

## About Project :

This project focuses on developing a comprehensive courier and bus ticketing platform for a local delivery company. The system includes a user mobile app, delivery personnel app, shipment vendor dashboard, bus shipment vendor dashboard, and an admin panel. The platform seamlessly integrates features like real-time parcel tracking, route optimization, multi-vendor management, and bus ticket sales, offering a streamlined experience for customers, vendors, and drivers. Designed for scalability, security, and user-friendly access, the platform supports efficient operations and easy integration with third-party services.

## The Problems :

- **Inefficient Delivery Management:** Vendors and drivers face challenges in managing and tracking shipments, leading to delays.
- **Lack of Real-Time Tracking:** Customers and vendors lack visibility into parcel status.
- **Fragmented User Experience:** Multiple platforms create confusion for users, drivers, and vendors.
- **Limited Monetization:** No integrated services like bus ticketing, missing growth opportunities.
- **Scalability Issues:** The platform struggles to scale with growing demand.
- **Identity verification** - The admin not able to verify the identity of the users

## The Goal :

- **Reduce Paperwork:** Streamline processes by providing an online solution for shipping and ticketing.
- **Simplify Parcel Delivery:** Enable easy parcel sending with real-time tracking and optimized routes.
- **Bus Ticketing:** Offer a convenient in-app and dashboard solution for booking bus tickets.
- **Efficient Shipment Management:** Allow vendors to manage shipments, deliveries, and finances in one platform.
- **Support Growth:** Provide a scalable, user-friendly platform for expanding businesses and services.

## Proposed Solution :

1. **Vendor Dashboard:** A unified platform for vendors to manage shipments, track parcels, and access analytics.

2. **Real-Time Tracking:** GPS tracking, optimized routes, and automated notifications for seamless parcel management.
3. **Bus Ticketing Integration:** In-app bus search and Dashboard bus ticket sales for added value to local transportation vendors.
4. **Secure Integration:** Robust security and API support for connecting with third-party systems and payment gateways.

## Key Features of Platform :

Here are the key features of the app:

- **Multi-Vendor Dashboard:** Dedicated interfaces for vendors to manage shipments, track parcels, and view analytics.
- **Real-Time Parcel Tracking:** Unique tracking numbers for parcels with traceability via mobile and web.
- **Automated Notifications:** SMS and customizable notifications for parcel updates, with multi-lingual support.
- **GPS Tracking & Route Optimization:** Real-time vehicle tracking and optimized delivery routes based on traffic data.
- **Operational Management:** Inventory and dispatch management tools for efficient parcel handling.
- **Identity verification** - The user can upload their requested Identity cards for the profile verification so that the user can use the application.
- **Bus Ticketing Integration:** In-app and dashboard bus ticket sales for users, adding value for local transportation vendors.
- **Scalable & Flexible Pricing:** Tiered pricing models to accommodate businesses of various sizes.
- **Secure Integration:** Robust security and API support for connecting with third-party systems and payment gateways.
- **Report & Analytics:** Real-time parcel volume tracking, financial reporting, and performance analytics for better decision-making.

## User (Customer) Flow :

- **Sign Up/Login**
  - User will register/sign using phone number or email in by providing their documents and admin will approve
- **Select pick up and delivery location**
  - User will select pick up and delivery location
- **Select vehicle type and enter receiver details**
  - user will select Select vehicle type and enter receiver details
- **Bidding system** -
  - Users can place bids based on their preferences
- **Select parcel detail**

- user will select the parcel details for delivery
- **Live Tracking**
  - user can track the delivery person
- **Live chat and call**
  - user can live chat and call with the delivery person
- **Locate vendors**
  - user can locate the shipment vendor nearby their area
- **Locate bus vendors**
  - user can locate the bus vendor nearby their area

## User (Driver) Flow :

- **Sign Up/Login**
  - Driver will register/sign using phone number or email in by providing their documents and admin will approve
- **Select the delivery requests**
  - Driver can select the upcoming delivery requests or counter the user
- **Bidding system -**
  - Drivers can place bids based on their preferences
- **Live route**
  - Driver can view the live route in the map
- **Live chat and call**
  - driver can live chat and call with the user
- **Parcel delivery**
  - Driver will deliver the parcel to the location

## Dashboard (Shipment vendor) Flow :

- **Sign Up/Login**
  - Vendor will register/sign using phone number or email in by providing their documents and admin will approve
- **Create shipment**
  - Vendor can create shipment and update the details of the shipment
- **User management**
  - Vendors can manage their users
- **Shipment Tracking**
  - Vendor can modify the status of the shipment
- **Reporting and analytics**
  - Real-time parcel volume tracking, financial reporting, and performance analytics for better decision-making.

## Dashboard (Bus - Shipment vendor) Flow :

- **Sign Up/Login**
  - Bus - Vendor will register/sign using phone number or email in by providing their documents and admin will approve
- **Create shipment**
  - Bus - Vendor can create shipment and update the details of the shipment
- **Bus management**
  - Bus - vendor can manage their buses
- **Bus Ticket Booking**
  - Bus - vendor can issue the bus ticket
- **Reporting and analytics**
  - Real-time parcel volume tracking, financial reporting, and performance analytics for better decision-making.

## Admin Flow :

- **Login**  
Admin logs into the system.
- **Dashboard**  
Displays graphs, pie charts, and listings.
- **Users Management**  
The admin has the ability to add, update, remove, and verify users on the platform.
- **Shipment and courier management** - Manage the shipments and courier of the platform
- **Bus ticket management** - Manage the Bus tickets issue on the platform
- **Subscription and coupons** - Manage the subscription and coupons
- **Reporting and analytics** - Real-time parcel volume tracking, financial reporting, and performance analytics for better decision-making.

## Additional Features we offer:

Here's a more concise version of the additional requirements:

1. **Multi-language Support**  
The platform supports multiple languages, ensuring accessibility for users from diverse backgrounds - English, French
2. **Push Notifications:** Real-time alerts for parcel updates and important announcements.
3. **Admin Panel:** Allows managing users, content management
4. **Dynamic Pricing for Shipments:** Pricing based on distance, weight, and urgency.

5. **Advanced Search Filters:** Filters for easier service selection based on user preferences.
6. **Transaction History:** Users can view detailed records of all the payments
7. **Customizable Delivery Options:** Choose between express, standard, or same-day delivery
8. **Automated Invoice Generation:** Automatic generation and sending of invoices.
9. **Mobile & Web:** Fully responsive on Android, iOS, and desktop browsers.
10. **Help & Support:** Users can reach out to the admin for assistance and share their issues.
11. **Bidding system** - Users and drivers can place bids based on their preferences

## App and admin panel Images :

Link of Figma :

<https://www.figma.com/design/e6Wz87S81zRAebinBt8Cak/JUDE?node-id=33-2&p=f&t=F8zdiNMLEyP88qvQ-0>

## TechStack :

**User and driver application** - Native (Kotlin and Swift)

**Admin panel** - MERN technology

**Database** - Mongodb

**Server** - NodeJs

**Domain** - from client like Afriwaylogistics.com

**Third party** - Google (firebase, geolocation, places api)

## Mobile app development -

kotlin - <https://www.pngwing.com/en/search?q=kotlin>

swift - <https://www.pngwing.com/en/search?q=swift+programming+language>

## Web design development -

html - <https://www.pngwing.com/en/free-png-vonbu>

css - [https://upload.wikimedia.org/wikipedia/commons/6/62/CSS3\\_logo.svg](https://upload.wikimedia.org/wikipedia/commons/6/62/CSS3_logo.svg)

javascript -

[https://www.flaticon.com/free-icon/js\\_5968292?term=javascript+logo&page=1&position=2&origin=tag&related\\_id=5968292](https://www.flaticon.com/free-icon/js_5968292?term=javascript+logo&page=1&position=2&origin=tag&related_id=5968292)

## Backend development

Mongodb - <https://www.pngwing.com/en/search?q=mongodb>

express js - <https://www.pngwing.com/en/free-png-sreax>

react js - <https://www.pngwing.com/en/search?q=react>

node js - <https://www.pngwing.com/en/free-png-amxds>

Third party - firebase - <https://www.pngwing.com/en/search?q.firebaseio.com>

**8. 3rd Party Platform** : Third party - firebase

**9. Time Duration :** - 5 months