1. User Module

Features:

- Register/Login (with OTP/email verification)
- Search restaurants (by cuisine, rating, distance)
- Add items to cart
- Place order
- Live order tracking on map
- Payment gateway integration
- Order history
- Profile management
- Ratings & Reviews

2. Hotel / Restaurant Module

Features:

- Register/Login
- Restaurant profile setup (images, description, menu)
- Add/Edit/Delete menu items
- View incoming orders
- Update order status (Preparing → Ready → Dispatched)
- Earnings Dashboard
- Review/Rating visibility

3. Delivery Partner Module

Features:

- Register/Login
- Verify documents (Aadhar, license)
- View assigned deliveries
- Accept/Reject order
- · Pick-up and drop tracking via map
- Mark delivery as complete

- Earnings tracker
- Support/Help Chat

4. Admin Module

Features:

- Admin login dashboard
- Manage users, restaurants, delivery partners
- Approve/Reject restaurant and partner applications
- View earnings, orders, live statuses
- Reports and analytics (daily, monthly)
- Block/Unblock users/restaurants/partners
- Support handling

Map Integration

- Use Google Maps API or Mapbox.
- Required in:
 - User side (select pickup & delivery address)
 - Delivery partner (real-time tracking)
 - Hotel side (pickup location display)
 - Admin dashboard (visual analytics)

FINAL PROJECT STRUCTURE

1. User Module (React Native App)

Features:

- Register/Login (OTP or email verification using Twilio or Firebase Auth)
- **Restaurant Search:** By cuisine, rating, or distance (Google Maps + Geo Queries).
- Add to Cart: Manage items and quantities.
- Place Order: Integrated with backend order management.
- Live Order Tracking: Real-time map tracking of delivery partner.

- Payment Gateway Integration: Razorpay / Stripe for secure payments.
- Order History: View past orders.
- **Profile Management:** Edit profile, addresses, etc.
- Ratings & Reviews: Rate restaurants and dishes.

2. Hotel/Restaurant Module (React Native App)

Features:

- Register/Login: With verification.
- Restaurant Profile Setup: Add images, description, menu details.
- Menu Management: Add/Edit/Delete items.
- View Incoming Orders: With real-time updates.
- Update Order Status: (Preparing → Ready → Dispatched).
- **Earnings Dashboard:** View revenue, best-selling items.
- Reviews & Ratings: See customer feedback.

3. Delivery Partner Module (React Native App)

Features:

- Register/Login: Document verification (Aadhar, license).
- View Assigned Deliveries: Orders assigned by the system/admin.
- Accept/Reject Orders: Real-time order allocation.
- **Pick-up & Drop Tracking:** Integrated with Google Maps.
- Mark Delivery as Complete: With proof (e.g., photo or OTP).
- Earnings Tracker: Daily and monthly reports.
- Support/Help Chat: Chat with admin/support.

4. Admin Module (React.js Web Panel)

Features:

Admin Login Dashboard: Analytics and KPIs.

- Manage Users, Restaurants, Delivery Partners: Approve/reject applications.
- View Orders & Earnings: Track order statuses.
- Reports & Analytics: Daily, weekly, monthly reports with charts.
- Block/Unblock Accounts: Manage violations.
- Support Handling: Chat or ticketing.
- Map Visualization: Real-time delivery locations.

5. Map Integration

- Google Maps API or Mapbox
 - User: Select pickup & delivery address.
 - o **Delivery Partner:** Real-time tracking and route optimization.
 - Hotel: Display pickup locations.
 - Admin: Visualize active orders/deliveries.

6. Enhancements

1. Food Donation to Orphanages:

- o Restaurants can mark leftover food for donation.
- Notifications sent via SMS/WhatsApp to nearby orphanages.

2. Notifications:

- WhatsApp Business API: Order confirmations and updates.
- o Twilio/Nodemailer: SMS and email alerts.

3. Billing Software:

Auto-generate PDF invoices for every order using pdfkit.

PROJECT ARCHITECTURE

- Frontend (Apps): React Native (User, Restaurant, Delivery Partner)
- Admin Panel: React.js (Vite + Tailwind + Charts.js/Recharts for analytics)
- Backend API: Node.js + Express.js

- Database: MySQL (with Sequelize ORM)
- Authentication: JWT + bcrypt (for security).
- Real-time Updates: Socket.IO (for order status, tracking).
- File Uploads: Cloudinary (for restaurant images, menu).
- Payment: Razorpay/Stripe integration.

PHASE-WISE DEVELOPMENT PLAN

Phase 1: Backend API Setup

- Node.js + Express + MySQL (Sequelize)
- Auth module (Register/Login with JWT & OTP)
- CRUD for Users, Restaurants, Delivery Partners

Phase 2: User App

- Login/Register
- Home screen (restaurants, categories)
- Cart, Checkout, Payment, Order Tracking

Phase 3: Restaurant App

Restaurant dashboard, menu management, order updates

Phase 4: Delivery Partner App

Delivery assignment, route tracking, earnings

Phase 5: Admin Panel

Analytics, user/restaurant/partner management

Phase 6: Enhancements

Notifications, Billing, Food Donation, WhatsApp API