Project 1b1 - Food Delivery System: The Hungry Wolf

New Use Cases

Use Case 11: Customer Profile Management

Preconditions: Customer is logged in.

Main Flow:

1. Customer navigates to "Profile Settings"
2. Updates personal information (name, phone, dietary preferences)
3. Manages delivery addresses (add, edit, delete)
4. Sets notification preferences
5. System saves changes and confirms update

Subflows:

2a. Upload profile picture

3a. Set default delivery address

Alternative Flows:

2a. Invalid phone format → system shows validation error

4a. Push notification permission denied → system notes preference

Use Case 12: Loyalty Points & Rewards

Preconditions: Customer has completed previous orders.

Main Flow:

1. Customer views loyalty points balance
2. Browse available rewards/discounts
3. Select a reward to redeem
4. The system applies a discount to the current order
5. Points deducted from the customer's account

Subflows:

2a: Viewpoints earning history

3a: Gift points to another user

Alternative Flows:

3a: Insufficient points → system shows minimum required

4a: Reward expired → system removes from available list

Use Case 13: Scheduled Order Placement

Preconditions: Customer wants to order for future delivery.

Main Flow:

1. Customer selects "Schedule Order"
2. Choose a future date and time slot
3. Adds items to the cart
4. Confirms the scheduled order with payment
5. System queues orders for future processing

Subflows:

2a. View restaurant availability for the selected time

4a. Pre-authorize payment for the scheduled order

Alternative Flows:

2a. Restaurant closed at selected time → suggest alternative slots

5a. Payment authorization fails → notify customer before scheduled time

Use Case 14: Menu Management

Preconditions: Restaurant owner is logged in.

Main Flow:

1. Restaurant accesses the menu dashboard
2. Adds/edits/removes menu items
3. Updates prices and availability status
4. Sets item categories and descriptions
5. The system updates the menu in real-time for customers.

Subflows:

2a. Upload item images

3a. Set temporary discounts on items

4a. Mark items as "Chef's Special"

Alternative Flows:

2a. Image file too large → system compresses or rejects

3a. Price below cost threshold → system warns restaurant

Use Case 15: Restaurant Analytics Dashboard

Preconditions: Restaurant partner is logged in.

Main Flow:

1. The restaurant views the performance dashboard
2. Analyzes order trends, peak hours, and popular items
3. Reviews customer ratings and feedback
4. Downloads sales reports
5. Adjusts business strategy based on insights

Subflows:

2a. Compare performance with previous periods

3a. Respond to customer reviews

4a. Export data in CSV/PDF format

Alternative Flows:

2a. No data available for selected period → show empty state message

Use Case 16: Customer Views Order History

Preconditions: Customer is logged in.

Main Flow:

1. The customer navigates to "Order History."
2. A list of all past and canceled orders is displayed.
3. The customer can view details for each order.

Subflows:

2a: Filter orders by date or restaurant.

Alternative Flows:

2b: The order history is empty → show a message "No orders yet."

Use Case 17: Account Deactivation

Preconditions: Customer wants to close their account.

Main Flow:

1. The customer goes to "Account Settings."
2. They select "Deactivate Account."
3. The system prompts for a confirmation and a reason.
4. The account is deactivated, and data is archived.

Subflows:

4a: Deactivation confirmation is sent via email.

Alternative Flows:

4b: Customer reactivates account → system restores profile and order history.

Use Case 18: Restaurant Timings & Availability

Preconditions: The restaurant owner/manager is logged in.

Main Flow:

1. The restaurant navigates to "Store Settings."
2. They can set daily opening and closing hours.
3. They can toggle their restaurant's availability (e.g., "open" or "closed").
4. The system updates its status on the platform.

Subflows:

2a: Temporarily close for a holiday or maintenance.

Alternative Flows:

2b: Attempt to set illogical hours (e.g., close time before open time) → system shows an error.

Use Case 19: Eco-Friendly Delivery Options

Preconditions: Customer cares about environmental impact.

Main Flow:

1. Customer selects "Eco-Friendly Delivery" option
2. System shows available green options (bike delivery, electric vehicle, biodegradable packaging)
3. Customer chooses preferred eco option
4. System matches with environmentally conscious delivery partners
5. Order delivered with sustainable packaging

Subflows:

2a: Show carbon footprint reduction estimate

3a: Option to pay a small premium for a carbon offset

Alternative Flows:

4a: No eco-friendly partners available → suggest alternative delivery time

5a: Restaurant doesn't support eco-packaging → notify customer of limitation

Use Case 20: Subscription Meal Plans

Preconditions: Customer wants regular meal delivery.

Main Flow:

1. Customer browses available meal plans
2. Selects plan duration and frequency
3. Chooses preferred restaurants/cuisines
4. Sets delivery schedule and address
5. System auto-places orders according to subscription

Subflows:

3a: Customize dietary restrictions and preferences

4a: Pause subscription temporarily

Alternative Flows:

5a: Restaurant unavailable → system suggests alternatives

5b: Customer wants to skip a meal → allow modification

Use Case 21: Customer Service Chatbot

Preconditions: Customer needs help but wants an automated response.

Main Flow:

1. The customer opens the chat support.
2. A chatbot provides automated responses to common questions (e.g., "Where is my order?," "How do I cancel?").
3. If the chatbot can't help, the conversation is handed over to a human agent.

Subflows:

2a: Chatbot provides links to relevant FAQs.

Alternative Flows:

3a: Chatbot provides an unhelpful response → the customer escalates the issue.

Use Case 22: Manage Restaurant Ratings & Reviews

Preconditions: Customers have left ratings and reviews.

Main Flow:

1. The restaurant manager views the ratings dashboard.
2. Read customer reviews and feedback.
3. Responds to reviews (thank you/address concerns).
4. Uses feedback to improve service quality.

Subflows:

2a: Filter reviews by rating or keyword.

3a: Report inappropriate reviews to the admin.

Alternative Flows:

3a: Review flagged as fake → admin investigates.

4a: Consistently low ratings → admin reaches out for support.

Use Case 23: Admin Creates Promotions

Preconditions: Platform admin is logged in.

Main Flow:

1. The admin navigates to "Promotions Management."
2. They create a new coupon code or a sitewide discount.
3. They define the promotion's rules (e.g., minimum order value, validity dates, user limits).
4. The system activates the promotion.

Subflows:

2a: Create a first-time user discount.

2b: Generate a unique coupon for a specific customer.

Alternative Flows:

3c: Invalid date range set → system flags the error.

Use Case 24: Customer Applies Promotion

Main Flow:

1. The customer enters a coupon code.
2. The system validates the code against its rules.
3. The discount is applied to the cart total.
4. Preconditions: The customer is on the checkout page.

Subflows:

2a: System automatically suggests applicable promotions.

Alternative Flows:

3a: Invalid or expired coupon code → show an "Invalid Coupon" message.

3c: Code already redeemed by the user → show a "Coupon Already Used" message.

Use Case 25: Wishlist / Save for Later

Preconditions: Customer browses menu.

Main Flow:

1. The customer selects items to "Save for Later."

2. The system stores items in the customer's wishlist.
3. Customers can view wishlists anytime.
4. Customers add wishlist items directly to carts in the future.

Subflows:

3a. The system allows sorting/filtering items in the wishlist (by restaurant, cuisine, price).

Alternative Flows:

2a. Item becomes unavailable → system greys out item in wishlist.

Use Case 26: Gift Orders

Preconditions: Customer logged in.

Main Flow:

1. The customer selects the "Send as Gift" option at checkout.
2. Customer enters recipient details (name, address, phone).
3. The customer adds a personalized greeting note.
4. Order is confirmed and assigned to a delivery partner.
5. Rider delivers food to the recipient.

Subflows:

2a. The system suggests saved contacts or address book integration for quicker entry.

Alternative Flows:

2b. Wrong recipient details entered → system alerts sender to recheck information.

Use Case 27: Tipping Delivery Partner

Preconditions: Order delivered successfully.

Main Flow:

1. The system prompts customers with a tipping option after delivery confirmation.
2. The customer selects the preset tip amount or enters a custom tip.
3. The system adds the tip to the delivery partner's payout balance.

Subflows:

2a. Tip options displayed dynamically (percentage-based or flat values).

Alternative Flows:

2b. Customer skips tipping → system proceeds without adding any payout.

Use Case 28: Rating Delivery Partner

Preconditions: Order delivered successfully.

Main Flow:

1. The system prompts customers to rate the delivery partner.
2. Customer selects rating (stars or thumbs-up/down).
3. Optionally, the customer enters a custom message.
4. The system stores the rating and associates it with the delivery partner's profile.

Subflows:

2a. Customers can provide quick tags (e.g., "On-time," "Polite," "Delayed").

Alternative Flows:

2b. Customer skips rating → system closes feedback prompt.

Use Case 29: Fraud Detection & Prevention

Preconditions: Customer or restaurant activity is ongoing on the platform.

Main Flow:

1. The system monitors real-time activity across users and restaurants.
2. System flags suspicious behavior (e.g., multiple refund requests, duplicate accounts, abnormal order frequency).
3. An alert is automatically generated and sent to the admin dashboard.
4. Admin investigates the flagged account.
5. Admin suspends or permanently blocks fraudulent accounts.

Subflows:

2a. AI-based scoring system calculates fraud probability and prioritizes cases.

Alternative Flows:

3a. If the investigation reveals a false positive → account is reinstated with a notification to the user.

Use Case 30: Group Order Coordination

Preconditions: Multiple people want to order together.

Main Flow:

1. Customer creates group order session
2. Shares the order link with colleagues/friends
3. Each person adds items to the shared cart
4. Group reviews the combined order

5. Designated person completes payment and delivery details

Subflows:

2a: Set a deadline for adding items

4a: Vote on the restaurant if multiple options are added

Alternative Flows:

3a: Restaurant doesn't deliver to some group members → split into multiple orders

5a: Payment method declined → allow others to pay or split the cost

Difference Between LLMs

Aspect	ChatGPT Output	Claude Output	Takeaway
Scope of Feedback	Focused tightly on assignment instructions (page length, reflection, stakeholder clashes).	Broad, system-level review (non-functional requirements, error handling, technical architecture, compliance).	ChatGPT had a rubric compliance, whereas Claude's reply demonstrated professional depth.
Depth vs Precision	Moderate depth; very precise in linking to instructions.	High depth with detailed system/technical critiques; less precise for assignment needs.	ChatGPT ensures requirements are met; Claude risks overscoping.
Tone & Framing	Concise, directive, checklist style consists of icons.	Formal, structured, report-like with sections and subpoints.	ChatGPT provided quick, actionable fixes, while Claude offered a comprehensive but heavy response.
Usefulness for Students	Ensures full marks by aligning to the professor's rubric.	Adds sophistication, realism, and professional polish.	ChatGPT is best for the minimum requirements; Claude is best for distinction/extra credit.

Careful prompting (by mentioning the use case format and previous use cases) got us better results than without showing the format.

Cost of LLMs

The use cases were generated using a pre-existing Claude Pro (Sonnet 3.7) membership.