

Restaurant Management System

Introduction:

The Restaurant Management System is a web-based system that allows User to search, order and rate food item, and Admin can manage menu and order. This document outlines the use cases of the application, describing the interactions between actors and the system.

Actors:

Admin: The administrative user who has overall control on the menu, inventory and order management functionalities.

Customer: The customer who can search, order and rate food of their choice.

Chef: The chef who can manage inventory such as add request item, update request item and view request status updated by the admin.

USE CASE 1

Use Case Name: Manage Menu
Brief Description: This use case allows the admin to manage the menu items available in the restaurant.
Actors: Administrator
Preconditions: <ul style="list-style-type: none">• The restaurant management system is operational.• The actor has the necessary credentials to access the system.
Main Flow: <ol style="list-style-type: none">1. The administrator logs into the restaurant management system using their credentials.2. The system presents the administrative dashboard or menu management section.3. The administrator selects the option to manage menu items.4. The actors select one of the following:<ul style="list-style-type: none">• Add a new food item to the menu.• Update an existing food item to the menu.• Remove a food item.5. If the actor chooses to add new food item:<ul style="list-style-type: none">• The actor provides necessary details such as item name, description, category and price.• The system validates the input.• The system adds the new food item to the menu.6. If the actor chooses to update an existing food item:<ul style="list-style-type: none">• The actor selects the food item to be updated.• The system displays the current details of the selected food item.• The actor modifies the necessary details such as name, description, category, price, or availability.• The system validates the input.• The system updates the food item with the modified details.7. If the actor chooses to remove a food item:<ul style="list-style-type: none">• The actor selects the food item to be removed.• The system confirms the deletion with the actor.• The system removes the selected food item from the menu.8. The system saves the changes made to the menu.9. The system displays a confirmation message to the actor.
Postconditions: <ul style="list-style-type: none">• The Menu Items are updated with the changes made by the actor.• The updated Menu is available to customer.
Alternate Flows: <ul style="list-style-type: none">• At any step, the actor can choose to cancel the operation, returning to the main menu

USE CASE 2

Use Case Name: Manage Order
Brief Description: This use case involves the process of managing customer orders within a restaurant management system. It allows the administrator to view the order details, and the chef to update the order status for the customer.
Actors: Administrator, Chef
Preconditions: <ul style="list-style-type: none">• The restaurant management system is operational.• The actor has the necessary credentials to access the system.
Main Flow: <ol style="list-style-type: none">1. The customer places an order through the restaurant's ordering system or by phone.2. The system displays the list of orders to the actors.3. The admin and chef can view the list of items that are ordered by the customers and analytics on it.4. The chef updates the order status based on its progress, such as:<ul style="list-style-type: none">• Marking the order as "pending" when the order is yet to be started.• Marking the order as "preparing" when they start preparing the items.• Marking the order as "cooked" when the items are ready for serving.• Marking the order as "delivered" when it has been handed over to the customer.5. The order management system reflects the updated order status.6. Both the administrator and chef can view the updated order details and status.
Postconditions: <ul style="list-style-type: none">• The Order Items are updated with the changes made by the actor.• The updated Status is available to customer.
Alternate Flows: <ul style="list-style-type: none">• If the administrator or chef encounters any technical issues or errors while managing orders, they can seek technical support or troubleshoot the problem.

USE CASE 3

Use Case Name: Search Food
Brief Description: This use case describes the process of searching for specific food items or dishes within a restaurant management system.
Actors: Customer
Preconditions: <ul style="list-style-type: none">• The restaurant management system is operational.• The actor has the necessary credentials to access the system.
Main Flow: <ol style="list-style-type: none">1. The customer navigates to the search functionality within the system.2. The customer enters keywords or filters to search for specific food items or dishes, such as cuisine type, keyword, or dietary preference.3. The system processes the search query and retrieves relevant results based on the entered text.4. The customer can select a specific search result to view detailed information about the food item or dish.
Postconditions: <ul style="list-style-type: none">• The customer can view detailed information about the searched food items or dishes.• The customer can add the selected food item or dish to their order if desired.• The customer can proceed with the checkout process or continue exploring other options.
Alternate Flows: <ul style="list-style-type: none">• If the search query does not yield any results, the system can display appropriate messages or suggestions to the customer, encouraging them to try different keywords or browse through available categories.• If the customer encounters any technical issues or errors during the search process, they can seek technical support or troubleshoot the problem.

USE CASE 4

Use Case Name: Manage Cart
Brief Description: This use case describes the process of managing the cart within a restaurant management system. The cart represents the items selected by the customer for their order.
Actors: Customer
Preconditions: <ul style="list-style-type: none">• The restaurant management system is operational.• The actor has the necessary credentials to access the system.
Main Flow: <ol style="list-style-type: none">1. The customer accesses the system through qr code or link provided.2. The customer browses the restaurant menu and selects items to add to the cart.3. The customer can modify the quantity of items already in the cart by adjusting the quantity field or using plus/minus buttons.4. The system recalculates the subtotals and updates the total cost of the cart based on the modified quantities.5. The customer can remove specific items from the cart by selecting the corresponding remove or delete option.6. The system updates the cart by removing the selected items and adjusts the total cost accordingly.7. The customer can review the final cart, ensuring that the selected items and quantities are accurate.8. The customer can proceed to checkout by selecting the checkout option or continue shopping to add more items.
Postconditions: <ul style="list-style-type: none">• The customers cart Items are updated with the changes made by the actor.
Alternate Flows: <ul style="list-style-type: none">• If the customer encounters any technical issues or errors while managing the cart, they can seek technical support or troubleshoot the problem.• If the customer decides not to proceed with the selected items in the cart, they can clear the cart or cancel the order process.

USE CASE 5

Use Case Name: Place Order
Brief Description: This use case describes the process of placing an order within a restaurant management system. It enables customers to select menu items, customize their order, and request delivery.
Actors: Customer
Preconditions: <ul style="list-style-type: none">• The restaurant management system is operational.• The actor has the necessary credentials to access the system.
Main Flow: <ol style="list-style-type: none">1. Review Order:<ul style="list-style-type: none">• The customer reviews the complete order, including the selected items and any customizations.• The system displays a summary of the order, including the item names, quantities, prices, and any additional notes or special request.• The customer can select the option to dine in or pick up.• The customer receives the order confirmation and waits for the food to be prepared or proceed to the restaurant for pickup based on the selected option.
Postconditions: <ul style="list-style-type: none">• The customer has successfully placed an order.• The order details are recorded in the restaurant management system.• The customer receives an order confirmation or receipt.• The chef can process the order for dine in or pickup based on the provided information
Alternate Flows: <ul style="list-style-type: none">• If the customer encounters any technical issues or errors during the order placement process, they can seek technical support or troubleshoot the problem.• If the customer decides to cancel the order before completing the payment or checkout process, they can cancel the order and exit the ordering flow.

USE CASE 6

Use Case Name: Rate Food
Brief Description: This use case involves the process of customers providing ratings for the food items they have ordered. It allows customers to share their feedback and experiences with the restaurant management system.
Actors: Customer
Preconditions: <ul style="list-style-type: none">• The restaurant management system is operational.• The actor has the necessary credentials to access the system.• The actor has placed an order or visited the restaurant.
Main Flow: <ol style="list-style-type: none">1. The customer navigates to the order history or order details section, where the previously placed orders are displayed.2. The customer selects the specific order for which they want to provide a rating.3. The system presents the order details, including the food items from the selected order.4. The customer selects the food item they want to rate from the displayed list.5. The system displays a rating interface for the selected food item, allowing the customer to provide a rating.6. The customer selects the rating they want to assign to the food item.
Postconditions: <ul style="list-style-type: none">• The customer has provided a rating for the selected food item.• The rating is recorded in the restaurant management system.
Alternate Flows: <ul style="list-style-type: none">• If the customer encounters any technical issues or errors while providing the rating, they can seek technical support or report the problem.• If the customer wants to provide ratings for multiple food items from the same order, they can repeat steps 5-12 for each item separately.• The restaurant management system may use the provided ratings and feedback to improve the quality of the food items and overall customer experience.

USE CASE 7

Use Case Name: Manage Inventory
Brief Description: This use describes the process of managing inventory within a restaurant management system, The chef can add a new inventory item to the system.
Actors: Chef, Administrator
Preconditions: <ul style="list-style-type: none">• The restaurant management system is operational.• The actor has the necessary credentials to access the system.
Main Flow: <ol style="list-style-type: none">1. The chef accesses the restaurant management system.2. The system presents the inventory management interface or section.3. The chef selects the option to make a new inventory request.4. The system prompts the chef to provide details about the requested inventory item.5. The chef can update the item list that is send to the admin or add additional items.6. The system records the inventory request and notifies the administrator about the new request.7. The admin can view the request send by the chef and update the request status such as “Pending”, “Approved”, “Delivered”,” Denied”.8. The chef can view the request status updated by the admin such as “Pending”, “Approved”,“Delivered”,” Denied”.
Postconditions: <ul style="list-style-type: none">• The chef has successfully made an inventory request, and the administrator has either approved or denied it.
Alternate Flows: <ul style="list-style-type: none">• If the chef or administrator encounters any technical issues or errors during the inventory request process, they can seek technical support or troubleshoot the problem.• The administrator may need to coordinate with the chef to gather additional information or clarify details related to the inventory request.• The administrator may apply budget constraints, inventory availability, or other business rules when evaluating and approving inventory requests.

USE CASE 8

Use Case Name: View Rate
Brief Description: The restaurant can view and analyze these rating to improve the service.
Actors: Admin, Customer
Preconditions: <ul style="list-style-type: none">• The restaurant management system is operational.• The actor has the necessary credentials to access the system.• The actor has placed an order or visited the restaurant.
Main Flow: <ol style="list-style-type: none">1. The admin and customer can view the rating for a specific food item.2. The administrator can use the ratings to make data-driven decisions and take actions to enhance the restaurant's service, menu, or overall customer experience.
Postconditions: <ul style="list-style-type: none">• Rating provided by customers are recorded and associated with the respective food item.• If the administrator encounters any technical issues or errors while viewing the ratings, they can seek technical support or troubleshoot the problem.• The administrator may communicate with customers to gather additional feedback or seek clarification on their ratings if necessary.
Alternate Flows: <ul style="list-style-type: none">• If the administrator encounters any technical issues or errors while viewing the ratings, they can seek technical support or troubleshoot the problem.• The administrator may communicate with customers to gather additional feedback or seek clarification on their ratings if necessary.

USE CASE 9

Use Case Name: Manage chef
Brief Description: This use case allows the admin to add the details of the chef.
Actors: Administrator, Chef
Preconditions: <ul style="list-style-type: none">• The restaurant management system is operational.• The actor has the necessary credentials to access the system.
Main Flow: <ol style="list-style-type: none">1. The administrator accesses the restaurant management system.2. The system presents the chef management interface or section.3. The administrator selects the option to add a new chef.4. The system prompts for relevant information about the new chef.5. The administrator enters the required information for the new chef.6. The system validates the entered information and adds the new chef to the system.7. Optionally, the system may generate a unique identifier or code for the chef.8. The administrator can view the updated chef list, which now includes the newly added chef.
Postconditions: <ul style="list-style-type: none">• A new Chef user is made in the database.• The administrator has successfully managed chef details by adding new chefs to the system.• The chef login can be done by respective user id with the chef role.
Alternate Flows: <ul style="list-style-type: none">• If the administrator encounters any technical issues or errors during the chef management process, they can seek technical support or troubleshoot the problem.