# Functional Requirement

1.1 User Registration & Login

Input: username, password, email address, mobile number

Output: success / failure message

Function:

New users can create an account by entering a username, password, email address and mobile number.

Registered users can log in with their username and password.

The system supports identity verification via email or SMS.

Quick login via social accounts (e.g., WeChat, Facebook) is supported.

Users can reset their password and receive reset links via email or SMS.

1.2 Browse Restaurant Menu

Input: none

Output: restaurant menu display

Function:

Users can browse the menus of all available restaurants in the system.

Each menu shows dish name, price, image, description, rating, etc.

Users can filter dishes by category (e.g., Chinese, Western, vegetarian).

Users can view detailed restaurant information such as opening hours, location and contact details.

The system supports sorting restaurants by distance, price and rating.

1.3 Shopping-Cart Management

Input: dish ID, quantity

Output: updated cart content

Function:

Users can add dishes to the shopping cart.

Users can modify the quantity of dishes in the cart.

Users can remove dishes from the cart.

Batch operations such as “select all” or “delete all” are supported.

The cart displays the total price and estimated delivery time.

Users can save dish combinations in the cart for quick reordering next time.

1.4 Order Placement & Payment

Input: delivery address, payment method

Output: order confirmation page

Function:

When placing an order, users choose a delivery method (pickup or delivery).

Users enter or select a saved delivery address.

Users can choose a payment method (e.g., credit card, Alipay, WeChat Pay).

A preview page is provided; payment starts after confirmation.

Multi-language payment pages are supported.

Coupons or discount codes can be applied to reduce the order amount.

Installment payment is supported.

1.5 Order Status Tracking

Input: none

Output: real-time order status updates

Function:

Users can view the current status of orders in “My Orders”, e.g., “Waiting for acceptance”, “Preparing”, “Out for delivery”, “Completed”.

Real-time push notifications inform users of status changes.

Users can check order history, including completed orders.

Users can cancel unprocessed orders.

1.6 Rating & Feedback

Input: review content, rating

Output: submission success / failure message

Function:

Users can rate and review dishes and service for their past orders.

Users can submit feedback about the system.

Both reviews and feedback support image uploads.

System administrators can reply to user feedback.

Users can view other users’ reviews and feedback.

1.7 Offers & Promotions

Input: none

Output: display of promotional information

Function:

The system lists currently available coupons and discount codes.

Users can collect coupons and apply them to orders.

Holiday promotions such as “spend-and-save” or “buy-one-get-one” are supported.

Users can view the history of coupon usage.

1.8 User Profile Management

Input: user information

Output: updated user information

Function:

Users can edit personal details such as name, phone number and email address.

Users can set payment preferences, e.g., default payment method.

Users can manage delivery addresses—add, delete and edit.

Users can view historical order records.

Users can view and manage favorite restaurants and dishes.

1.9 Customer Support

Input: user question

Output: solution or contact to customer service

Function:

Users can submit questions or request help.

A FAQ section is provided.

Users can contact customer service via live chat, phone or email.

A ticket system tracks the progress of issue resolution.

1.10 Restaurant Management

Input: restaurant information, menu information

Output: updated restaurant information

Function:

Restaurant admins can log in and manage their restaurant profile.

Admins can update the menu—add, delete or modify dish information.

Admins can view and process orders.

Admins can read user reviews and feedback.

Admins can set up promotional campaigns.

1.11 Map & Navigation

Input: user current location

Output: navigation route

Function:

Integrated map services provide navigation to restaurant locations.

Users can view nearby restaurant locations.

The system gives navigation guidance for pickup orders.

1.12 Recommendation System

Input: user behavior data

Output: recommended dishes and restaurants

Function:

Based on historical orders, browsing history and reviews, the system recommends suitable dishes and restaurants.

Users can set recommendation preferences such as taste and price range.

A personalized recommendation page is provided.