" or "Eco-Friendly" packaging. [23.3.1] [23.3.2] [23.4.2]
23.2.3 If "Eco-Friendly" is chosen, the order is tagged accordingly. [23.3.1] [23.3.2]
23.2.4 The staff member views the tag while preparing the order. (UC2)

23.3 Subflows

23.3.1 If "Eco-Friendly" has a surcharge, the cart total is updated. [23.4.1]
23.3.2 If subsidized by WolfCafe, a discount is applied instead. [23.4.2]

23.4 Alternative Flows

23.4.1 If eco-friendly packaging is unavailable, the option is hidden.
23.4.2 If the customer doesn't select an option, the default is "Standard."

24. Use Case 24: Admin Generates Sales and Waste Reports

24.1 Preconditions

24.1.1 An administrator is logged into the WolfCafe portal.
24.1.2 The system has logged past orders and inventory usage. (UC1)

24.2 Main Flow

24.2.1 The admin navigates to the "Reports" tab. [24.3.1] [24.3.2] [24.4.1]
24.2.2 The admin selects "Sales and Waste Report" from options. [24.3.1] [24.3.2] [24.4.2]
24.2.3 The system generates a report showing total sales, revenue, and wasted items. [24.3.1] [24.3.2]
24.2.4 The report can be exported as CSV/PDF. [24.4.2]

24.3 Subflows

24.3.1 Admin filters reports by date range. [24.4.1]
24.3.2 Admin filters by item/recipe category. [24.4.1]

24.4 Alternative Flows

24.4.1 If no data is available, the system shows "No records found."
24.4.2 If export fails, the system prompts the admin to retry.

25. Use Case 25: Admin Runs Algorithmic Transparency Audit

25.1 Preconditions

25.1.1 An administrator is logged into the WolfCafe portal.
25.1.2 The system has audit tools installed for UI and pricing compliance.

25.2 Main Flow

25.2.1 The admin navigates to the "Audit Tools" tab. [25.3.1] [25.3.2] [25.4.1]
25.2.2 The admin selects "Run Transparency Audit." [25.3.1] [25.3.2] [25.4.1]
25.2.3 The system checks for hidden fees, forced tips, or other dark patterns in the checkout process. [25.3.1] [25.3.2]
25.2.4 The system generates an audit report and highlights issues. [25.3.1] [25.3.2]

25.3 Subflows

25.3.1 If issues are found, the system suggests remediation steps. [25.4.1]
25.3.2 If no issues are found, the system logs "Audit Clean." [25.4.2]

25.4 Alternative Flows

25.4.1 If audit tool errors, the system prompts the admin to rerun.
25.4.2 If permissions are insufficient, "Access Denied" message appears.

26. Use Case 26: Display Nutrition and Allergen Information

26.1 Preconditions

26.1.1. The customer is logged into WolfCafe as Guest or Account Holder.
26.1.2. The WolfCafe menu database contains nutrition/allergen metadata for items (FDA compliance).

26.2 Main Flow

26.2.1. The customer views the menu or a specific product page.
26.2.2. The system retrieves nutrition and allergen data linked to the product. [26.3.1]
26.2.3. The system displays calories, macronutrients, and allergens per FDA guidelines.

26.3 Subflows

26.3.1. If nutritional data is updated by staff/admin, the system syncs with the public menu.

26.4 Alternative Flows

26.4.1. If nutritional data is missing, the system displays "Information not available."
26.4.2. If the customer filters for "allergen-free," items with allergens are hidden.

27. Use Case 27: Handle Multi-State Sales Tax

27.1 Preconditions

27.1.1. The customer has items in their cart and entered a delivery/pickup location.
27.1.2. The system tax module is configured with state/county tax tables (IRS/Thomson Reuters).

27.2 Main Flow

27.2.1. Customer proceeds to checkout.
27.2.2. System calculates applicable tax based on customer's delivery/pickup location. [27.3.1]
27.2.3. Tax is applied to subtotal and displayed at checkout.
27.2.4. Order total updates accordingly.

27.3 Subflows

27.3.1. If customer is in a state with different restaurant vs. grocery tax rates, system applies correct category rate.

27.4 Alternative Flows

27.4.1. If tax tables cannot be retrieved, system defaults to a backup rate and flags transaction for admin review.
27.4.2. If customer is exempt (e.g., WIC coverage), tax is reduced accordingly.

28. Use Case 28: Ensure Privacy and HIPAA Compliance

28.1 Preconditions

28.1.1. The customer has created an account with personal details.
28.1.2. System is configured with HIPAA-compliant privacy controls (HHS.gov).

28.2 Main Flow

28.2.1. Customer accesses their account dashboard.
28.2.2. System displays only non-sensitive data by default. [28.3.1]
28.2.3. For sensitive data (payment, dietary preferences, medical-linked allergies), system requires re-authentication (password/2FA).
28.2.4. All activity is logged for audit.

28.3 Subflows

28.3.1. Customer can download their data per HIPAA/consumer privacy rights.
28.3.2. Admin can flag suspicious access attempts.

28.4 Alternative Flows

28.4.1. If the session expires, customer is logged out.
28.4.2. If unauthorized access is detected, account is locked and customer notified.

29. Use Case 29: Supplier Restocks Inventory

29.1 Preconditions

29.1.1. Supplier contract exists in WolfCafe system.
29.1.2. Admin/staff has flagged inventory levels below threshold.

29.2 Main Flow

29.2.1. System auto-generates a restock request for the supplier.
29.2.2. Supplier receives request and confirms availability. [29.3.1]
29.2.3. Supplier delivers goods and updates are recorded in inventory.
29.2.4. Admin verifies quantities and closes the restock order.

29.3 Subflows

29.3.1. If supplier accepts partially (due to shortage), system updates records with reduced quantities.

29.4 Alternative Flows

29.4.1. If supplier cannot fulfill, admin is alerted to switch to backup supplier.
29.4.2. If delivery is delayed, staff are notified of possible shortages.

30. Use Case 30: Apply Promotions, Coupons, and Discounts

30.1 Preconditions

30.1.1. Customer is logged into WolfCafe and has items in the cart.
30.1.2. Admin/staff has created valid promo codes or discounts.

30.2 Main Flow

30.2.1. Customer enters coupon or selects promotion at checkout.
30.2.2. System validates promotion eligibility. [30.3.1]
30.2.3. Discount is applied to order subtotal.
30.2.4. Final total is displayed including tax and fees.

30.3 Subflows

30.3.1. Loyalty points may automatically convert into discounts.

30.4 Alternative Flows

30.4.1. If the promo expires, the system rejects and notifies the customer.
30.4.2. If the coupon is invalid, the system prevents checkout with a discount.

Reflection Document:

Differences in LLM Reporting

The two LLM's that we used for reporting on use cases were ChatGPT and DeepSeek.

Our experience using ChatGPT consisted of uploading the PDFs into ChatGPT.

We started out with zero-shot prompting and slowly added information, and consistently gave the AI a use case from our previous project A. ChatGPT made few grammatical mistakes and consistently attempted to expand on the problem statement from its training data instead of using the information from the PDF files.

We then used careful prompting and clarified that the information in the PDFs must be used, which after telling ChatGPT this, it worked much better and utilized the PDF information as the basis. We also had to give an example of a use case from ourselves to get it started. However, when doing this, ChatGPT adapted better to the format of a use case, and it puts plenty of "links" to other portions of the use case properly, with brackets for current use case information (ex. [10.1.2]) and parenthesis for other use cases (ex. (UC6)). Additionally, ChatGPT's use cases were more detailed and contained specific steps.

We also utilized DeepSeek in some of the use cases, having prompted it with zero-shot, it gave a similar output to ChatGPT in that it would attempt to make up things to add to the problem statement with, and then put those modifications into use cases. DeepSeek also made a small amount of grammatical errors, forgetting prepositions like 'the'. This continued into careful prompting.

When careful prompting with DeepSeek, we found the same things as ChatGPT where we had to give it an example of a use case, but we also had less trouble telling it to not add onto the problem statement by just stating so. DeepSeek seemed to still forget a few 'the' prepositions. Additionally, compared to ChatGPT, it does not use bracket linking or parenthesis linking as often. An interesting difference between the two's use cases seems to be that ChatGPT's instructions were focused on specific actions, whereas DeepSeek's guide showed more abstract features to implement.

We believe that a blend of both DeepSeek and ChatGPT would be the most effective, with DeepSeek for brainstorming and drafting, and ChatGPT for re-writing and expanding the size of each use case for detail.

Total Cost of LLM Usage

Our group hasn't spent any monetary value on LLM usage at this point in the project.