CSC 510 (001): Software Engineering (Proj1b1) - Group 3

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1 Comments on prompt crafting

1. Starting a prompt with "Act as a..." or "You are a..." (e.g., "You are a senior product manager") is a great technique. It instantly frames the model's tone, vocabulary leading to more consistent and specialized outputs.
2. Vague Instructions yield Vague Results. Specificity is key. Instead of asking for a "short summary," when we ask for a "summary in three bullet points, not to exceed 100 words total." then it gives better results.
3. Telling the model what not to do can be just as important as telling it what to do. Instructions like "NEVER use jargon," "DO NOT write a conclusion," or "AVOID citing sources not provided in the context" help get the desired output with precision. Writing in all caps is successful most of the time.
4. The complexity and style of a response can be drastically altered by specifying who it's for. Prompts like "Write this use case for a senior executive product manager" will produce outputs tailored in vocabulary, depth, and format for that specific audience.
5. The Order of Instructions Matters a lot. For complex prompts, it's often best to provide all context and examples first, and then state the final, primary instruction at the end. This ensures the model has processed all the necessary information before it begins to generate the final output, leading to more coherent and compliant results.

2 Use Cases

Customer-Facing Experience

UC-11: Customize Menu Item

Owner: Menu & Discovery Team

1. **Goal / Value Proposition:** To allow customers to tailor menu items to their specific preferences and dietary needs, increasing satisfaction and order value.
2. **Brief Description:** This use case describes how a Customer selects an item and modifies it by choosing from available options before adding it to their cart.
3. **Actors:**
    a. Primary Actor: Customer
    b. Secondary Actor(s): Restaurant Partner
4. **Trigger:** The Customer selects a customizable menu item from a restaurant's page.
5. **Preconditions:**
    a. The Customer is viewing a restaurant menu.
    b. The selected item has customization options defined by the restaurant.
6. **Postconditions:**
    a. On Success: A customized version of the menu item, with an adjusted price, is added to the Customer's cart.
    b. On Failure: The item is not added to the cart, and the Customer remains on the customization screen.
7. **Main Flow (Basic Flow):**
    a. The Customer taps a menu item that offers options.
    b. The System displays a customization screen with available options (e.g., size, toppings, side dishes, special instructions).
    c. The Customer makes their selections from the available options.

d. The System updates the item's subtotal in real-time as options are selected.
e. The Customer confirms their choices and adds the customized item to the cart.

8. **Alternative & Exception Flows:**

A1 Special Instructions: The Customer enters free-text special instructions (e.g., "no onions"). The System appends this text to the item's order data.

E1 Required Option Not Selected: If the Customer tries to proceed without selecting a mandatory option (e.g., protein choice), the System displays an error and prompts them to make a selection.

UC-12: Filter Menu Based on Allergens and Dietary Needs

Owner: Health & Nutrition Features Team

1. **Goal / Value Proposition:** To protect public health by allowing customers with food allergies or specific dietary needs to easily identify and filter for safe meal options, reducing the risk of adverse health events.
2. **Brief Description:** This use case outlines how a customer can set their dietary profile to include major food allergens (e.g., nuts, gluten, dairy) or dietary preferences (e.g., vegetarian) and use this profile to filter restaurant menus.
3. **Actors:**
   a. Primary Actor: Customer with Dietary Restrictions
   b. Secondary Actor(s): Restaurant Partner
4. **Trigger:** The Customer accesses the dietary filter feature on the search or menu page.
5. **Preconditions:**
   a. Restaurant Partners have provided ingredient and allergen data for their menu items.
   b. The System has a database mapping menu items to allergens and dietary attributes.
6. **Postconditions:**
   a. On Success: The customer views a menu tailored to their dietary needs, with unsafe items hidden or clearly marked.
   b. On Failure: The menu is not filtered, and the customer must manually check each item.
7. **Main Flow (Basic Flow):**
   a. The Customer navigates to their dietary profile or a filter option on a menu.
   b. The Customer selects one or more major food allergens to avoid (e.g., "Peanuts," "Shellfish").
   c. The Customer applies the filter.
   d. The System dynamically updates the menu view, hiding all items that have been tagged by the restaurant as containing the selected allergens.
   e. The Customer can then browse and select from the remaining "safe" items.
8. **Alternative & Exception Flows:**

A1 Allergen Warning on Item Page: Instead of hiding items, the system displays all items but places a prominent warning label (e.g., "Contains: Gluten, Dairy") on items that match the customer's restricted profile.

E1 Cross-Contamination Disclaimer: For any filtered results, the System displays a disclaimer advising the customer that the restaurant prepares food in a common kitchen and cannot guarantee against cross-contamination, recommending they contact the restaurant directly for severe allergies.

UC-13: Group Ordering / "Cart Sharing"

Owner: Social & Discovery Team

1. **Goal / Value Proposition:** To facilitate collaborative ordering for groups (e.g., office lunches, family dinners) by allowing multiple users to add items to a single, shared cart.
2. **Brief Description:** This use case describes how a "Host" customer initiates a group order from a restaurant, shares a link with other "Guests," who can then add their own items to the shared cart before the host finalizes and pays for the order.
3. **Actors:**

a. Primary Actor: Host Customer
b. Secondary Actor(s): Guest Customers

4. **Trigger:** The Host selects the ”Start a Group Order” option on a restaurant’s menu page.
5. **Preconditions:**
   a. The Host is authenticated and is viewing a restaurant menu.
   b. The restaurant supports group ordering.
6. **Postconditions:**
   a. On Success: The Host successfully places an order containing items added by multiple guests.
   b. On Failure: The group order is not placed.
7. **Main Flow (Basic Flow):**
   a. The Host initiates a group order from a restaurant page.
   b. The System generates a unique, shareable link for the group cart.
   c. The Host shares the link with Guests (e.g., via text message, email).
   d. Guests click the link, are directed to the restaurant’s menu, and add their desired items to the shared cart.
   e. The Host sees all items added by guests in real-time.
   f. The Host locks the cart, proceeds to checkout, and pays for the entire order.
8. **Alternative & Exception Flows:**

   A1 Set Spending Limit: The Host can set a per-person spending limit for guests. The System prevents guests from adding items that would exceed this limit.

   E1 Host Cancels Order: Before placing the order, the Host cancels the group order. The System clears the shared cart and notifies any active guests that the order has been canceled.

UC-14: Schedule an Order for Future Delivery

Owner: Checkout & Logistics Team

1. **Goal / Value Proposition:** To offer customers the flexibility to plan meals in advance by scheduling orders for a future time or date.
2. **Brief Description:** This use case describes the process of a Customer selecting a specific future delivery window during the checkout process instead of immediate delivery.
3. **Actors:**
   a. Primary Actor: Customer
   b. Secondary Actor(s): Restaurant Partner, Logistics System
4. **Trigger:** The Customer chooses the ”Schedule” option during checkout.
5. **Preconditions:**
   a. The Customer has items in their cart and has proceeded to checkout.
   b. The selected restaurant offers scheduled orders for the desired time.
6. **Postconditions:**
   a. On Success: An order is created and held by the System, to be transmitted to the restaurant at the appropriate time before the scheduled delivery.
   b. On Failure: The order is not placed, and the Customer is returned to the checkout screen.
7. **Main Flow (Basic Flow):**
   a. During checkout, the Customer selects the ”Schedule” or ”Deliver Later” option.
   b. The System presents a date and time picker showing available delivery slots.
   c. The Customer selects a desired future delivery window.
   d. The Customer confirms the scheduled time and completes the order placement and payment process.
   e. The System holds the order and automatically sends it to the restaurant at a predetermined time to ensure it is prepared and delivered by the scheduled window.
8. **Alternative & Exception Flows:**

A1 Edit Scheduled Time: Before the order is sent to the restaurant, the Customer navigates to their active orders and modifies the scheduled delivery time to another available slot.

E1 Restaurant Unavailable at Scheduled Time: If the System detects the restaurant will be closed during the scheduled time, it informs the Customer that the order cannot be fulfilled and cancels it.

UC-15: Transact WIC Electronic Benefits for an Online Order

Owner: WIC & EBT Integration Team

1. **Goal / Value Proposition:** To improve equity and access for participants in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) by removing regulatory barriers and allowing them to use their electronic benefits for online shopping.
2. **Brief Description:** This use case describes how a WIC shopper uses their Electronic Benefit Transfer (EBT) card to purchase authorized supplemental foods through an internet vendor's online platform, including handling fees not covered by WIC benefits.
3. **Actors:**
   a. Primary Actor: WIC Shopper (participant, proxy, or parent/caretaker)
   b. Secondary Actor(s): Internet Vendor, WIC State Agency, EBT Processor
4. **Trigger:** The WIC Shopper is ready to check out with a cart containing WIC-authorized foods on an approved internet vendor's platform.
5. **Preconditions:**
   a. The WIC State Agency has authorized the use of internet-based transactions.
   b. The vendor is an authorized "internet vendor".
   c. The WIC Shopper has a valid EBT card and knows their PIN or other authentication method.
6. **Postconditions:**
   a. On Success: The WIC shopper's benefit balance is debited for the authorized foods, the order is placed with the internet vendor, and the State agency is charged only for foods received by the participant.
   b. On Failure: The WIC shopper's benefit balance is not debited, and the order is not placed.
7. **Main Flow (Basic Flow):**
   a. The Customer selects WIC-authorized items and proceeds to checkout.
   b. The System prompts the Customer to enter their EBT card information as a payment method.
   c. The System separates WIC-eligible items from non-eligible items and associated fees (e.g., delivery, service, bag fees).
   d. The Customer authenticates the WIC transaction according to State agency policy (e.g., entering a PIN).
   e. The System prompts the Customer to pay for any remaining balance (non-WIC items or fees) with another tender type.
   f. The System confirms the order.
8. **Alternative & Exception Flows:**

A1 Split Tender Transaction: The WIC shopper uses their cash-value benefit (CVB) for fruits and vegetables and pays the difference if the purchase price exceeds the benefit amount.

E1 Transaction Fails: If the EBT processor declines the transaction (e.g., insufficient benefit balance), the System displays an error and allows the user to modify their cart or payment method.

UC-16: Tipping the Delivery Partner

Owner: Checkout & Payments Team

1. **Goal / Value Proposition:** To allow customers to show appreciation for their Delivery Partner's service by adding a tip, which is a critical component of driver earnings.
2. **Brief Description:** This use case describes how a Customer can add a tip to their order, either during checkout (pre-tip) or after the delivery is complete (post-tip).

3. **Actors:**
    a. Primary Actor: Customer
    b. Secondary Actor(s): Delivery Partner, Payment Gateway
4. **Trigger:** The Customer is at the checkout screen or receives a prompt to rate and tip after delivery.
5. **Preconditions:**
    a. The Customer is placing an order or has just received a completed order.
6. **Postconditions:**
    a. On Success: The specified tip amount is charged to the Customer's payment method and allocated to the Delivery Partner's earnings.
    b. On Failure: No tip is processed.
7. **Main Flow (Basic Flow Post-Tip):**
    a. After an order is marked as "Delivered," the System sends a notification to the Customer to rate their experience and add a tip.
    b. The Customer opens the rating/tipping screen.
    c. The System displays suggested tip amounts (e.g., 15%, 20%, 25%) and a custom amount option.
    d. The Customer selects a tip amount and confirms.
    e. The System processes the tip as a separate transaction via the Payment Gateway.
    f. The System updates the Delivery Partner's earnings with the tip amount.
8. **Alternative & Exception Flows:**

A1 Add Tip During Checkout (Pre-Tip): At the checkout screen, the customer selects a pre-tip amount. The System adds this to the initial payment authorization. The customer retains the ability to adjust the tip for a short period after delivery.

E1 Tipping Window Expires: If the customer does not add a post-tip within a specified time frame (e.g., 24 hours), the option to tip for that order is removed.

UC-17: Reorder a Past Meal

Owner: Customer Accounts Team

1. **Goal / Value Proposition:** To provide customers with a quick and convenient way to reorder their favorite meals, increasing order frequency and user retention.
2. **Brief Description:** This use case describes how a Customer accesses their order history, selects a past order, and adds all items from that order to their current cart with a single action.
3. **Actors:**
    a. Primary Actor: Customer
4. **Trigger:** The Customer taps the "Reorder" button on a past order in their history.
5. **Preconditions:**
    a. The Customer is authenticated and has at least one completed order.
6. **Postconditions:**
    a. On Success: The items from the selected past order are added to the Customer's current cart.
    b. On Failure: The cart remains empty or unchanged.
7. **Main Flow (Basic Flow):**
    a. The Customer navigates to their "Order History" screen.
    b. The Customer selects a specific past order to view its details.
    c. On the Order Detail screen, the Customer taps the "Reorder" button.
    d. The System adds all items from that past order into the customer's current cart.
    e. The System navigates the Customer to the cart view to review the items before checkout.
8. **Alternative & Exception Flows:**

A1 Reorder with Unavailable Items: If some items from the past order are no longer available, the System adds only the available items to the cart and displays a notification to the user about which items could not be added.

A2 Reorder with Price Changes: If prices have changed since the original order, the System adds the items to the cart with their current prices and displays a notification to the user about the price updates.

UC-18: Subscription Service for Free Delivery

Owner: Customer Loyalty & Growth Team

1. **Goal / Value Proposition:** To increase customer loyalty and order frequency by offering a paid subscription service that provides benefits like free delivery on eligible orders.
2. **Brief Description:** This use case describes how a Customer signs up for a monthly or annual subscription, and how the associated benefits are automatically applied to their orders.
3. **Actors:**
    a. Primary Actor: Customer
    b. Secondary Actor(s): Payment Gateway
4. **Trigger:** The Customer navigates to the subscription sign-up page and initiates the process.
5. **Preconditions:**
    a. The Customer is authenticated and has a valid payment method on file.
6. **Postconditions:**
    a. On Success: The Customer's account is flagged as having an active subscription, and they are charged the subscription fee.
    b. On Failure: The subscription is not activated.
7. **Main Flow (Basic Flow):**
    a. The Customer selects the subscription plan (e.g., monthly, annual) and agrees to the terms.
    b. The System charges the subscription fee to the Customer's default payment method via the Payment Gateway.
    c. Upon successful payment, the System activates the subscription on the Customer's account.
    d. For subsequent orders that meet the subscription criteria (e.g., order subtotal above a minimum), the System automatically applies the free delivery benefit at checkout.
8. **Alternative & Exception Flows:**

A1 Cancel Subscription: The Customer navigates to their account settings and cancels their subscription. The System keeps the subscription active until the end of the current billing cycle and then deactivates it.

E1 Subscription Payment Fails: At the time of renewal, the Payment Gateway declines the charge for the subscription fee. The System deactivates the subscription benefits and notifies the Customer to update their payment information.

UC-19: Process Customer Refund or Credit

Owner: Customer Support & Payments Team

1. **Goal / Value Proposition:** To provide a fair process for handling customer complaints and issuing refunds or credits, turning a negative experience into a retention opportunity.
2. **Brief Description:** This use case outlines how a Customer Support Agent investigates an order issue reported by a customer and issues a full or partial refund or platform credit.
3. **Actors:**
    a. Primary Actor: Customer Support Agent
    b. Secondary Actor(s): Customer, Payment Gateway
4. **Trigger:** A Customer contacts support to report a problem with a delivered order.
5. **Preconditions:**
    a. The Customer has a completed order in their history.

b. The Customer Support Agent is logged into the support administration panel.

6. **Postconditions:**
   a. On Success: A refund is processed or credit is issued, the customer is notified, and the resolution is logged.
   b. On Failure: No refund is issued, and the support ticket is updated with a reason for denial.
7. **Main Flow (Basic Flow):**
   a. An Agent receives a support ticket linked to an order ID.
   b. The Agent reviews the customer's complaint and order details.
   c. The Agent validates the complaint and decides on a resolution (e.g., refund for a missing item).
   d. The Agent selects the item(s) to be refunded or enters a custom refund amount in the admin panel.
   e. The Agent submits the refund, and the System sends a command to the Payment Gateway.
   f. The System notifies the customer via email that the refund has been processed.
8. **Alternative & Exception Flows:**

A1 Issue Platform Credit: Instead of a monetary refund, the agent offers platform credit. The agent selects "Issue Credit," and the System adds the amount to the customer's account wallet.

E1 Suspected Fraudulent Activity: The System's fraud detection algorithm flags the customer's account for an unusual number of refund requests. The System displays a warning to the Agent, who follows a specialized investigation procedure.

Delivery Partner Operations

UC-20: Onboard a New Delivery Partner

Owner: Driver Operations Team

1. **Goal / Value Proposition:** To provide a streamlined, self-service onboarding process for individuals to become Delivery Partners, enabling rapid fleet expansion.
2. **Brief Description:** This use case describes the process for a prospective driver to sign up, submit required documents and information, and be approved to start making deliveries.
3. **Actors:**
   a. Primary Actor: Prospective Delivery Partner
   b. Secondary Actor(s): Platform Admin Team
4. **Trigger:** A prospective driver navigates to the "Drive With Us" page and begins the sign-up process.
5. **Preconditions:**
   a. The applicant has a valid driver's license, vehicle registration, and insurance.
   b. The applicant meets the minimum age requirement.
6. **Postconditions:**
   a. On Success: A new driver profile is created in a "Pending Approval" state, and admins are notified to review the submission.
   b. On Failure: No profile is created; an error message is shown.
7. **Main Flow (Basic Flow):**
   a. The applicant creates an account with their email and password.
   b. The System presents a multi-step form to enter personal information (name, address, etc.).
   c. The applicant uploads required documents (e.g., driver's license, proof of insurance).
   d. The applicant consents to a background check.
   e. The applicant provides banking information for payouts.
   f. The applicant reviews and submits the application.
   g. The System validates the form and sends it to the admin review queue.
8. **Alternative & Exception Flows:**

A1 Save Draft and Exit: The applicant saves an in-progress application and can resume it later.

E1 Document Upload Fails: The applicant attempts to upload a file in an unsupported format or that exceeds the size limit. The System displays an error message.

UC-21: Manage Driver Vehicle and Insurance Verification

Owner: Driver Operations Team

1. **Goal / Value Proposition:** To ensure delivery partners maintain valid documentation and meet safety requirements for food transport and customer protection.
2. **Brief Description:** This use case describes how a Driver Operations Coordinator verifies and maintains current documentation for active delivery partners.
3. **Actors:**
    a. Primary Actor: Driver Operations Coordinator
    b. Secondary Actor(s): Delivery Partner, Insurance Verification Service
4. **Trigger:** New driver application submitted or existing driver documentation approaching expiration.
5. **Preconditions:**
    a. Delivery partner has provided vehicle registration, insurance, and license documentation.
    b. Coordinator has access to verification systems and regulatory requirement database.
6. **Postconditions:**
    a. On Success: Driver documentation is verified and driver status is activated or maintained.
    b. On Failure: Driver cannot be activated or is suspended until documentation issues resolved.
7. **Main Flow (Basic Flow):**
    a. Coordinator reviews driver application and supporting documentation.
    b. System validates vehicle registration and insurance coverage through third-party verification services.
    c. Coordinator confirms driver's license validity and driving record meets platform requirements.
    d. System flags any documentation approaching expiration or compliance issues.
    e. Coordinator approves driver for active status or requests corrected documentation.
8. **Alternative & Exception Flows:**

    A1 Insurance Expiration: Driver's insurance expires while active - System automatically suspends driver until renewal verified.

    E1 Verification Service Unavailable: Cannot confirm documentation electronically - Coordinator uses manual verification procedures.

UC-22: Facilitate Driver Training and Certification Programs

Owner: Driver Training Team

1. **Goal / Value Proposition:** To ensure delivery partners are properly trained in safety, customer service, and platform procedures before beginning active delivery work.
2. **Brief Description:** This use case describes how a Driver Training Coordinator delivers mandatory training programs and certifies delivery partners for platform activation.
3. **Actors:**
    a. Primary Actor: Driver Training Coordinator
    b. Secondary Actor(s): Delivery Partner, Learning Management System
4. **Trigger:** New delivery partner completes initial application approval and requires certification before activation.
5. **Preconditions:**
    a. Training curriculum is developed with assessment criteria and learning management system is operational.
    b. Delivery partner has completed background verification and document approval.
6. **Postconditions:**
    a. On Success: Delivery partner completes certification and account is activated for delivery assignments.

b. On Failure: Partner fails certification and cannot be activated until remedial training completed.

7. **Main Flow (Basic Flow):**
   a. Coordinator enrolls approved delivery partner in mandatory training program.
   b. System delivers online training modules covering safety procedures, food handling, and customer service standards.
   c. Delivery partner completes knowledge assessments and practical skill demonstrations.
   d. Coordinator reviews completion status and performance scores against certification requirements.
   e. System activates delivery partner account upon successful certification completion.
8. **Alternative & Exception Flows:**

   A1 Training Failure: Partner fails certification assessment - Coordinator provides remedial training with re-evaluation opportunity.

   E1 System Unavailable: Training platform inaccessible - Coordinator arranges in-person training session as alternative delivery method.

UC-23: Manage Driver Availability and Tasks

Owner: Driver Logistics Team

1. **Goal / Value Proposition:** To provide Delivery Partners with tools to manage their work status, and accept or reject delivery offers efficiently.
2. **Brief Description:** This use case covers how a Delivery Partner uses the driver application to go online, receive delivery offers, and manage their tasks from pickup to drop-off.
3. **Actors:**
   a. Primary Actor: Delivery Partner
   b. Secondary Actor(s): Logistics System, Restaurant Staff, Customer
4. **Trigger:** The Delivery Partner logs into the app and sets their status to ”Available”.
5. **Preconditions:**
   a. The Delivery Partner is logged into the driver app.
   b. The device has an active internet connection and location services enabled.
6. **Postconditions:**
   a. On Success: The Delivery Partner successfully accepts and completes a delivery task, and their earnings are updated.
   b. On Failure: The delivery offer is declined or canceled and reassigned to another driver.
7. **Main Flow (Basic Flow):**
   a. The System sends a new delivery offer to the driver’s app, showing key details (restaurant, payout, locations).
   b. The driver accepts the offer within a set time limit.
   c. The System provides navigation to the restaurant.
   d. The driver confirms pickup of the order at the restaurant.
   e. The System provides navigation to the customer’s location.
   f. The driver confirms the delivery is complete at the customer’s address.
8. **Alternative & Exception Flows:**

   A1 Reject Delivery Offer: The driver taps ”Decline” or lets the offer timer expire. The System offers the delivery to another nearby driver.

   E1 Cannot Complete Delivery: The driver arrives at the customer’s location but cannot complete the drop-off (e.g., unreachable customer). The driver initiates a support request through the app for next steps.

UC-24: Driver Manages In-Transit Delivery Problem

Owner: Driver Experience & Logistics Team

1. **Goal / Value Proposition:** To empower drivers to efficiently and professionally resolve common delivery issues in real-time, improving customer satisfaction and reducing the need for support intervention.
2. **Brief Description:** This use case describes the actions a Driver takes when encountering an issue after picking up an order, such as a wrong address, bad weather, or a customer changing their preference.
3. **Actors:**
    a. Primary Actor: Delivery Driver
    b. Secondary Actor(s): Customer, Customer Support, System (Logistics Engine)
4. **Trigger:** The Driver encounters an obstacle that prevents a straightforward delivery.
5. **Preconditions:**
    a. The Driver has an active delivery order and is in possession of the food.
    b. The Driver has the app open on their device.
6. **Postconditions:**
    a. On Success: The delivery issue is resolved, and the order is successfully delivered or appropriately disposed of, with the order status updated in the system.
    b. On Failure: The issue remains unresolved, leading to a failed delivery and escalation to Customer Support.
7. **Main Flow (Basic Flow):**
    a. The Driver arrives at the customer's location but cannot find the customer.
    b. The Driver uses the in-app chat/call function to attempt to contact the customer.
    c. The Customer responds with clarifying instructions.
    d. The Driver follows the new instructions and completes the delivery.
    e. The Driver marks the order as delivered in the app.
8. **Alternative & Exception Flows:**

    [A1] Wrong Address: The customer informs the driver the address is incorrect. The driver inputs the new address into the app. The System recalculates the route and any additional payment for the driver.

    [E2] Unresponsive Customer: The customer does not respond to contact attempts. The System initiates a countdown timer. If the timer expires, the System instructs the driver on the next steps (e.g., leave food in a safe place, dispose of food) and closes the order.

Restaurant & Vendor Management

UC-25: Onboard a Home Kitchen Partner

Owner: Partner Onboarding Team

1. **Goal / Value Proposition:** To expand the variety of food offerings and create new entrepreneurial opportunities by allowing certified home-based cooks to sell meals on the platform, catering to a demand for authentic, home-cooked food.
2. **Brief Description:** This use case describes the process of vetting, certifying, and activating a home-based kitchen as a vendor on the platform, including checks for hygiene and legal compliance.
3. **Actors:**
    a. Primary Actor: Home Kitchen Applicant
    b. Secondary Actor(s): Onboarding Team, Health & Safety Inspector
4. **Trigger:** An individual home cook applies to become a vendor through the platform's partner portal.
5. **Preconditions:**
    a. The applicant has the legal right to work and operate a home-based food business in their jurisdiction.
    b. The applicant has access to a kitchen that can meet platform and local health standards.
6. **Postconditions:**
    a. On Success: The home kitchen is activated on the platform as a new restaurant partner, able to receive orders.
    b. On Failure: The application is rejected, and the applicant is notified of the reason.

7. **Main Flow (Basic Flow):**
    a. The Applicant submits an application with personal details, menu, and kitchen information.
    b. The Onboarding Team reviews the application for completeness and basic eligibility.
    c. The System schedules a virtual or in-person inspection of the home kitchen to verify hygiene and safety standards.
    d. Upon successful inspection, the System provides the applicant with access to the restaurant partner portal to set up their menu and hours.
    e. The Onboarding Team activates the home kitchen's profile, making it visible to customers.
8. **Alternative & Exception Flows:**

    [E3] Inspection Failure: The Health & Safety Inspector fails the kitchen based on predefined criteria. The System places the application on hold and provides the applicant with a list of corrective actions required.

    [A4] Limited Menu Onboarding: The applicant is approved to start with a limited, pre-approved menu to test the market before expanding their offerings.

UC-26: Manage Restaurant Menu and Availability

Owner: Partner Platform Team

1. **Goal / Value Proposition:** To allow Restaurant Partners to dynamically control their menu, mark items as out of stock, and manage their store's online status.
2. **Brief Description:** This use case describes how a Restaurant Manager uses the partner portal to update their menu items and availability in real-time.
3. **Actors:**
    a. Primary Actor: Restaurant Manager / Staff
    b. Secondary Actor(s): Customer
4. **Trigger:** The Restaurant Manager logs into the partner portal with the intent to update the menu or store status.
5. **Preconditions:**
    a. The restaurant has an active partnership with the platform.
    b. The manager is logged into the partner portal or tablet application.
6. **Postconditions:**
    a. On Success: The restaurant's menu and availability are accurately reflected on the customer-facing app.
    b. On Failure: The menu remains unchanged.
7. **Main Flow (Basic Flow Mark Item Out of Stock):**
    a. The Manager navigates to the "Menu Management" section of the portal.
    b. The Manager locates the item that is currently unavailable.
    c. The Manager toggles the item's status to "Out of Stock".
    d. The System immediately updates the customer-facing menu to show the item as unavailable or removes it from view.
8. **Alternative & Exception Flows:**

    A1 Temporarily Go Offline: The manager navigates to settings and taps "Pause New Orders," selecting a duration. The System lists the restaurant as "Currently Unavailable" on the customer app for that period.

    A2 Update Item Price: The manager selects an item, enters a new price, and saves the change. The System updates the price on the customer-facing menu.

UC-27: Fulfill an Order Using a Consumer-Owned Reusable Container

Owner: Sustainability & Operations Team

1. **Goal / Value Proposition:** To reduce single-use container waste by allowing food establishments to establish a contamination-free process for filling containers provided by the consumer.
2. **Brief Description:** This use case describes how a food establishment, having received approval from the regulatory authority for its written plan, allows an employee to fill a customer's personal container with food.

3. **Actors:**
    a. Primary Actor: Food Establishment Employee
    b. Secondary Actor(s): Customer, Regulatory Authority
4. **Trigger:** A customer places an order and indicates they would like to use their own reusable container.
5. **Preconditions:**
    a. The food establishment has a written, approved plan for a contamination-free process to fill consumer-owned containers.
    b. The customer's container appears clean and suitable for the food item.
6. **Postconditions:**
    a. On Success: The customer's order is fulfilled using their own container, preventing the use of a disposable one.
    b. On Failure: The employee declines to use the container, and the order is fulfilled using a standard disposable container provided by the establishment.
7. **Main Flow (Basic Flow):**
    a. The Customer places an order for pickup and brings their own container.
    b. The employee receives the container from the customer.
    c. The employee follows the approved contamination-free process (e.g., placing the container on a tray, using clean utensils to transfer food without the container touching any food-contact surfaces).
    d. The employee fills the container with the ordered food.
    e. The employee returns the filled container to the customer.
8. **Alternative & Exception Flows:**

A1 Consumer Self-Service for Non-TCS Foods: A consumer is allowed to directly refill their own container at a self-service station (e.g., a bulk bin for granola) as long as the food is not a Time/Temperature Control for Safety (TCS) food and the process prevents contamination.

E1 Container is Unsuitable: The employee inspects the customer's container and deems it dirty or otherwise unsuitable. The employee politely informs the customer and uses a standard store-provided container instead.

UC-28: Restaurant Partner Posts Surplus Food for Donation

Owner: Social Impact & Sustainability Team

1. **Goal / Value Proposition:** To reduce food waste and support community needs by enabling restaurants to easily donate safe, edible surplus food to local charities or food banks.
2. **Brief Description:** This use case describes the process for a Restaurant Partner to list surplus food items that are nearing their sell-by date but are still perfectly good for consumption, making them available for pickup by registered non-profit organizations.
3. **Actors:**
    a. Primary Actor: Restaurant Partner (Owner/Manager)
    b. Secondary Actor(s): Charitable Organization, Delivery Partner
4. **Trigger:** A Restaurant Partner has surplus food at the end of the day that would otherwise be discarded.
5. **Preconditions:**
    a. The Restaurant Partner is registered and verified for the food donation program.
    b. At least one registered Charitable Organization is active in the restaurant's vicinity.
6. **Postconditions:**
    a. On Success: A donation request is created and broadcast to nearby charities, and a pickup is scheduled. The food is diverted from landfill.
    b. On Failure: The donation is not posted, and the food remains at the restaurant.
7. **Main Flow (Basic Flow):**
    a. The Restaurant Partner navigates to the "Food Donations" section of their portal.
    b. The Partner creates a new donation listing, specifying the food items, quantity, and a pickup window.

c. The System sends a notification to eligible Charitable Organizations in the area.
d. A Charitable Organization accepts (”claims”) the donation through their own interface.
e. The System confirms the match, assigns a volunteer or platform Delivery Partner for pickup, and notifies the restaurant.

8. **Alternative & Exception Flows:**

[E4] Donation Not Claimed: If no charity claims the donation within a set time, the System notifies the Restaurant Partner that the donation has expired.
[S5] Direct-to-Animal Feed: The Partner flags the donation (e.g., scraps) as suitable for animal feed, routing the notification to participating farms or animal feed producers.

Platform Administration & Operations

UC-29: Administer a Corporate Meal Program

Owner: B2B & Enterprise Team

1. **Goal / Value Proposition:** To allow a company to provide meals as a taxable fringe benefit, such as for overtime work or to boost morale, by managing employee stipends and direct billing.
2. **Brief Description:** This use case describes how a Corporate Administrator sets up a meal program, adds employees, and defines budget rules. Employees then order food from designated restaurants, with the cost being billed directly to the company account.
3. **Actors:**
   a. Primary Actor: Corporate Administrator
   b. Secondary Actor(s): Employee, Restaurant Partner
4. **Trigger:** A company decides to offer an employee meal benefit and signs up for a corporate account.
5. **Preconditions:**
   a. The corporation has a contractual agreement and a valid payment method on file with the food delivery platform.
   b. The administrator has been granted access to the corporate management portal.
6. **Postconditions:**
   a. On Success: Employees can order meals within the company’s defined policy, and the corporation is billed accordingly.
   b. On Failure: The meal program is not activated, and employees cannot order using the corporate account.
7. **Main Flow (Basic Flow):**
   a. The Corporate Administrator logs into the business portal.
   b. The Administrator adds employees to the program via email.
   c. The Administrator sets the program rules (e.g., $20 daily lunch stipend, available from 11 AM - 2 PM, Monday-Friday).
   d. Employees receive an invitation, link their personal accounts to the corporate profile, and can switch to the business profile when ordering.
   e. When an employee places an order that complies with the rules, the cost is automatically charged to the corporate account.
8. **Alternative & Exception Flows:**

A1 Order Exceeds Stipend: An employee places an order where the total cost exceeds their available meal stipend. The System requires the employee to pay the overage with a personal payment method.
A2 Group Order for Team Lunch: An administrator or designated employee places a single large catering order for a team meeting, which is charged to a specific department’s budget within the corporate account.

UC-30: Coordinate Multi-Location Corporate Catering

Owner: B2B & Enterprise Team

1. **Goal / Value Proposition:** To enable corporate clients to efficiently order and coordinate meal delivery across multiple office locations simultaneously.
2. **Brief Description:** This use case describes how a Corporate Administrator manages large-scale catering orders across multiple locations with centralized billing and coordination.
3. **Actors:**
    a. Primary Actor: Corporate Administrator
    b. Secondary Actor(s): Restaurant Partner, Delivery Partner, Employees
4. **Trigger:** Corporate Administrator initiates multi-location catering order for company event or regular meal program.
5. **Preconditions:**
    a. Corporate account is established with approved budget and multiple locations configured.
    b. Employee headcount and dietary requirements are documented for each location.
6. **Postconditions:**
    a. On Success: Coordinated orders are placed with synchronized delivery times across all locations.
    b. On Failure: Orders are not placed and administrator is notified of capacity or availability issues.
7. **Main Flow (Basic Flow):**
    a. Corporate Administrator accesses enterprise portal and selects multi-location ordering.
    b. Administrator configures delivery locations, timing requirements, and budget allocation per location.
    c. System presents catering options that can serve all locations within specified timeframe.
    d. Administrator places coordinated orders with staggered preparation and delivery schedules.
    e. System confirms all orders and provides consolidated tracking dashboard with real-time updates.
8. **Alternative & Exception Flows:**

    A1 Location Modification: Last-minute venue change - Administrator updates delivery address with system validating driver availability.

    E1 Capacity Exceeded: Insufficient restaurant or driver capacity - System suggests alternative timing or restaurant combinations.

UC-31: Admin Implements a Driver Incentive Program

Owner: Driver Operations & Strategy Team

1. **Goal / Value Proposition:** To improve driver performance, retention, and compliance with safety rules by creating and managing programs that reward drivers for positive behavior, such as high ratings, low incident rates, or completing a certain number of deliveries.
2. **Brief Description:** A platform Administrator uses an internal tool to configure and launch an incentive campaign for delivery drivers. This can include financial bonuses, preferred access to delivery blocks, or other non-monetary rewards.
3. **Actors:**
    a. Primary Actor: Administrator (Platform)
    b. Secondary Actor(s): Driver Performance System
4. **Trigger:** The business decides to launch a program to boost driver engagement or address a performance issue like delivery times.
5. **Preconditions:**
    a. The Administrator has the necessary permissions to create and manage financial incentives.
    b. Driver performance data (e.g., completion rate, ratings, safety record) is available in the system.
6. **Postconditions:**
    a. On Success: The incentive program is live, and drivers are notified. The system begins tracking progress toward the reward.
    b. On Failure: The program is not launched, and no changes are made.
7. **Main Flow (Basic Flow):**

a. The Administrator navigates to the ”Driver Incentives” module.
b. The Administrator defines the program parameters: target audience (e.g., all drivers in a city), goal (e.g., ”Complete 50 deliveries this week”), reward (e.g., ”$25 bonus”), and duration.
c. The System validates the parameters.
d. The Administrator launches the campaign.
e. The System automatically notifies eligible drivers via the driver app and begins tracking their progress towards the goal.

8. **Alternative & Exception Flows:**

[A2] Reputation-Based Incentive: The Administrator creates a program that rewards drivers who maintain a customer rating above 4.8 stars for a month with a ”Top Driver” badge and priority access to orders.
[A2] Safety-Based Incentive: The Administrator launches a program offering a bonus to all drivers in a region who have zero traffic violations or reported safety incidents over a quarter.

UC-32: Monitor Fleet Performance and Analytics

Owner: Operations Manager

1. **Goal / Value Proposition:** To track real-time delivery metrics, driver performance, and system efficiency to optimize operations and identify improvement opportunities.
2. **Brief Description:** This use case describes how an Operations Manager uses the dashboard to monitor active deliveries, driver performance, and system metrics to make operational decisions.
3. **Actors:**
   a. Primary Actor: Operations Manager
   b. Secondary Actor(s): Delivery Partner, Logistics System
4. **Trigger:** The Operations Manager logs into the management dashboard to review current operations.
5. **Preconditions:**
   a. Operations Manager is authenticated in the management dashboard.
   b. Active deliveries and drivers are in the system.
6. **Postconditions:**
   a. On Success: The manager has reviewed performance metrics and identified areas for optimization.
   b. On Failure: Dashboard data is unavailable, and the manager cannot assess current operations.
7. **Main Flow (Basic Flow):**
   a. The Operations Manager accesses the real-time operations dashboard.
   b. The System displays key metrics: active drivers, average delivery times, order volume, and completion rates.
   c. The Manager reviews performance heat maps showing delivery density and problem areas.
   d. The Manager analyzes driver performance rankings and identifies underperforming areas.
   e. The Manager generates reports for stakeholder review.
8. **Alternative & Exception Flows:**

A1 Emergency Response: Critical service disruption detected - System alerts manager with recommended immediate actions.
E1 Data Unavailable: System unable to fetch real-time data - displays last known status with clear timestamp warning.

UC-33: Optimize Delivery Route Assignment

Owner: Data Science Team

1. **Goal / Value Proposition:** To develop and refine algorithms that efficiently assign delivery orders to drivers based on location, traffic, and capacity optimization.
2. **Brief Description:** This use case describes how a Data Scientist analyzes delivery patterns and implements algorithmic improvements to reduce delivery times and costs.

3. **Actors:**
    a. Primary Actor: Data Scientist
    b. Secondary Actor(s): Delivery Partner, Operations Manager
4. **Trigger:** Scheduled algorithm review or performance degradation in current routing system.
5. **Preconditions:**
    a. Data Scientist has access to historical delivery data and development environment.
    b. Current routing algorithm is deployed and collecting performance metrics.
6. **Postconditions:**
    a. On Success: Improved routing algorithm is deployed with measurable performance gains.
    b. On Failure: Current algorithm remains active with no changes implemented.
7. **Main Flow (Basic Flow):**
    a. Data Scientist analyzes delivery performance metrics and identifies optimization opportunities.
    b. Scientist develops improved routing algorithm using machine learning on historical patterns.
    c. Algorithm is tested in simulation environment with historical data validation.
    d. Scientist conducts A/B testing with subset of live traffic to measure improvements.
    e. Improved algorithm is deployed system-wide after validation confirms performance gains.
8. **Alternative & Exception Flows:**

    A1 Performance Degradation: New algorithm performs worse - System automatically reverts to previous stable version.

    E1 Training Data Insufficient: Historical data incomplete - Scientist delays deployment until adequate dataset available.

UC-34: Manage Trust and Safety Incidents

Owner: Trust & Safety Team

1. **Goal / Value Proposition:** To investigate and resolve safety incidents, fraud cases, and policy violations to maintain platform integrity.
2. **Brief Description:** This use case outlines how a Trust & Safety agent investigates reported incidents and implements appropriate resolutions.
3. **Actors:**
    a. Primary Actor: Trust & Safety Agent
    b. Secondary Actor(s): Customer, Restaurant Partner, Delivery Partner
4. **Trigger:** An incident is reported through the app or flagged by automated systems.
5. **Preconditions:**
    a. Trust & Safety agent is logged into incident management system.
    b. Incident has been reported with sufficient detail for investigation.
6. **Postconditions:**
    a. On Success: Incident is resolved with appropriate action taken and case documented.
    b. On Failure: Case remains open pending additional information or escalation.
7. **Main Flow (Basic Flow):**
    a. Agent receives incident alert with case details and evidence.
    b. Agent reviews incident history, user accounts, and supporting documentation.
    c. Agent contacts involved parties to gather additional information if needed.
    d. Agent determines appropriate resolution based on platform policies.
    e. System implements decision and logs complete case resolution.
8. **Alternative & Exception Flows:**

A1 Law Enforcement Required: Agent identifies criminal activity and escalates to legal team with proper documentation.

E1 Insufficient Evidence: Cannot determine fault - Agent closes case with monitoring flag on involved accounts.

UC-35: Process an Electronic Benefit Return for an Unfulfilled Item

Owner: WIC & EBT Integration Team

1. **Goal / Value Proposition:** To ensure a WIC participant does not lose their electronic benefits when an item from an online order cannot be fulfilled by the vendor, allowing the benefit value to be used at a later date or at another vendor.
2. **Brief Description:** This use case describes the process of a vendor being unable to fulfill part of an online WIC order and the subsequent return of the corresponding electronic benefit value to the participant's balance, even after the benefit's original expiration date.
3. **Actors:**
    a. Primary Actor: Internet Vendor System
    b. Secondary Actor(s): EBT Processor, WIC Shopper
4. **Trigger:** An item in a paid WIC online order is identified as out-of-stock or otherwise unfulfillable by the vendor.
5. **Preconditions:**
    a. A WIC shopper has successfully placed an online order using electronic benefits.
    b. The State agency has a system in place to process benefit returns.
6. **Postconditions:**
    a. On Success: The value of the unfulfilled item is returned to the participant's benefit balance, and the participant is notified. The State agency is not charged for the unfulfilled item.
    b. On Failure: The participant's benefit balance is not credited, and the participant may lose the benefit.
7. **Main Flow (Basic Flow):**
    a. The vendor's system identifies an item from a WIC online order that cannot be fulfilled.
    b. The vendor's system initiates a return request to the EBT Processor for the specific item.
    c. The EBT Processor validates the request and credits the electronic benefit value back to the WIC shopper's benefit balance.
    d. The System sends a notification to the WIC shopper informing them of the returned benefit.
8. **Alternative & Exception Flows:**

A1 Return of Benefits After Last Date of Use: When electronic benefits are returned to a participant's balance near or after the original expiration date, the State agency must provide the participant with no less than 7 calendar days to transact the returned benefits.

E1 Exchange for Recalled Product: In the event of a product recall, the vendor must treat WIC shoppers the same as all other customers, which may include providing a substitute product, store credit, or a cash refund as per store policy, instead of a benefit return.