

Functional Requirement Document (FRD): Food Franchise Platform

1. Document Control

- **Project Name:** Franchise-Based Food Ordering & Operations Platform (Lean Architecture)
- **Client Business Model:** Central Supply + Franchise Operations (Manufacturing Out of Scope)
- **Platforms Covered:** Web Admin Panel (includes POS Mode), Mobile Application (Customer)
- **Prepared For:** Business, Product & Technical Stakeholders
- **Purpose:** Define functional requirements aligned to a **cost-optimized, single-layer system architecture**

2. Business Overview & Operating Model

The client operates a **central supply model** where inventory is assumed to be **always available** for dispatch to franchises.

Key Business Principles

- No manufacturing workflows are part of this system
- Inventory is treated as supplied by a central entity on demand
- Manpower is provided by the client, not managed in the system
- Franchise owners are **passive stakeholders** with **view-only access**

Sales Channels (Phase 1)

Orders will be accepted through **only two channels:** 1. **In-Store Orders** via Web-based POS (operated by staff) 2. **Customer Mobile Application** (Prepaid orders only)
QR-based ordering, table-level ordering, and guest browser flows are explicitly **out of scope.**

3. System Architecture (Lean & Cost-Optimized)

Single Backend (APIs)

```
|  
|   └— Web Application  
|   |   └— Super Admin Panel  
|   |   └— Franchise Dashboard (Read-only)  
|   |   └— POS Mode (Role-based UI)|  
|   └— Mobile Application (Customer)
```

- One backend system
- One web application with role-based interfaces
- One customer-facing mobile application

4. User Roles & Access Levels

4.1 Super Admin (Central Team)

- Full system access
- Franchise and inventory control
- Sales and operational oversight

4.2 Franchise Owner (View-Only)

- Read-only access to:
 - Sales data
 - Inventory levels
 - Store performance metrics

4.3 Store Operator (POS User)

- Access to POS mode only
- Can create and process in-store orders

4.4 End Customer (Mobile App User)

- Can browse menu and place prepaid orders

5. Web Application – Functional Requirements

5.1 Franchise Creation & Management (Super Admin)

- Create franchise profiles
- Assign:
 - Location (Geo-coordinates)
 - Service radius
 - Active menu
- Activate / deactivate franchises

Inventory Master (Super Admin)

- Item master (raw materials / SKUs)
- Units of measurement
- Transfer price (internal)

Franchise Inventory View

- Current stock level
- Stock received (manual or system-triggered)
- Stock consumed via orders

Franchise users cannot modify inventory.

5.3 Auto Inventory Deduction

- Inventory deducted automatically on order confirmation
- Deduction based on predefined **Bill of Materials (BOM)** per menu item
- Applies to:
 - Web POS orders
 - Mobile app orders

5.4 POS Mode (Web-Based)

The POS is implemented as a **role-based interface within the same web application**.

POS Capabilities

- Full-screen interface
- Touchscreen & mouse compatible

- Category-based menu layout
- Fast add/remove items

POS Order Flow

1. Order creation
2. Item selection
3. Payment selection
4. Order confirmation
5. Inventory deduction
- 5.5 Payments (In-Store)
 - Supported payment modes:
 - o UPI
 - o Cash
 - o Card
 - Payment type captured for reconciliation

5.6 Franchise-wise Sales Overview

- Daily / weekly / monthly sales
 - Order count
 - Average order value
 - Channel split:
 - o POS
 - o Mobile App
- #### 5.7 MOQ-Based Replenishment Alerts
- Define MOQ per item per franchise
 - System highlights items below MOQ
 - Replenishment orders created by Super Admin
- #### 5.8 Replenishment Orders (Central to Franchise)
- Super Admin can:

- o Create stock allocation orders
- o Assign quantities to franchises
 - Franchise inventory updated upon confirmation

6. Mobile Application – Functional Requirements

6.1 User Onboarding

- Mobile number registration
- OTP-based authentication

6.2 Menu Browsing

- Location-based franchise mapping
- Menu visibility based on nearest active franchise
- Real-time availability based on inventory
- Capture user location via GPS
- Auto-map order to nearest eligible franchise

6.4 Order Placement

- Prepaid orders only
- Order types:

- o Takeaway

- o Dine-in

- No table selection or QR scanning

6.5 Rewards (Simplified)

- First-order reward only
- Fixed or percentage-based discount
- Auto-applied at checkout

Advanced gamification (roulette / spin wheel) is out of scope for Phase 1.

6.6 Order Status & Notifications

- Order placed

- Order accepted
- Order ready for pickup
- Notifications via push / SMS

7. Reporting & Analytics (Basic)

Super Admin

- Franchise-wise sales comparison
- Inventory consumption summary

Franchise Owner (View-Only)

- Daily sales summary

Performance

- Support peak-hour concurrent orders

Security

- Role-based access control
- Secure payment processing

Scalability

- Ability to add new franchises without architectural changes

9. Assumptions & Constraints

- Central supply inventory is always available
- No manufacturing, procurement, or HR workflows
- Payment gateway credentials provided by client