# Functional Requirement

Function Requirement 1: Register User

- Input: Username, password, contact details, etc.

- Output: Success or error message (e.g., username already exists, invalid data).

- Description: System provides a registration form. After validation, user data are saved and a result is returned.

Function Requirement 2: Delete User

- Input: Administrator’s target user account.

- Output: Success or error message (e.g., deletion failed).

- Description: Administrators remove the user; system confirms and returns the outcome.

Function Requirement 3: Add Restaurant

- Input: Restaurant name, address, opening hours, etc.

- Output: Success or error message (e.g., required fields missing).

- Description: Administrators add new restaurants; the system validates and saves the data.

Function Requirement 4: Delete Restaurant

- Input: Administrator’s target restaurant.

- Output: Success or error message (e.g., outstanding orders exist).

- Description: Administrators delete restaurants; the system removes the record if no unfinished orders.

Function Requirement 5: Manage Restaurant

- Input: Updated restaurant details (e.g., address, hours).

- Output: Success or error message (e.g., invalid address format).

- Description: Administrators edit restaurant info; validated changes are saved.

Function Requirement 6: Add Dish

- Input: Dish name, price, image, etc.

- Output: Success or error message (e.g., negative price).

- Description: Restaurant admins add dishes; validated data are stored.

Function Requirement 7: Delete Dish

- Input: Restaurant admin’s target dish.

- Output: Success or error message (e.g., dish has pending orders).

- Description: Restaurant admins delete dishes; the system removes the record if no pending orders.

Function Requirement 8: Modify Dish

- Input: Updated dish details (e.g., price, description).

- Output: Success or error message (e.g., negative price).

- Description: Restaurant admins edit dish info; validated changes are saved.

Function Requirement 9: View Dish Details

- Input: User’s target dish.

- Output: Dish details (image, price, description) or error (dish not found).

- Description: Users view full dish information.

Function Requirement 10: Create Order

- Input: Dishes and total from the cart.

- Output: Order-created success or error (empty cart).

- Description: Users create orders from the cart page.

Function Requirement 11: Delete Order

- Input: User’s target order.

- Output: Deletion success or error (order not in “Pending Payment”).

- Description: Users delete orders in “Pending Payment” state.

Function Requirement 12: View Order

- Input: User’s target order.

- Output: Order details (dishes, total, status) or error (order not found).

- Description: Users view full order information.

Function Requirement 13: Modify Order

- Input: Updated delivery address or notes.

- Output: Update success or error (order not in “Pending Payment”).

- Description: Users edit orders in “Pending Payment” state.

Function Requirement 14: Add to Cart

- Input: User’s target dish.

- Output: Success or error (insufficient stock).

- Description: Users add dishes to the cart.

Function Requirement 15: Remove from Cart

- Input: User’s target dish.

- Output: Success or error (dish not found).

- Description: Users remove dishes from the cart.

Function Requirement 16: Manage Cart

- Input: User actions (adjust quantity, clear cart).

- Output: Update success or error (cart empty).

- Description: Users manage cart contents in real time.

Function Requirement 17: Initiate Payment

- Input: Order and payment method.

- Output: Payment success or error (insufficient balance, network failure).

- Description: Users pay for orders; system calls payment gateway and updates order status.

Function Requirement 18: Cancel Payment

- Input: Target order.

- Output: Cancellation success or error (payment already completed).

- Description: Users cancel ongoing payments; order status reverts.

Function Requirement 19: Post Review

- Input: User’s rating and comment.

- Output: Success or error (empty content).

- Description: Users publish reviews after validation.

Function Requirement 20: Manage Reviews

- Input: Admin-selected review and action (edit/delete).

- Output: Success or error (sensitive content).

- Description: Admins moderate reviews.

Function Requirement 21: Manage Payment Records

- Input: Admin-selected record and action (view, edit, export).

- Output: Success or error (record not found).

- Description: Admins query, edit, or export payment records.

Function Requirement 22: Create Administrator

- Input: Username, password, permission level.

- Output: Success or error (username exists).

- Description: Super-admins create new admin accounts.

Function Requirement 23: Delete Administrator

- Input: Super-admin’s target administrator.

- Output: Success or error (deletion failed).

- Description: Super-admins remove administrators.