Requirements Analysis and User Stories

Functional Requirements

FR-001 (Priority: High)
Customer mobile app for browsing restaurants and ordering food.

FR-002 (Priority: High)
Restaurant partner app for managing orders and menu.

FR-003 (Priority: High)
Delivery driver app with GPS navigation.

FR-004 (Priority: High)
Real-time order tracking with map view.

FR-005 (Priority: High)
Multiple restaurant search with cuisine filters.

FR-006 (Priority: Medium)
Rating and review system for restaurants and delivery.

FR-007 (Priority: Medium)
Scheduled ordering for future delivery.

FR-008 (Priority: Medium)
Group ordering functionality.

FR-009 (Priority: High)
Menu management for restaurants.

FR-010 (Priority: High)
Order acceptance functionality for restaurants.

FR-011 (Priority: Medium)
Inventory management for restaurants.

FR-012 (Priority: High)
Delivery partners to accept deliveries.

FR-013 (Priority: High)
Delivery partners to navigate to customer.

FR-014 (Priority: High)
Delivery partners to update delivery status.

FR-015 (Priority: High)
Platform management by administrators.

FR-016 (Priority: Medium)
Dispute resolution by administrators.

FR-017 (Priority: Medium)
Analytics dashboard for administrators.

FR-018 (Priority: High)

Support for credit/debit card payments.

FR-019 (Priority: High)
Support for digital wallet payments.

FR-020 (Priority: High)
Support for UPI payments.

FR-021 (Priority: Medium)
Support for cash on delivery.

FR-022 (Priority: Medium)
Split payment functionality for group orders.

FR-023 (Priority: Medium)
Wallet system with rewards and cashback.

FR-024 (Priority: High)
Automated payment to restaurants and delivery partners.

FR-025 (Priority: Medium)
Dynamic pricing based on demand and distance.

FR-026 (Priority: Medium)
Surge pricing during peak hours.

FR-027 (Priority: Medium)
Promotional campaigns and referral system.

FR-028 (Priority: Medium)
Loyalty program for frequent customers.

FR-029 (Priority: High)
Commission calculation for restaurants.

FR-030 (Priority: High)
Web admin panel for operations management.

Non-Functional Requirements

NFR-001 - performance
Support concurrent users.
Metric: 100,000+ concurrent users during peak hours

NFR-002 - performance
Order placement processing time.
Metric: Within 2 seconds

NFR-003 - performance
Real-time GPS tracking update interval.
Metric: 5-second update intervals

NFR-004 - performance
Push notification delivery time.
Metric: Within 1 second

NFR-005 - availability
Uptime during business hours.
Metric: 99.9%

NFR-006 - security

Data protection.

Metric: Data encryption for payment information

NFR-007 - legal

User data privacy.

Metric: GDPR compliance for user data

NFR-008 - scalability

Infrastructure scalability.

Metric: Scalable infrastructure to handle seasonal spikes

NFR-009 - usability

Support for multiple languages.

Metric: Multi-language support for different regions

User Stories

US-001 (Priority: High, Points: 5)

As a Customer

I want to browse restaurants in my area

So that I can easily find a place to order food from.

Acceptance Criteria:

  - The app displays a list of restaurants based on my location.
  - I can filter restaurants by cuisine type.
  - I can see restaurant ratings and reviews.
  - The list is sorted by distance, rating, or popularity.

US-002 (Priority: High, Points: 8)

As a Customer

I want to place an order from a restaurant

So that I can get the food I want delivered to my location.

Acceptance Criteria:

  - I can view the restaurant's menu with descriptions and prices.
  - I can add items to my order.
  - I can specify delivery address and time.
  - I can pay using various payment methods.
  - I receive an order confirmation with estimated delivery time.

US-003 (Priority: High, Points: 5)

As a Restaurant Partner

I want to manage my menu

So that I can keep it up-to-date and reflect changes in offerings.

Acceptance Criteria:

  - I can add new menu items with descriptions, prices, and images.
  - I can edit existing menu items.
  - I can categorize menu items into sections.
  - I can mark items as unavailable or sold out.

US-004 (Priority: High, Points: 5)

As a Restaurant Partner

I want to accept or reject incoming orders

So that I can control which orders I can fulfill based on my capacity.

Acceptance Criteria:

  - I receive a notification when a new order is placed.
  - I can view order details, including items, customer address, and total price.
  - I can accept or reject the order within a specified time frame.
  - The customer receives a notification of the order status.

US-005 (Priority: High, Points: 3)

As a Delivery Partner

I want to accept delivery requests

So that I can start delivering orders.

Acceptance Criteria:

  - I receive a notification when a new delivery request is available.
  - I can view the pickup and delivery addresses.
  - I can see the estimated delivery time and compensation.
  - I can accept or reject the delivery request.

US-006 (Priority: High, Points: 5)

As a Delivery Partner

I want to navigate to the restaurant and customer location using GPS

So that I can deliver orders efficiently.

Acceptance Criteria:

- The app provides turn-by-turn navigation to the pickup location.
- The app provides turn-by-turn navigation to the delivery location.
- The app integrates with a reliable GPS service.
- The navigation updates in real-time.

US-007 (Priority: High, Points: 3)

As a Delivery Partner

I want to update the order status

So that the customer is informed about the delivery progress.

Acceptance Criteria:

- I can mark the order as 'Picked Up', 'En Route', and 'Delivered'.
- The customer receives real-time updates on the order status.
- The system accurately logs the time of each status change.

US-008 (Priority: High, Points: 5)

As a Customer

I want to track my order in real-time on a map

So that I know where my food is and when it will arrive.

Acceptance Criteria:

- I can see the delivery partner's location on a map.
- I can see the estimated delivery time.
- The map updates in real-time as the delivery partner moves.
- The map shows the route taken by the delivery partner.

US-009 (Priority: High, Points: 8)

As a Administrator

I want to manage the platform

So that I can ensure the smooth operation of the application.

Acceptance Criteria:

- I can manage user accounts (add, edit, delete).
- I can configure system settings.
- I can monitor platform performance.
- I can access logs and reports.

US-010 (Priority: Medium, Points: 5)

As a Administrator

I want to access an analytics dashboard

So that I can understand platform usage and identify areas for improvement.

Acceptance Criteria:

- The dashboard displays key metrics such as number of orders, active users, and revenue.
- I can filter the data by time period.
- The dashboard presents data in a clear and understandable format.
- I can export the data for further analysis.

US-011 (Priority: Medium, Points: 3)

As a Customer

I want to rate and review restaurants and delivery partners

So that I can share my experiences and help other users make informed decisions.

Acceptance Criteria:
  - I can submit a rating and review for restaurants after completing an order.
  - I can submit a rating and review for delivery partners after receiving my order.
  - Reviews are displayed publicly on the restaurant and delivery partner profiles.
  - Offensive or inappropriate reviews are flagged for moderation.

US-012 (Priority: Medium, Points: 5)

As a Restaurant Partner

I want to manage my inventory

So that I can accurately reflect the availability of my menu items and avoid disappointing customers.

Acceptance Criteria:
  - I can update the quantity of ingredients available for each menu item.
  - The system automatically updates inventory levels as orders are placed.
  - I receive alerts when inventory levels are low.
  - I can disable menu items that are out of stock.

US-013 (Priority: Medium, Points: 5)

As a Customer

I want to schedule an order for future delivery

So that I can plan my meals in advance.

Acceptance Criteria:
  - I can select a future date and time for my order to be delivered.
  - I can modify or cancel a scheduled order up to a certain time before delivery.
  - The restaurant receives a notification of the scheduled order.
  - I receive a reminder notification before the scheduled delivery time.

US-014 (Priority: Medium, Points: 8)

As a Customer

I want to create a group order

So that I can easily order with friends or colleagues.

Acceptance Criteria:
  - I can invite other users to join my group order.
  - Each member of the group can add items to the order.
  - I can set a deadline for adding items to the order.
  - The order is submitted when the deadline is reached or when I manually submit it.
  - Each member can see the total price and split the payment.