

Project Documentation: Food Delivery App

1. Project Overview

Project Name: Food Delivery App

Platform: Android, iOS, and Web

Tech Stack: React Native / Flutter (Mobile), React.js (Web), Node.js/Express.js (Backend), MongoDB/MySQL (Database)

2. Key Features & Functionalities

2.1 User App Functionalities

- **User Registration/Login** (Email/Phone number, OTP, Google Login)
- **User Profile Management** (Edit profile, address book, change password)
- **Search Restaurants & Dishes** with real-time suggestions
- **Filter & Sort Options** (Cuisine, Ratings, Delivery Time, Cost)
- **View Restaurant Profile** (Menu, Photos, Ratings, Delivery time, Offers)
- **View Dish Details** (Ingredients, Price, Customization options)
- **Add to Cart** (Multiple dishes, quantity update, remove items)
- **Apply Coupons & Offers** (Automated and manual entry)
- **Live Order Tracking (GPS)** with ETA & delivery partner info
- **Multiple Payment Options** (UPI, Credit/Debit Cards, Wallet, COD)
- **Order History & Repeat Order** functionality
- **Rate & Review Orders** with image upload support
- **Help & Support Chatbot / Form** with ticket generation
- **Push Notifications (Order Status, Offers, Reminders)**
- **Favorites / Wishlist** for restaurants and dishes
- **Referral & Loyalty Points System** (track referrals, redeem points)
- **In-App Chat with Restaurant / Delivery Partner**

2.2 Restaurant Partner App Functionalities

- **Login / Signup for Partners** with verification
- **Profile & Menu Management** (Update hours, availability)
- **Add/Edit/Delete Items** with pricing, variations, and photos
- **Accept/Reject Orders** with preparation time estimation
- **Order Management Dashboard** (pending, preparing, dispatched)
- **Track Delivery Boy Assignment** and order status
- **Order History & Analytics** with download option
- **Business Reports** (weekly/monthly revenue, top-selling items)
- **Push Notifications for New Orders & Updates**

2.3 Delivery Boy App Functionalities

- **Login/Signup** with background verification
- **Profile Management** (documents, bank info, schedule availability)
- **Real-time Order Notification** and delivery acceptance
- **Accept/Reject Delivery Requests** with reason capture
- **Live Navigation to Restaurant & Customer** using Google Maps
- **Mark as Picked Up / Delivered** with photo proof
- **Earnings & Incentive Dashboard** (daily, weekly, bonuses)
- **Availability Toggle** for online/offline status

2.4 Admin Panel Functionalities

- **Dashboard Overview (Users, Orders, Revenue, Active Restaurants)**
 - **User Management** (view, suspend, delete accounts)
 - **Restaurant Management** (approval, suspension, commission setup)
 - **Delivery Personnel Management** (documents, ratings, route zones)
 - **Commission & Payout Settings** (based on order volume, location)
 - **Category & Cuisine Management**
 - **Coupon & Discount Management** with expiry and usage limits
 - **Review & Complaint Monitoring** with flagging system
 - **Content Management (FAQs, T&Cs, App banners)**
 - **Analytics & Reports** (Custom report generation, download options)
 - **Order History Logs** and tracking
 - **Support Ticket Dashboard** (assign tickets, monitor resolutions)
 - **Role-Based Access Control (Admin/Sub-Admin)**
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3. Number of Screens / Pages

3.1 User App Screens (20+)

1. Splash Screen
2. Onboarding Screens
3. Login / Signup / OTP Verification
4. Home Screen (Restaurant listing)
5. Restaurant Details Page
6. Search Page
7. Filters Page
8. Dish Details Page
9. Cart Screen
10. Apply Coupon Screen
11. Checkout / Payment Gateway
12. Live Order Tracking Map
13. Order Summary / Invoice Screen

14. Order History
15. Rate & Review Page
16. Profile Settings
17. Wishlist / Favorites
18. Notifications
19. Help & Support
20. Referral / Loyalty Points Page
21. Chat with Support/Delivery

3.2 Restaurant Partner App Screens (10+)

1. Login / Signup
2. Dashboard
3. New Orders List
4. Order Details Page
5. Menu Management
6. Add/Edit Item
7. Restaurant Profile Page
8. Earnings / Reports
9. Notifications
10. Settings / Support

3.3 Delivery Partner App Screens (8+)

1. Login / Signup
2. Active Orders Page
3. Order Details
4. Navigation Map
5. Pickup / Delivery Confirmation
6. Earnings Page
7. Notifications
8. Profile / Settings

3.4 Admin Panel Screens (15+)

1. Admin Dashboard
2. User List Page
3. Restaurant List Page
4. Delivery Boy List
5. Orders List
6. Complaints & Ratings Page
7. Coupon Management
8. Reports and Analytics
9. Payout Management
10. Cuisine/Category Management
11. Admin Login

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- 12. CMS (FAQs, T&Cs)
 - 13. Notifications Management
 - 14. System Logs
 - 15. Role Management
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4. Other Functional Requirements

- **Multilingual Support** (English, regional languages)
 - **Dark/Light Theme** toggle
 - **Accessibility Compliance (WCAG)**
 - **Responsive Design (Web + Mobile)**
 - **Real-time Database Updates** (e.g., Firebase / WebSockets)
 - **Custom Error Pages**
 - **Version Control System (Git)**
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5. Security Features

- HTTPS / SSL encryption
 - JWT / OAuth2 Authentication
 - Data Validation & Sanitization
 - Secure Payment Gateway Integration
 - Admin Role-Based Access Control
 - OTP Verification for Login and Orders
 - Rate Limiting and DDOS protection
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6. Deployment & Maintenance

- **CI/CD Pipeline for Updates**
 - **Cloud Hosting (AWS / Firebase / DigitalOcean)**
 - **Monitoring (Logs, Crash Reports, Performance)**
 - **Regular Security Patches & Updates**
 - **Automated Backups**
 - **Scalability Planning** (Microservices, Load Balancer)
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7. Development Phases

Phase 1: Planning & Requirement Gathering

- Finalize Functional Requirements
- Wireframing and UI/UX Design Planning

Phase 2: UI/UX Design

- Create Figma or Adobe XD wireframes
- Design Responsive Layouts
- Design Approval from Client

Phase 3: Frontend Development

- Implement Mobile UI (React Native / Flutter)
- Implement Web Interface (React.js)
- Integrate basic navigation & forms

Phase 4: Backend Development

- Setup Node.js/Express Server
- Build RESTful APIs
- Connect to MongoDB/MySQL
- Setup Authentication & Role Management

Phase 5: Integration

- Integrate Frontend with Backend APIs
- Add Payment Gateway (e.g., Razorpay, Stripe)
- Real-time Chat & Notifications Setup

Phase 6: Testing

- Unit Testing (Jest/Mocha)
- UI Testing (BrowserStack / Appium)
- UAT (User Acceptance Testing)

Phase 7: Deployment

- Setup CI/CD Pipeline
- Deploy to Play Store / App Store / Web
- Final Review and QA

Phase 8: Post-Launch Support

- Monitor App Performance
- Handle Bug Fixes
- Plan for Feature Enhancements

8. Conclusion

This Food Delivery App aims to replicate and enhance the user experience offered by platforms like Swiggy and Zomato. It provides end-to-end solutions for customers, restaurant partners, and delivery personnel, all controlled and managed through a robust admin backend. This document outlines a scalable, feature-rich, and secure roadmap for development and delivery.
