Use Case ID: UC001

Scope: Website Registration

Primary Actor: New User

Stakeholders and Interests:
- New User: Wants to register on the website to access its features.
- System: Manages user registration and account creation.

Preconditions:
- The user is on the website's registration page.
- The website is accessible and operational.

Postconditions:
- Upon successful registration, the user is redirected to the sign-in page.
- If registration fails, appropriate error messages are displayed to the user.

Main Success Scenario:
1. The user enters registration information:
   - Email address
   - Password
   - Confirm Password

2. The system validates the user's input:
   - Ensures that the email address is in the correct format.
   - Checks if the email address is not already associated with an existing account.
   - Verifies that the password length is at least 6 characters.
   - Ensures that the password contains both alphanumeric characters and symbols.

3. If any validation fails, the system displays an error message and returns to step 1.

4. If all validation passes, the system creates a new user account using the provided email and password.

5. The system redirects the user to the sign-in page.

Extensions (Failure Scenarios):

1. Incorrect Email Format:
   - The system detects that the email format is incorrect.
   - The system displays an error message indicating the incorrect email format.
   - Return to step 1 of the Main Success Scenario.

2. Existing Account Detected:
   - The system identifies that the provided email is already associated with an existing account.

- The system displays an error message indicating that an account with that email already exists.
- Return to step 1 of the Main Success Scenario.

3. Password Length not Satisfied:
- The system finds that the provided password is less than 6 characters.
- The system displays an error message indicating that the password length is insufficient.
- Return to step 1 of the Main Success Scenario.

4. Password not Alphanumeric or Symbol:
- The system determines that the password does not meet the required conditions (e.g., lacks alphanumeric characters or symbols).
- The system displays an error message specifying the password requirements.
- Return to step 1 of the Main Success Scenario.

5. Server Error (Technical Issue):
- A technical issue occurs on the server-side.
- The system displays an error message indicating a server error.
- The user is prompted to try the registration process again later.

Special Requirements:
- The system must securely store user registration information, including the password (encrypted).

Assumptions:
- The user has access to a web browser and an internet connection.
- The website's registration page is accessible and functional.
- The user provides accurate and valid information during registration.

Notes:
- The use case includes error handling for common registration failures to provide a user-friendly experience.
- The system should implement appropriate security measures to protect user data.

Use Case ID: UC002

Scope: Website User Login

Primary Actor: Registered User

Stakeholders and Interests:
- Registered User: Wants to log in and access the menu for browsing.
- System: Manages user login and menu access.

Preconditions:
- The user is registered on the website.
- The website is accessible and operational.
- The user is on the website's login page.

Postconditions:
- Upon successful login, the user can access the menu and its prices.
- In case of login failure or server issues, appropriate error messages are displayed.

Main Success Scenario:
1. The user enters their login credentials:
   - Email address
   - Password

2. The system validates the user's credentials:
   - Verifies that the entered email and password match a registered user account.

3. If validation succeeds, the system grants access to the menu section of the website.

4. The user can browse through the menu and view prices.

Extensions (Failure Scenarios):

1. Incorrect Email or Password:
   - The system determines that the entered email or password is incorrect or does not match any registered user.
   - The system displays an error message indicating incorrect login credentials.
   - Return to step 1 of the Main Success Scenario.

2. Server Error (Login):
   - A technical issue occurs on the server-side during login.
   - The system displays an error message indicating a server error.
   - The user is prompted to try the login process again later.

3. Server Down (Menu Display):
   - The user has successfully logged in but encounters a server issue when trying to access the menu and prices.

- The system displays an error message indicating that the menu is currently unavailable due to server issues.
- The user is informed to try accessing the menu later.

Special Requirements:
- User passwords must be securely stored and compared during the login process.

Assumptions:
- The user has a valid registered account.
- The user provides accurate login credentials.
- The website's login page and menu display functions are operational.

Notes:
- Error handling is essential for providing a user-friendly experience during login and menu access.
- The system should implement appropriate security measures for user authentication and session management.

Use Case ID: UC003

Scope: Item Customization

Primary Actor: Logged-In User

Stakeholders and Interests:
- Logged-In User: Wants to customise items to suit their preferences.
- Canteen Owner: Approves or disapproves item customizations.
- System: Manages item customization and pricing.

Preconditions:
- The user is logged in.
- The user is on a page where customizable items are presented.
- The customizable item is available and indicated as such.

Postconditions:
- The user can customise the selected item.
- The customization is approved by the canteen owner.
- Prices are updated according to the customization.

Main Success Scenario:
1. The user selects a customizable item from the menu.

2. The system presents customization options, such as toppings, ingredients, or preparation preferences.

3. The user selects their desired customizations.

4. The system sends a customization request to the canteen owner.

5. The canteen owner reviews the customization request:
   - If approved, the canteen owner confirms the customizations.
   - If disapproved, the canteen owner provides a reason for rejection.

6. If approved, the system applies the customizations to the item and updates the price accordingly.

7. The user confirms the customization and proceeds to order the customised item.

Extensions (Failure Scenarios):

1. Item Not Customizable:
   - The user attempts to customise an item that is not indicated as customizable.
   - The system displays an error message indicating that the selected item is not customizable.
   - Return to step 1 of the Main Success Scenario.

2. Customization Not Approved:
   - The canteen owner disapproves the customization request.
   - The system displays an error message with the reason for rejection.
   - The user can choose to revert to the original item or make alternative customizations.

3. Server Error (Customization):
   - A technical issue occurs on the server-side during the customization process.
   - The system displays an error message indicating a server error.
   - The user is prompted to try the customization process again later.

Special Requirements:
- The system must support a range of customization options based on the type of item.
- Prices for customised items should be calculated and displayed accurately.
- The canteen owner must have a mechanism to review and approve customizations.

Assumptions:
- The user is logged in and authenticated.
- The customizable items are clearly identified on the menu.
- The canteen owner has the ability to approve or disapprove customizations.

Notes:
- Effective communication between the user, system, and canteen owner is crucial for a smooth customization process.
- Error handling and feedback should be user-friendly to provide a positive user experience.

Use Case ID: UC004

Scope: Cart Management

Primary Actor: Logged-In User

Stakeholders and Interests:
- Logged-In User: Wants to manage the items in their cart by adding or removing items.
- System: Manages the cart and ensures accurate updates.
- Inventory System: Provides the availability of items for purchase.

Preconditions:
- The user is logged in.
- The user has items in their cart.
- The items selected are available in the inventory.

Postconditions:
- The user's cart is updated with the selected items and quantities.
- The total price reflects the changes in the cart.
- The user can proceed to view their final order or continue shopping.

Main Success Scenario:
1. The user navigates to the cart section of the website.

2. The user selects a menu item from their cart.

3. The user specifies the quantity by:
   - Selecting '+' to add an item to the cart.
   - Selecting '-' to remove an item from the cart.

4. The system updates the cart contents and recalculates the total price based on the changes.

5. The user can review the updated cart or continue shopping.

Extensions (Failure Scenarios):

1. Server Error (Cart Management):
   - A technical issue occurs on the server-side during cart management.
   - The system displays an error message indicating a server error.
   - The user is prompted to try cart management again later.

2. Item Quantity Exceeds Availability:
   - The user attempts to add more items to the cart than what is available in the inventory.
   - The system displays an error message indicating that the requested quantity is not available.
   - Return to step 3 of the Main Success Scenario.

Special Requirements:
- The system must accurately track item availability in real-time.
- Price calculations must reflect the changes in the cart.

Assumptions:
- The user is logged in and authenticated.
- The user has items in their cart.
- The selected items are available in the inventory.

Notes:
- Error handling and feedback should be user-friendly to ensure a positive user experience.
- Real-time inventory tracking is essential to prevent reordering.

Use Case ID: UC005

Scope: Order Confirmation and Payment

Primary Actor: Logged-In User

Stakeholders and Interests:
- Logged-In User: Wants to confirm and pay for the items in their cart to complete an order.
- System: Manages the order and payment process.
- Payment Gateway: Handles online payment processing.
- Bank: Processes the payment transaction.

Preconditions:
- The user is logged in.
- The user has items in their cart.
- The cart is not empty.
- The online payment gateway is operational.
- The user has sufficient funds in their bank account.

Postconditions:
- The order is confirmed, and the payment is processed.
- The user receives a confirmation message.
- The inventory is updated to reflect the order.

Main Success Scenario:
1. The user navigates to the cart section of the website.

2. The user reviews the items in their cart and confirms the order.

3. The user selects the "Pay" option.

4. The system initiates an online payment transaction through the payment gateway.

5. The payment gateway processes the transaction and communicates with the user's bank.

6. The bank verifies the transaction and deducts the appropriate amount from the user's account.

7. The system updates the order status to "Confirmed" and notifies the user with a success message.

Extensions (Failure Scenarios):

1. Empty Cart:
   - The user attempts to confirm and pay for an empty cart.
   - The system displays an error message indicating that the cart is empty.

- The user is prompted to add items to the cart before proceeding.

2. Payment Gateway Down:
- The online payment gateway is temporarily unavailable.
- The system displays an error message indicating that online payment is not possible at the moment.
- The user is prompted to try the payment process again later.

3. Insufficient Funds:
- The user's bank account does not have sufficient funds to complete the transaction.
- The bank declined the payment request.
- The system displays an error message indicating insufficient funds.
- The user is informed to add funds to their account or use an alternative payment method.

Special Requirements:
- Integration with a secure and reliable online payment gateway.
- Real-time communication with the user's bank for payment verification.

Assumptions:
- The user is logged in and authenticated.
- The user has items in their cart and has reviewed the order.
- The online payment gateway is operational and reliable.
- The user has sufficient funds in their bank account.

Notes:
- Secure handling of payment information is critical for user trust and security.
- Error messages should provide clear guidance

Use Case ID: UC006

Scope: Order Status Tracking

Primary Actor: Logged-In User

Stakeholders and Interests:
- Logged-In User: Wants to view and track the status of their food order.
- System: Manages order status and provides tracking information.
- Canteen Owner: Provides order status updates.

Preconditions:
- The user is logged in.
- The user has placed and paid for an order.
- The order is in progress.
- The system and server are operational.

Postconditions:
- The user can view the order status and collect the order when it is completed.
- The order status reflects real-time updates provided by the canteen owner.

Main Success Scenario:
1. The user navigates to the order status tracking section of the website.

2. The system displays the current status of the user's order, such as "Preparing" or "Ready for Pickup."

3. If the order status is "Preparing," the system provides an estimated time for completion.

4. The user can monitor the order status and wait until it is marked as "Ready for Pickup."

5. When the order status changes to "Ready for Pickup," the user is notified.

6. The user collects the order based on the notification or tracking information.

Extensions (Failure Scenarios):

1. Server Error (Order Status):
   - A technical issue occurs on the server-side during order status tracking.
   - The system displays an error message indicating a server error.
   - The user is prompted to try tracking the order status again later.

2. Canteen Owner Delay:
   - The canteen owner does not provide timely updates on the order status.
   - The system cannot display real-time information.
   - The user may need to wait longer than expected for updates.

Special Requirements:
- Real-time communication between the canteen owner and the system for order status updates.
- Display of estimated completion time for orders in progress.

Assumptions:
- The user is logged in and authenticated.
- The user has placed and paid for an order.
- The canteen owner actively updates order statuses.

Notes:
- Accurate and timely order status updates are crucial for user satisfaction.

Use Case ID: UC007

Scope: User Feedback and Reviews

Primary Actor: Logged-In User

Stakeholders and Interests:
- Logged-In User: Wants to provide feedback and reviews on food items.
- System: Manages user reviews and notifies canteen owners.
- Canteen Owners: Receive user reviews for their food items.

Preconditions:
- The user is logged in.
- The user has ordered and consumed food items.
- The system and server are operational.
- The food items are sold by canteen owners.

Postconditions:
- The user's feedback and reviews are submitted.
- Canteen owners receive notifications of user reviews.
- Reviews are visible to other users.

Main Success Scenario:
1. The user navigates to the review section of the website.

2. The user selects a food item they have ordered and consumed.

3. The user provides a review for the selected food item, limited to 200 characters.

4. The system validates the review length and content.

5. On successful submission, the system stores the user's review and notifies the relevant canteen owner.

6. The user's review is visible to other users interested in the same food item.

Extensions (Failure Scenarios):

1. Review Length Exceeds Limit:
   - The user attempts to submit a review longer than 200 characters.
   - The system displays an error message indicating that the review must be 200 characters or less.
   - Return to step 3 of the Main Success Scenario.

2. Server Error (Review Submission):
   - A technical issue occurs on the server-side during review submission.
   - The system displays an error message indicating a server error.

- The user is prompted to try submitting the review again later.

Special Requirements:
- Limiting user reviews to 200 characters to ensure concise feedback.
- Notification mechanism for canteen owners to receive and view user reviews.

Assumptions:
- The user is logged in and authenticated.
- The user has ordered and consumed the food item.
- Canteen owners are notified promptly of user reviews.

Notes:
- User reviews can help improve the quality of food items and provide valuable insights for other users.

Use Case ID: UC008

Scope: Menu Management by Canteen Owner

Primary Actor: Canteen Owner

Stakeholders and Interests:
- Canteen Owner: Wants to manage the items available on the menu.
- System: Manages the menu items and their availability to users.

Preconditions:
- The canteen owner is logged in.
- The canteen owner has access to the menu management section.
- The system and server are operational.

Postconditions:
- Menu items are added or removed based on the canteen owner's actions.
- Users can only order items that are available on the menu.

Main Success Scenario:
1. The canteen owner navigates to the menu management section of

the website.

2. The canteen owner can view the current menu items and their availability.

3. To add an item to the menu, the canteen owner provides item details such as name, description, and price.

4. To remove an item from the menu, the canteen owner selects the item to be removed.

5. The system updates the menu based on the canteen owner's actions.

Extensions (Failure Scenarios):

1. Server Error (Menu Management):
   - A technical issue occurs on the server-side during menu management.
   - The system displays an error message indicating a server error.
   - The canteen owner is prompted to try menu management again later.

Special Requirements:
- The system must ensure that users can only order items that are available on the menu.
- Menu management should be straightforward and user-friendly for canteen owners.

Assumptions:
- The canteen owner is logged in and authenticated.
- The canteen owner has the necessary permissions to manage the menu.

Notes:
- Effective menu management ensures that users can only order items that are currently offered by the canteen.

Use Case ID: UC009

Scope: Price Management by Canteen Owner

Primary Actor: Canteen Owner

Stakeholders and Interests:
- Canteen Owner: Wants to update the prices of menu items to reflect changes.
- System: Manages the menu and displays updated prices to users.

Preconditions:
- The canteen owner is logged in.
- The canteen owner has access to the price management section.
- The system and server are operational.

Postconditions:
- The updated prices for menu items are displayed on the website.

Main Success Scenario:
1. The canteen owner navigates to the price management section of the website.

2. The canteen owner selects a menu item for which the price needs to be updated.

3. The canteen owner enters the new price for the selected item.

4. The system updates the menu with the new price for the item.

5. The updated price is now displayed on the website for users to see.

Extensions (Failure Scenarios):

1. Server Error (Price Update):
   - A technical issue occurs on the server-side during price update.
   - The system displays an error message indicating a server error.
   - The canteen owner is prompted to try updating the price again later.

Special Requirements:
- The system must ensure that updated prices are reflected accurately to users.

Assumptions:
- The canteen owner is logged in and authenticated.
- The canteen owner has the necessary permissions to update prices.

Notes:
- Accurate pricing information is essential for transparent transactions with users.

Use Case ID: UC010

Scope: Order Processing by Canteen Owner

Primary Actor: Canteen Owner

Stakeholders and Interests:
- Canteen Owner: Wants to receive and process orders for food preparation and delivery.
- System: Manages order details and communicates them to the canteen owner.

Preconditions:
- The canteen owner is logged in.
- The system and server are operational.
- Users have placed orders.

Postconditions:
- The canteen owner receives order details, including user information and food customization.

Main Success Scenario:
1. The canteen owner navigates to the order management section of the website.

2. The canteen owner views a list of pending orders with details.

3. The system presents order details, including user information and food customization.

4. The canteen owner reviews the orders, noting the order of arrival.

5. Food is prepared based on the order details and customization provided.

Extensions (Failure Scenarios):

1. Server Error (Order Reception):
   - A technical issue occurs on the server-side during order reception.
   - The system displays an error message indicating a server error.
   - The canteen owner is prompted to try receiving orders again later.

Special Requirements:
- Efficient sorting of orders to ensure a first-come-first-serve basis for food preparation.

Assumptions:
- The canteen owner is logged in and authenticated.
- Users have placed orders for food items.

Notes:
- Timely order processing is crucial to ensure customer satisfaction.

Use Case ID: UC011

Scope: Order Status Management by Canteen Owner

Primary Actor: Canteen Owner

Stakeholders and Interests:
- Canteen Owner: Wants to change the status of an order to notify the user.
- System: Manages order status updates and communicates them to users.

Preconditions:
- The canteen owner is logged in.
- Orders have been successfully received.
- The system and server are operational.

Postconditions:
- The order status is updated, and the user is notified accordingly.

Main Success Scenario:
1. The canteen owner navigates to the order status management section of the website.

2. The canteen owner selects an order for status update.

3. The canteen owner updates the status of the selected order, such as "Preparing" or "Ready for Pickup."

4. The system communicates the updated status to the user associated with the order.

5. The user is notified of the status change.

Extensions (Failure Scenarios):

1. Server Error (Status Update):
   - A technical issue occurs on the server-side during status update.
   - The system displays an error message indicating a server error.
   - The canteen owner is prompted to try updating the status again later.

Special Requirements:
- Timely communication of order status updates to users.

Assumptions:
- The canteen owner is logged in and authenticated.
- Orders have been successfully received and processed.

Notes:
- Clear and timely status updates enhance the user experience and order tracking.