Use Cases

UC 1: Add a New Item to Inventory

Pre-reqs	Short Description	Main Flow	Alternative Flows
The user (Staff or Admin) is logged into the system. The user has the appropriate role-based access (Staff or Admin).	Staff or admin can add a new item to inventory	1.User logs into system 2. User clicks "Add Item" button 3. User fills out the required information including name, description, and amount 4. User clicks the "Submit" button [Invalid Input] [Duplicate Name] 5. The new item is added to the inventory	[Invalid Input]: One or more input fields are empty [Duplicate Name]: Name of new item already exists in inventory

UC 2: Delete an Item in Inventory

Pre-reqs	Short Description	Main Flow	Alternative Flows
The user (Staff or Admin) is logged into the system. The user has the appropriate role-based access (Staff or	Staff or admin can add an item in inventory	1.User logs into system 2. User clicks "Delete Item" button 3. User searches for the name of item to be deleted in dropdown menu and selects it 4. User clicks the "Submit" button [Cannot Delete] 5. The item is removed from inventory	[Cannot Delete]: Item to be delete exists in at least one recipe and cannot be deleted

Admin).			

UC 3: Create A Recipe

Pre-reqs	Short Description	Main Flow	Alternative Flows
The user (Staff or Admin) is logged into the system.

The user has the appropriate role-based access (Staff or Admin). | Staff or admin can create a new recipe from items in inventory | 1.User logs into system
2. User clicks "Create Recipe" button
3. User fills out the required information including name, description, items from inventory, and cost
4. User clicks the "Submit" button [Invalid Input] [Duplicate Name]
5. The new recipe is added to the menu | [Invalid Input]: One or more input fields are empty or have an invalid value

[Duplicate Name]: Name of new recipe already exists on the menu |

UC 4: Delete a Recipe

Pre-reqs	Short Description	Main Flow	Alternative Flows
The user (Staff or Admin) is logged into the system.

The user has the appropriate role-based access (Staff or Admin). | Staff or admin can delete a recipe from the menu | 1.User logs into system
2. User clicks "Delete Recipe" button
3. User searches for the recipe name to be deleted in dropdown menu and selects it
4. User clicks the "Submit" button [Cannot Delete]
5. The recipe is removed from the menu | [Cannot Delete]: Recipe has a current order in line for a customer and cannot be deleted until order is fulfilled |

UC 5: Edit a Recipe

Pre-reqs	Short Description	Main Flow	Alternative Flows
The user (Staff or Admin) is logged into the system. The user has the appropriate role-based access (Staff or Admin).	Staff or admin can edit an recipe from the menu	1.User logs into system 2. User clicks "Edit Recipe" button 3. User searches for the recipe name to be edited in dropdown menu and selects it 4. User edits parameters in question such as name, item counts, price, etc. 4. User clicks the "Submit" button [Invalid Input] [Duplicate Name] 5. The recipe is updated in the menu	[Invalid Input]: One or more input fields are empty or have an invalid value [Duplicate Name]: Name of edited recipe already exists on the menu

UC 6: Manage Staff & Customers

Pre-reqs	Short Description	Main Flow	Alternative Flows

The user (Admin) is logged into the system.
 	
The user has the appropriate role-based access (Admin).
	The admin needs to be able to create/edit/delete staff/customer user accounts	1. An admin selects the "Manage Staff and Customers" option.
		2. The system displays a list of all existing staff and customer users.
		3. The admin can choose to:
		  a. Create a New User:
		    i. The admin selects the "Add New User" option.
		    ii. The system prompts the admin to enter details (e.g., username, password, role, contact information). [Invalid Input]
		    iii. The admin enters the
			[Invalid Input]: If the admin enters invalid information (e.g., missing required fields) while creating or editing a user, the system displays an error message indicating the required fields and prompts the admin to correct the input.

		information and submits it.	
		iv. The system validates the information and saves the new user, displaying a confirmation message.	
		b. Edit an Existing User:	
		i. The admin selects a user from the list to edit.	
		ii. The system displays the current details of the selected user.	
		iii. The admin modifies the necessary fields and submits the changes. [Invalid Input]	
		iv. The system displays a confirmation message.	
		c. Delete a User:	

UC 7: Customer Orders

Pre-reqs	Short Description	Main Flow	Alternative Flows
The user (Customer) is logged into the system. The user has the appropriate role-based access (Customer).	Customers need to be able to add items to their order and then make a purchase while leaving a tip.	1. A customer selects the Order Items option from the menu. 2. The system displays a list of available recipes/items. 3. The customer browses the items and selects one or more recipes/items to add to their order. 4. The customer can specify the quantity for each selected item. 5. The system calculates the order	[Order Time Limit]: If the customer takes too long to finalize the order, the system times out and prompts them to restart the ordering process.

		total, including the selected items, applicable sales tax, and displays it to the customer. 6. The customer is prompted to enter a tip, choosing from options of 15%, 20%, 25%, or a custom amount. 7. The customer reviews the order summary and confirms the order. [Order time out] 8. The system processes the order and displays a confirmation message with the order details. 9. The customer is returned to the order menu or home screen.	

UC 8: View & Fulfill Orders

Pre-reqs	Short Description	Main Flow	Alternative Flows
Staff is logged into the system.	Staff users need to be able to view orders and fulfill them.	1. Staff can look at current orders waiting to be fulfilled. 2. Staff members can choose which order they would like to fulfill. 3. Staff member chooses to fulfill an order [Order	[Order fulfilled by other Staff]: If when a staff member tries to fulfill an order the order has already been fulfilled by another staff member the staff member is displayed an error message stating that the order has already been fulfilled and the page is reloaded to show current orders waiting to be filled.

		fulfilled by other Staff]. 4. The system updates the order to show that it is fulfilled. 5. The person who ordered is notified that their order has been fulfilled by a staff member and is ready for pick up [UC 5].	

UC 9: Pickup Notification

Actors	Short Description	Main Flow	Alternative Flows
Customers and staff members are logged into the system. Customer places an order [UC #3] and a staff member fulfills that order [UC #4].	Customers need to be able to see when their order is fulfilled so they can pick it up.	1. Customer's screen displays a notification saying that their order is ready for pickup. 2. The system logs information and updates the customer's view of their order even after the notification goes away. 3. Customer picks up their order and confirms in the system that they received it [No Confirmation].	[No Confirmation]: If the customer fails to complete the confirmation of pickup, then after 2 hours, the system will log the order as confirmed anyways since the customer did not pick up their order in time.

UC 10: Set Sales Tax Rate

Pre-reqs	Short Description	Main Flow	Alternative Flows
Admin is logged into the system.	Admin users need to be able to set a sales tax rate for the system.	1. Admin selects the option to set the sales tax rate. 2. Admin enters the new sales tax rate. 3. The system validates the sales tax rate [Invalid Rate]. 4. The system updates the sales tax rate and logs the update with Admin details. 5. Admin is returned to the main menu.	[Invalid Rate]: If the input sales tax rate is not a valid positive decimal number (ex. greater than or equal to 0 and less than or equal to 100), an error message is displayed, and the Admin is returned to the form to enter a valid rate. The tax rate isn't updated.

UC 11: Generate a Sales Report

Pre-reqs	Short Description	Main Flow	Alternative Flows
Admin is logged into the system.	Admin can generate a sales report over a specific date range.	1. Admin selects "Generate Report." 2. Admin chooses a start and end date. [Invalid Dates] 3. The system compiles order and payment data. 4. The report is displayed and available for export.	[Invalid Dates]: If the end date is earlier than the start date, the system shows error.

UC 12: Apply a Discount Code

Pre-reqs	Short Description	Main Flow	Alternative Flows
The	Customers can apply	1. The customer adds items	[Invalid Code]: Code is expired or

| customer is logged into the system. | a discount code to their order. | to the cart.
2. Customer enters discount code at checkout.
3. The system validates the code and applies a discount. [Invalid Code]
4. Order total updates with discounted amounts. | does not exist, error shown. |

UC 13: Reset Password

Pre-reqs	Short Description	Main Flow	Alternative Flows
The user has an account in the system.	Users can reset their password if forgotten.	1. The user clicks "Forgot Password." 2. System prompts for email/username. [Invalid Email] 3. The system sends reset links via email. 4. The user sets a new password.	[Invalid Email]: If entered email not registered, error shown.

UC 14: Review Past Orders

Pre-reqs	Short Description	Main Flow	Alternative Flows
Customer is logged into the system.	Customers can review past orders.	1. Customer selects "Order History." [No Orders] 2. The system displays a list of past orders. 3. The customer clicks an order to see details.	[No Orders]: If no order history exists, display "No orders found."

UC 15: Update Payment Methods

Pre-reqs	Short Description	Main Flow	Alternative Flows
User is logged into the system.	Users can update stored payment methods.	1. User selects "Payment Settings." 2. User enters new card or account details. 3. System validates details. [Invalid Payment Info] 4. Payment method saved.	[Invalid Payment Info]: If card fails validation, error displayed.

UC 16: View Inventory

Pre-reqs	Short Description	Main Flow	Alternative Flows
Staff/Admin is logged into the system.	Staff or Admin can view stock levels in report format.	1. User selects "Inventory Report." [No Data] 2. System compiles current stock quantities. 3. Report is displayed and available for download.	[No Data]: If inventory is empty, show "No items available."

UC 17: Update Profile

Pre-reqs	Short Description	Main Flow	Alternative Flows
User is logged into the system.	Users can update their personal information.	1. User selects "Profile Settings." 2. User edits name, contact, or preferences. [Invalid Input]	[Invalid Input]: Missing or incorrect data prompts error.

		3. User clicks save. 4. System updates information.	

UC 18: Issue Refund

Pre-reqs	Short Description	Main Flow	Alternative Flows
Admin/Staff is logged into the system.	Staff or Admin can issue refunds for orders.	1. Staff selects "Refund Order." 2. Staff enters order number. 3. System validates order. [Invalid Order] 4. Refund is processed and logged.	[Invalid Order]: If order does not exist or is outside refund window, error displayed.

UC 19: Provide Nutrition Information for Menu Items

Pre-reqs	Short Description	Main Flow	Alternative Flows
App includes vendor menu items with nutrition data.	Enable shoppers to view detailed and summary nutrition info (e.g., calories, macros) for every item.	1. Customer opens item detail. 2. System displays summary nutrition (e.g., calories) and detailed breakdown (e.g., fat, sugar). 3. Customer uses built-in nutrition calculator to estimate the order's nutritional composition. 4. Customer adds item to cart.	[Missing Nutrition Info]: If nutrition data is unavailable, system flags item and prompts vendor to supply it; allows order only if vendor updates info.

UC 20: Generate a Daily Sales Summary

Pre-reqs	Short Description	Main Flow	Alternative Flows
Admin is logged into the system.	Admin generates daily summary of sales and orders.	1. Admin selects "Daily Summary." [No Orders] 2. System compiles orders and sales data for current day. 3. Summary displayed and available to export.	[No Orders]: If no orders for the day, system displays "No sales recorded."

UC 21: Schedule Staff Shifts

Pre-reqs	Short Description	Main Flow	Alternative Flows
Admin is logged into the system. Admin has appropriate role-based access.	Admin can create and manage staff work schedules.	1. Admin selects "Schedule Management." 2. Admin chooses staff member and shift date. 3. Admin sets start time, end time, and position. 4. Admin clicks "Save Schedule." 5. Staff member receives shift notification. 6. Schedule is updated in the system.	[Scheduling Conflict]: If staff member already has a shift during selected time, system displays conflict error and suggests alternative times. [Invalid Time Range]: If end time is before start time, error message displayed.

UC 22: Manage Loyalty Points

Pre-reqs	Short Description	Main Flow	Alternative Flows
Customer is logged into	Customers can view and redeem loyalty	1. Customer selects "Loyalty Points."	[Insufficient Points]: If customer doesn't have enough points, error

		2. System displays current point balance and available rewards. 3. Customer selects reward to redeem. 4. System validates sufficient points balance. 5. Points are deducted and reward applied to account. 6. Confirmation message displayed.	message shows required points needed. [Expired Rewards]: If selected reward has expired, system notifies customer and refreshes available rewards.
the system. Customer has made at least one purchase.	points for discounts.		

UC 23: Set Operating Hours

Pre-reqs	Short Description	Main Flow	Alternative Flows
Admin is logged into the system. Admin has appropriate role-based access.	Admin can set and modify restaurant operating hours.	1. Admin selects "Operating Hours Settings." 2. Admin sets opening and closing times for each day. 3. Admin can mark days as closed or set special hours. 4. Admin clicks "Update Hours." 5. System validates time entries and saves changes. 6. Updated hours are displayed to customers.	[Invalid Hours]: If closing time is before opening time, system displays error and prompts correction. [Holiday Override]: Admin can set special holiday hours that override regular schedule.

UC 24: Process Group Orders

Pre-reqs	Short Description	Main Flow	Alternative Flows
Customer is logged into the system. Multiple	Customers can create and contribute to group orders.	1. Primary customer creates "Group Order." 2. System generates shareable group order	[Payment Failure]: If any group member's payment fails, entire order is cancelled and group notified. [Order Timeout]: If group order isn't

		code. 3. Other customers join using the code. 4. Each customer adds items to shared cart. 5. Primary customer reviews total order and confirms. 6. Payment is split according to individual contributions. 7. Single order is sent to kitchen with all items.	finalized within time limit, system cancels and notifies all participants.
customers want to place a combined order.			

UC 25: Manage Allergies and Dietary Restrictions

Pre-reqs	Short Description	Main Flow	Alternative Flows
User is logged into the system. User has dietary restrictions or allergies.	Users can set dietary preferences and receive filtered menu options.	1. User selects "Dietary Preferences." 2. User selects allergies and dietary restrictions from list. 3. User saves preferences to profile. 4. System filters menu to show only compatible items. 5. Warning alerts appear for items with potential allergens.	[No Compatible Items]: If no menu items match restrictions, system displays message and suggests contacting staff. [Allergen Warning]: System displays prominent warnings when restricted items are accidentally added to cart.

UC 26: Handle Equipment Maintenance

Pre-reqs	Short Description	Main Flow	Alternative Flows
Staff or Admin is logged into	Staff can report equipment issues and track maintenance	1. Staff selects "Equipment Status." 2. Staff reports equipment	[Critical Equipment]: If critical equipment (oven, POS) is marked down, system sends immediate alerts

the system. Equipment requires maintenance or is out of order.	status.	issue or marks as out of service. 3. System logs issue with timestamp and staff member details. 4. Admin receives maintenance notification. 5. Admin updates status when maintenance is completed. 6. Equipment is marked as operational again.	to management. [Menu Impact]: System automatically disables menu items that require out-of-service equipment.

UC 27: Process Catering Orders

Pre-reqs	Short Description	Main Flow	Alternative Flows
Customer is logged into the system. Customer wants to place a large advance order.	Customers can place large catering orders with advance notice.	1. Customer selects "Catering Orders." 2. Customer enters event date, time, and guest count. 3. Customer selects items and quantities from catering menu. 4. System calculates total with catering pricing. 5. Customer provides delivery/pickup details. 6. Admin receives catering request for approval. 7. Customer receives confirmation once approved.	[Insufficient Notice]: If order date is too soon, system requires minimum advance notice and suggests alternative dates. [Capacity Exceeded]: If order size exceeds kitchen capacity, system suggests splitting order or alternative arrangements.

UC 28: Manage Table Reservations

Pre-reqs	Short Description	Main Flow	Alternative Flows
Customer is	Customers can make,	1. Customer selects "Make	[No Availability]: If no tables

Pre-reqs	Short Description	Main Flow	Alternative Flows
logged into the system. Restaurant accepts table reservations.	modify, and cancel table reservations.	Reservation." 2. Customer enters date, time, and party size. 3. System shows available time slots. 4. Customer selects preferred time and provides contact details. 5. System confirms reservation and sends confirmation. 6. Customer receives reminder notification before reservation time.	available at requested time, system suggests alternative times within 30-minute window. [Late Cancellation]: If customer cancels within 2 hours of reservation, system logs late cancellation in customer profile.

UC 29: Generate Ingredient Usage Reports

Pre-reqs	Short Description	Main Flow	Alternative Flows
Admin is logged into the system. System has tracked ingredient usage over time.	Admin can generate reports showing ingredient consumption patterns.	1. Admin selects "Ingredient Reports." 2. Admin chooses date range and specific ingredients. 3. System compiles usage data from completed orders. 4. Report shows consumption trends and waste analysis. 5. Admin can export report for inventory planning. 6. System provides reorder recommendations based on usage.	[No Usage Data]: If no data exists for selected period, system displays message and suggests different date range. [Missing Ingredients]: If selected ingredients weren't used in timeframe, report shows zero usage with notation.

UC 30: Handle Customer Feedback

Pre-reqs	Short Description	Main Flow	Alternative Flows
Customer has completed an order. Customer wants to provide feedback.	Customers can submit feedback and ratings for their orders.	1. Customer receives feedback prompt after order completion. 2. Customer rates order on 5-star scale. 3. Customer can add written comments about experience. 4. Customer submits feedback. 5. System stores feedback linked to order and customer. 6. Admin can view feedback dashboard for analysis.	[Negative Feedback]: If rating is 2 stars or below, system immediately notifies management and prompts follow-up contact. [Spam Detection]: System flags potentially fake reviews based on patterns and requires admin verification.

GPT PROMPT (note that this pdf was attached):
"For the pdf, use case 11-20, the goal is to create 10 use cases using you, chatgpt. I will do the other 10 with claude and compare your outputs. so based on the current format, just give me 10 use cases to paste underneath the first 10 into the boxes

pre req should have its own code block, short description should, main flow should, alternative flow should as well"

CLAUDE PROMPT (note that this pdf was attached):

"For the pdf, use case 21-30, the goal is to create 10 use cases using you, claude. I will do the other 10 with chatgpt and compare your outputs. so based on the current format, just give me 10 use cases to paste underneath the first 10 into the boxes

pre req should have its own code block, short description should, main flow should, alternative flow should as well"

Comparison

Neither Claude nor ChatGPT favored one particular stakeholder or user over the other. They both had relatively similar outputs in terms of the type of actions that they were accounting for. For example, ChatGPT created a "Generate a Sales Report" Use Case [11], which was designed to allow admin users to export sales data, likely to run analytics and determine what options are selling well, and which are not. Claude, though, created a "Generate Ingredient Usage Report" Use Case [29], which is designed to run this analysis and determine which ingredients the eatery may be running low on, and which we are purchasing too much of. Both of these use cases share the same theme of exporting data for us to interpret and run our business accordingly. There are more examples of this shared theme between ChatGPT and Claude, which is why we believe that there was no substantial difference between the output for these two LLMs.

We did not spend any money on LLMs.