CSC 510: Project 1a1

Stakeholders:	Administrators	Staff	Customers
Scenarios/Influence	- Creating, editing, and deleting users with the staff and/or customer role - Setting the system's sales tax rate	- Creating a new item, recipe, or ingredient - Adding inventory - Viewing and selecting order to fill	- Purchasing recipe(s)/item(s) - Making purchases anonymously

- Other than administrators, staff, and customers I think another stakeholder could be an anonymous "viewer" of sorts. Someone checking out WolfCafe and its products without buying anything. After brainstorming with ChatGPT, I realized that in regards to a legitimate business there are many stakeholders. These can include investors, manufacturers/suppliers, or even the software development, IT, and security teams. You can also think about the banks or company with which you process your payments since customers are buying products. Since these products are edible there are now many more stakeholders in regards to potentially growing, making, packing, and distributing those products to the WolfCafe.

Stakeholder biases:
1. Administrators being able to set the system's sales tax rate wouldn't affect the staff's needs, but it would affect the customers who are purchasing items. Whether that effect is positive or negative depends on the change of the tax rate.
2. Administrators having the ability to create, edit, and delete any staff or customer user directly affects their needs. Staff and customers can't do what they do best if their role gets deleted or edited. Edited in what way? Could be many things like credentials/authentication, abilities tied to your role, your role entirely, etc.
3. The staff's roles directly affect the customer, but do not affect the administrators. When staff create new items, recipes, ingredients, or inventory it affects the customers product options and therefore what they are purchasing.
4. If the staff did not execute their responsibility of viewing and selecting orders to fill then this entire business would come crumbling down. So in the big picture it affects all stakeholders, but specifically it affects customers. They may receive the wrong items or no items at all.
5. Customers are what make the business run so of course they affect everyone and are critical to the success of this business, but *technically* their roles don't affect anyone else's roles. All other stakeholders can perform their duties without depending on the customers actions.

Prompt crafting:

Prompt crafting is essential in order to receive the best responses from an LLM. The more descriptive and specific you are, the better output you will get. From my understanding, zero shot prompting is when you provide an LLM with a task (that they haven't been explicitly trained on) without providing examples of the task itself. Careful prompting is quite the opposite. When you carefully craft your prompts to an LLM in order to guide the model on more complex tasks, you can receive a more accurate response, but it may take longer to prepare.

When comparing the two, zero-shot prompting may be better for simple, more general tasks while careful prompting can mold better to more complex tasks. Zero-shot prioritizes speed while careful prioritizes accuracy and relevance. Zero-shot is also cheaper since it is faster and efficient for resource constrained environments.

Use Cases:

UC1 Create new Item/Recipe

1.1 Preconditions

The WolfCafe user is authenticated as Staff or Admin

1.2 Main Flow

1. Staff selects "Create New Item."

2. Staff enters item or recipe name, description, and base price [S1]

3. Staff submits the form

4. The system saves the new item to catalog

5. Item is now visible to customers

1.3 Subflows

- [S1] Staff may add optional image of product

- [S2] Staff links item to existing ingredients

1.4 Alternative Flows

- [E1] An error message "Invalid price" is displayed if the user enters a price that is

  negative or blank

- [E2] A prompt is displayed to confirm or cancel the task if the item name is shared with another existing item

UC2 Add Inventory

2.1 Preconditions

The WolfCafe user is authenticated as Staff and the item the inventory applies to exists in the catalog

2.2 Main Flow

1. Staff selects "Manage Inventory"
2. Staff chooses an item
3. Staff enters amount to add
4. System updates the inventory

2.3 Subflows

- [S1] Staff scans barcode to identify them

2.4 Alternative Flows

- [E1] System rejects the input and an error message is displayed if a negative quantity is entered
- [E2] An error message is displayed if the item does not exist

UC3 Manage Staff Users

3.1 Preconditions

The WolfCafe user is authenticated as Administrator

3.2 Main Flow

1. Admin opens "User Management"
2. Admin selects "Add Staff" [S1]
3. Admin enters staff information (i.e. username, role, id)
4. System creates Staff account

3.3 Subflows

- [S1] Admin edits existing staff profile

- [S2] Admin deletes or deactivates staff account

3.4 Alternative Flows

- [E1] System rejects the input and an error message is displayed if the staff username already exists

- [E2] An error is displayed if there are missing required fields

UC4 Manage Customers

4.1 Preconditions

The WolfCafe user is authenticated as an Administrator

4.2 Main Flow

1. Admin opens "User Management"

2. Admin selects customer account

3. Admin edits details or deletes customer account [S1]

4. System saves changes

4.3 Subflows

- [S1] Admin resets customer password

4.4 Alternative Flows

- [E1] An error is displayed if the customer is not found

- [E2] Admin cancels operation.

UC5 Place Customer Order

5.1 Preconditions

The WolfCafe user is authenticated as a Customer [S1] and the inventory had available items

5.2 Main Flow

1. Customer browses products

2. Customer adds items to cart

3. Customer selects "Checkout" [S1]

4. Customer choose tip (15%, 20%, 25%, or custom)

5. System calculates and applies subtotal, tax, and total

6. Payment is rendered and the order is stored

5.3 Subflows

- [S1] Customer updates cart quantities (add or remove) after checkout out

5.4 Alternative Flows

- [E1] An error is displayed if the item is not in stock

- [E2] The order is not stored and and error is displayed if the payment fails

UC6 Fulfill Customer Order

6.1 Preconditions

The WolfCafe user is authenticated as Staff and there are stored, unfulfilled orders

6.2 Main Flow

1. Staff views pending order list

2. Staff selects an order

3. Staff prepares order

4. Staff marks order as fulfilled

5. Staff notifies Customer

6. System updates the order status

6.3 Subflows

- [S1] Staff prints out order ticket before preparing

6.4 Alternative Flows

- [E1] Staff cancels order selection if wrong order is selected

- [E2] The status will not be updated if there is a system error

UC7 Customer Pickup

7.1 Preconditions

The WolfCafe user is authenticated as a Customer and their order status is fulfilled

7.2 Main Flow

1. Customer see updated order status on screen

2. Customer approaches counter

3. Customer provides pickup code or confirmation

4. Staff verifies the customers order confirmation

5. Staff marks order as picked up

7.3 Subflows

- [S1] Customer confirms pickup via app

7.4 Alternative Flows

- [E1] There is an error message displayed if the customer provides the wrong code

- [E2] Order will be cancelled if the customer never pick it up

UC8 Set Sales Tax Rate

8.1 Preconditions

The WolfCafe user is authenticated as an Admin

8.2 Main Flow

1. Admin navigates to "Tax Settings"

2. Admin enters new tax rate [S1]

3. System validates input

4. System saves new tax rate

5. All future orders apply updated rate

8.3 Subflows

- [S1] Admin sets default NC tax rate (2.0%)

8.4 Alternative Flows

- [E1] The system rejects the input tax rate if it is invalid (>100% or negative)

- [E2] The system rejects the tax rate if it doesn't comply with the NC sales tax laws

UC9 View Order History (optional requirement)

9.1 Preconditions

The WolfCafe user is authenticated as a Customer and is logged in

9.2 Main Flow

1. Customer selects "Order History"

2. System displays past orders

3. Customer may review order details [S1]

9.3 Subflows

- [S1] Customer selects an order to repeat/repurchase

9.4 Alternative Flows

- [E1] There are no orders to review; system notifies customer

UC10 Anonymous Order (optional requirement)

10.1 Preconditions

The WolfCafe user is unauthenticated and considered a guest user

10.2 Main Flow

1. Guest browses menu

2. Guest adds items to cart [S1]

3. Guest proceeds to checkout and enters payment information [S2]

4. Order is stored as anonymous

10.3 Subflows

- [S1] Guest abandons cart and does not place an order

- [S2] Guest provides email to receive receipt of purchase

10.4 Alternative Flows

- [E1] Payment fails; no order created