Comprehensive Project Plan for Multi-Sided Delivery Platform : Move Now

Project Overview: Delivery App with Multi-Sided Functionality

This project involves the development of a comprehensive delivery platform similar to Uber, but focused on multi-type delivery services. The platform consists of three main components:

- 1. User App (for customers requesting delivery services).
- 2. Driver App (for delivery service providers).
- 3. Admin Dashboard (for platform management, reporting, and support).

Purpose of the Platform

The app aims to simplify delivery operations for:

- Individuals needing transportation for goods (e.g., furniture, parcels).
- Special cases like towing cars using specialized vehicle options.
- Offering additional services such as helpers to assist in carrying goods.

The platform ensures efficient communication between users, drivers, and administrators, with real-time updates and robust management tools.

Core Features

1. User App

- Signup/Login:

Users can register via email or phone or log in using their credentials.

- Map-Based View:

Users can view nearby available vehicles, categorized as:

- Regular Vehicles (e.g., vans, cars).
- Special Vehicles (e.g., car lifters for emergencies).
- Vehicle and Destination Selection:

Users choose a vehicle type and set a pickup and drop-off location. For special vehicles, they can input detailed cargo specifications.

- Price Calculation:

Dynamic pricing displayed based on vehicle type, distance, and any additional services (e.g., helpers).

- Order Confirmation:

Users confirm the request and select a payment method (cash or card). They can also review cost breakdowns.

- Driver Allocation:

Once a driver accepts, the user sees the driver's profile with real-time tracking, chat, and phone call options.

- Cancellation Policy:

Users can cancel the trip within a 4-minute grace period or face a cancellation charge.

- Notifications:

Real-time alerts for trip updates, driver arrival, or payment confirmation.

- Rating System:

Users can rate their experience and provide feedback after the trip.

2. Driver App

- Driver Signup and Verification:

Drivers upload their documents (e.g., ID, vehicle registration) for admin review and approval.

- Job Requests:

Drivers receive notifications for nearby user requests, showing trip details and estimated earnings.

- Driver Earnings:

Drivers can track their earnings and receive payouts via:

- Bank transfers.
- E-wallet.
- Cash pickup from the office.
- Trip Management:

Drivers can start, pause, or end trips, with real-time updates shared with the user.

- Support Channel:
 - Drivers can contact admin support for trip or payout issues.
- Driver Rating:

Drivers receive ratings based on user feedback.

3. Admin Dashboard

- User and Driver Management:
 - View, approve, or reject driver applications.
 - Manage user accounts and handle complaints.
- Trip Monitoring:
 - Track active, completed, and canceled trips in real time.
 - View vehicle locations on a live map.
- Payment Tracking:
 - Monitor user payments and driver earnings.
 - Resolve payment discrepancies.
- Customer Support:
 - Manage support tickets raised by users or drivers.
 - Assign tickets to specific support agents.
 - Monitor ticket resolution status (open, in-progress, resolved).
- Analytics and Reporting:
 - Generate detailed reports for:
 - Total revenue.
 - Trip volumes (completed, canceled).
 - Driver and user activity.
 - Visualize data through charts and graphs for business insights.

Detailed User Flow

User Flow:

1. Account Setup:

Users sign up or log in.

2. Search for Vehicles:

They view nearby vehicles and select the type.

- Request Details:
 - Enter pickup/drop-off locations.
 - Specify cargo details if applicable.
 - Add extra services (e.g., helper).
- 4. Review and Confirm:
 - Review price breakdown.
 - Confirm booking.
- 5. Real-Time Updates:
 - Track driver location and ETA.
 - Communicate with the driver if needed.
- 6. Trip Completion:
 - Payment is processed.
 - User rates the experience.

Driver Flow:

1. Account Setup:

Drivers register and upload documents.

2. Receive Requests:

Drivers receive requests based on location.

3. Accept Trip:

Review trip details and accept.

- 4. Trip Execution:
 - Navigate to the user's pickup location.
 - Transport goods to the drop-off location.
- 5. Earnings Tracking:
 - Drivers track completed trips and earnings in the app.

Admin Flow:

- 1. Platform Oversight:
 - Monitor user and driver activities.
 - Track trips and resolve issues.
- 2. Support Management:
 - Assign support tickets to agents.
 - Ensure timely resolution.
- 3. Generate Reports:
 - Use analytics for business optimization.
 - Monitor revenue and operational efficiency.

Technology Stack

- 1. Frontend:
 - User App: Flutter.
 - Driver App: Flutter.
 - Admin Dashboard: Vue.js or React.js.
- 2. Backend:
 - Framework: Laravel (PHP).
 - Database: MySQL with JSON support for flexible data handling.
- 3. APIs:
 - Google Maps API for location services.
 - Payment Gateway API for processing card payments.
- 4. Infrastructure:
 - Server: AWS or Google Cloud for scalability and reliability (or other).