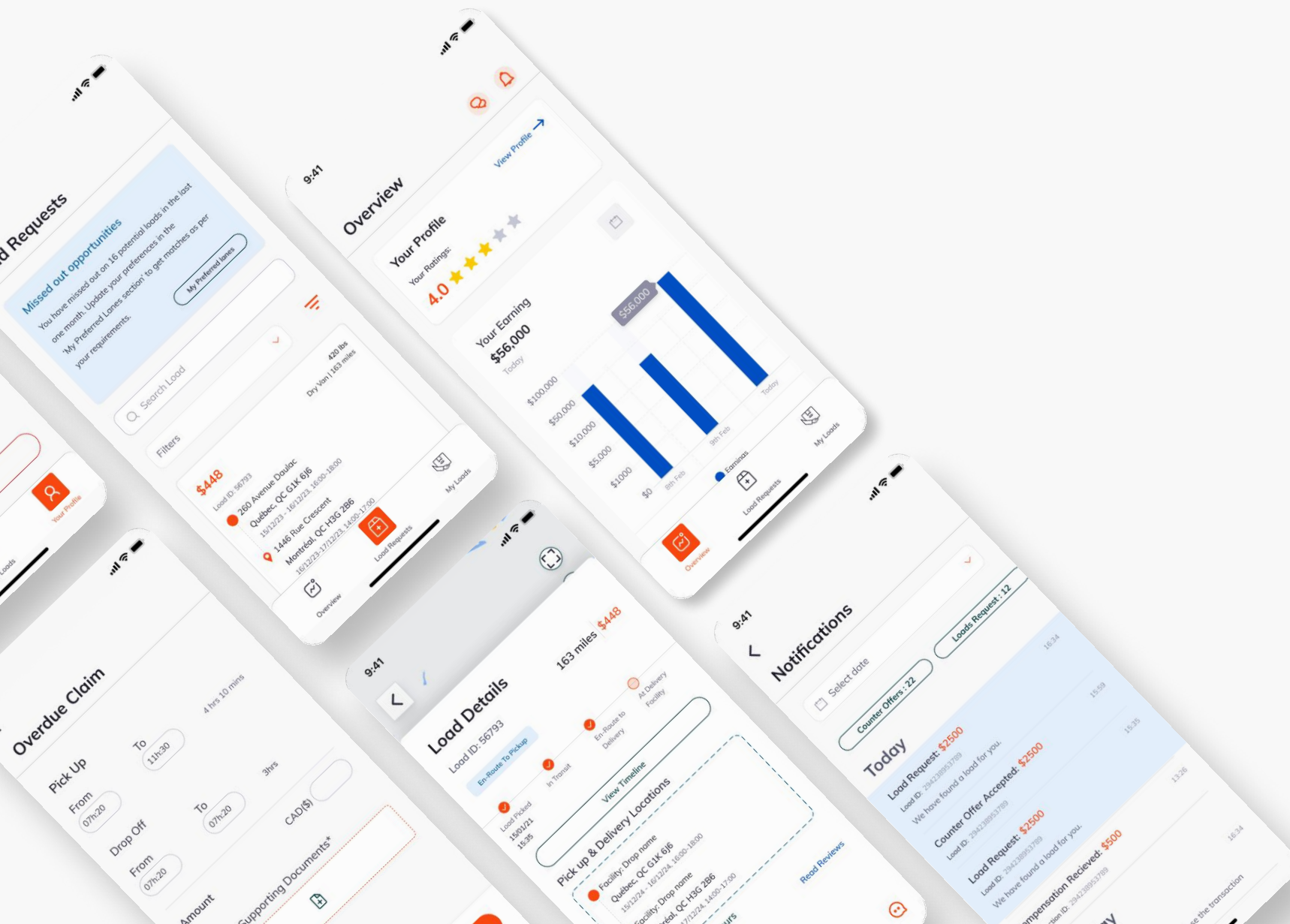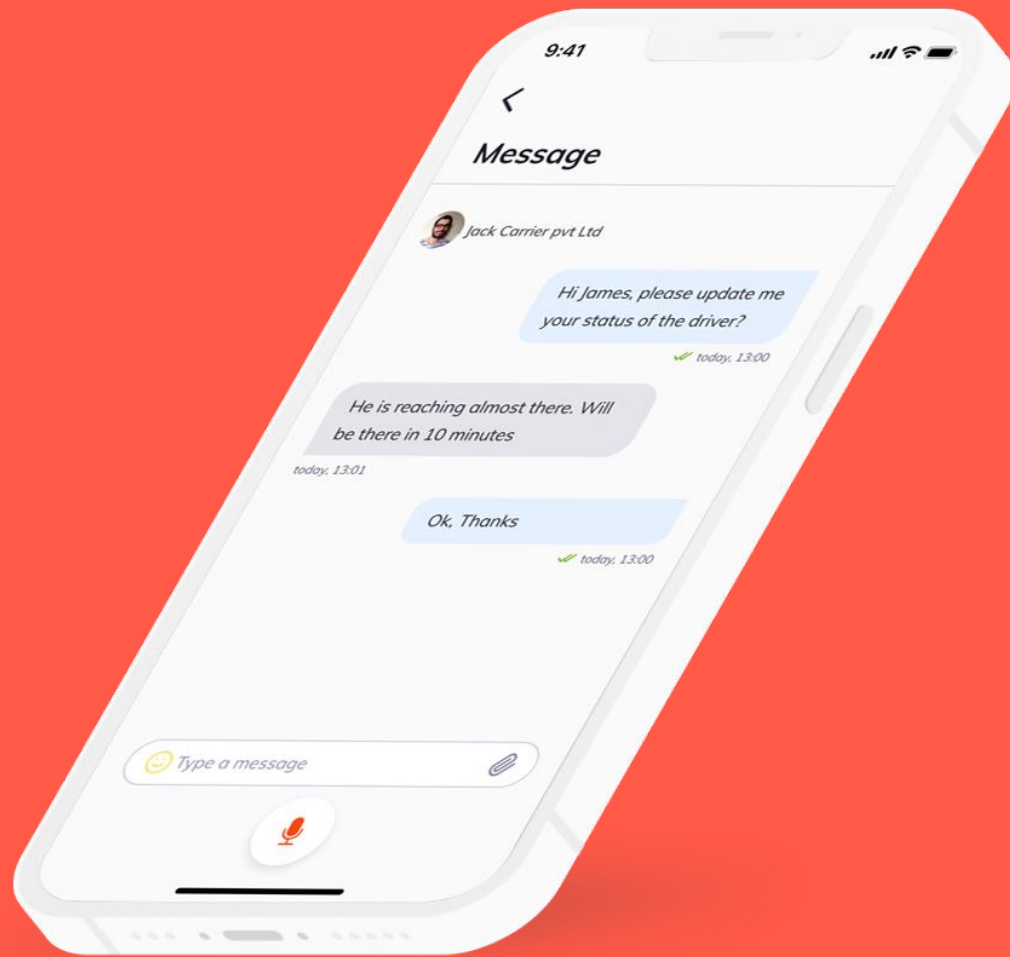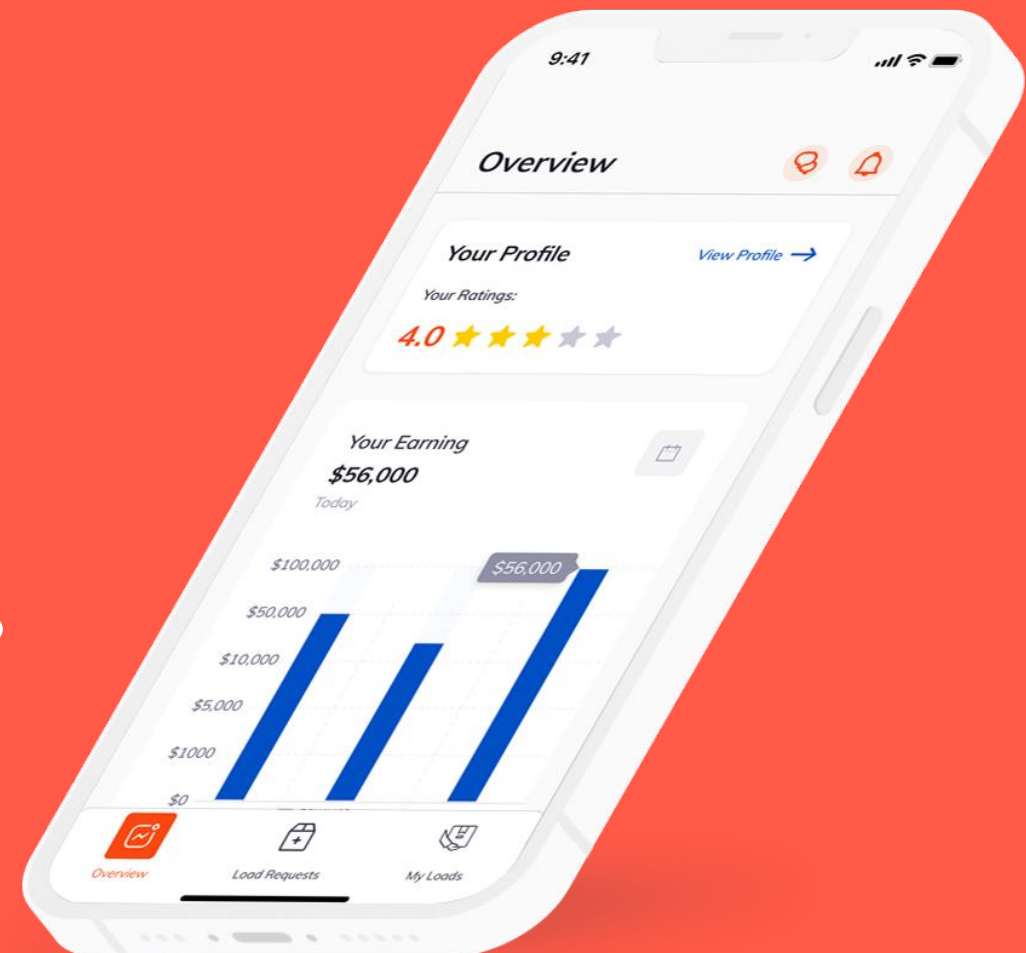# Case Study

TruckExpress is a mid-sized logistics company specializing in freight forwarding and supply chain solutions. Despite its established market presence, TruckExpress faced significant operational challenges that affected efficiency and customer satisfaction.
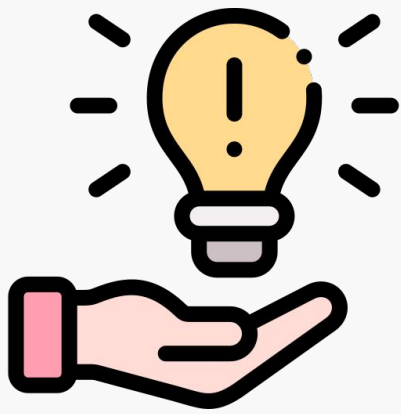
Problem Statement

TruckExpress experienced several key issues:

1. <u>Operational Inefficiencies:</u> Manual processes led to slow response times and errors in shipment tracking.

2. <u>Lack of Real-Time Visibility:</u> Customers and internal teams had limited visibility into the status and location of shipments.

3. <u>Poor Communication:</u> Inefficient communication between drivers, warehouse staff, and management resulted in delays and misunderstandings.

4. <u>Difficulty in Managing Fleet:</u> Managing a diverse fleet of vehicles and drivers was cumbersome and error-prone.
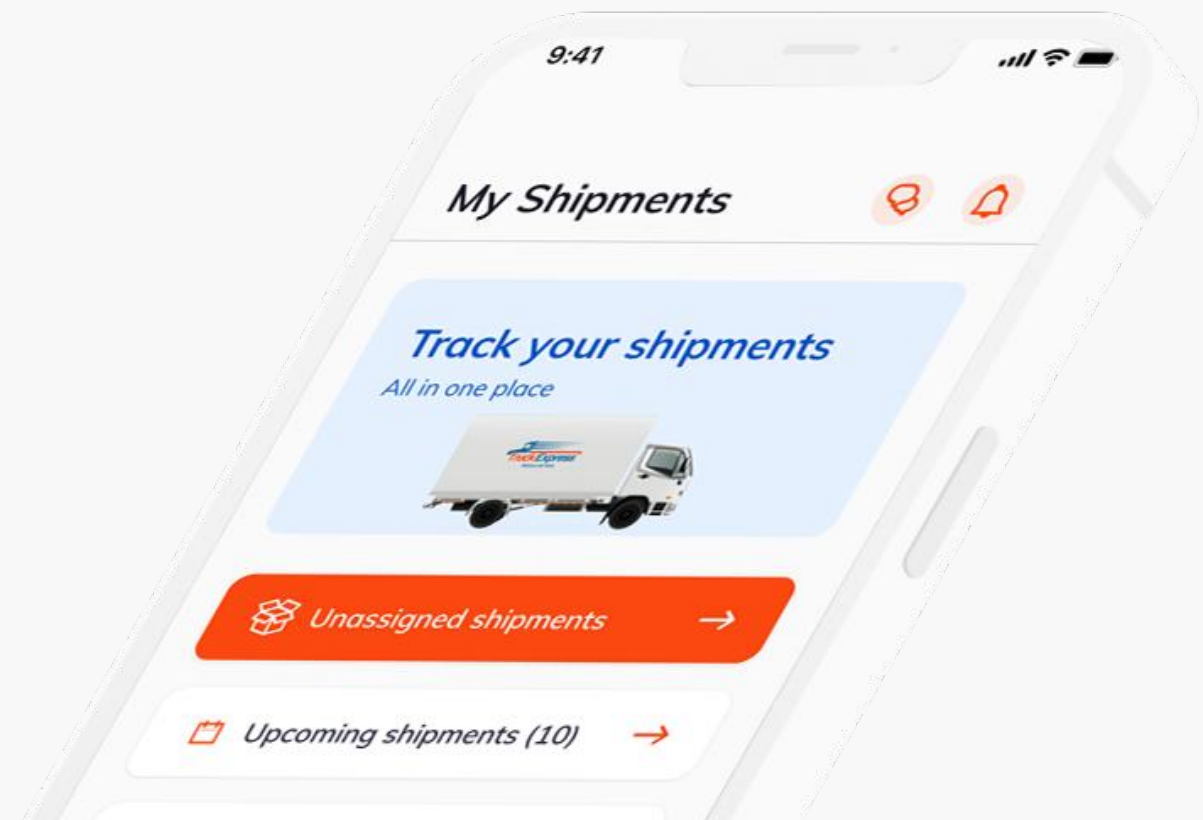
Solution
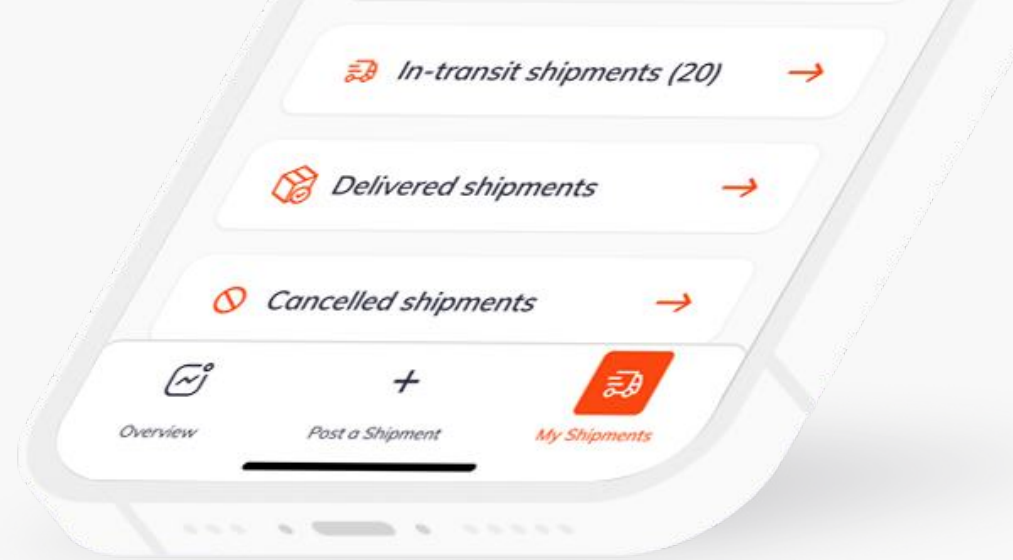
TruckExpress developed a comprehensive mobile app tailored to address its logistics challenges. The app was designed with the following features:

1. <u>Real-Time Tracking:</u> Enabled GPS-based tracking of shipments, providing real-time location updates and estimated delivery times.

2. <u>Automated Notifications:</u> Automated alerts and notifications for shipment status changes, delivery updates, and delays.

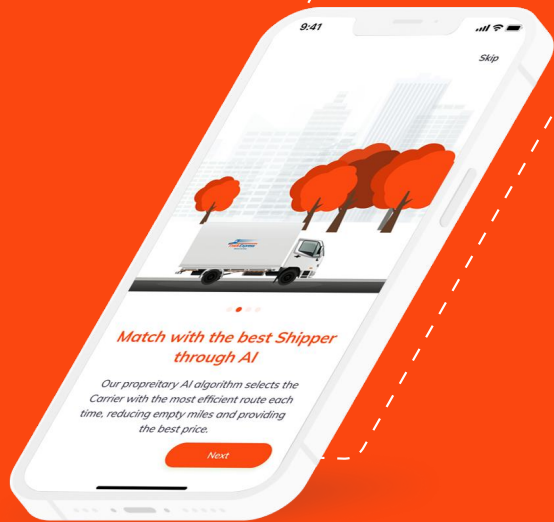3. <u>Driver Communication:</u> Integrated messaging and call features for seamless communication between drivers and dispatchers.

4. <u>Fleet Management Tools:</u> Features for monitoring vehicle health, tracking maintenance schedules, and optimizing routes based on traffic conditions.

5. <u>Unified Data Access:</u> Centralized access to shipment data, inventory levels, and fleet information.

6. <u>Automated Updates:</u> Synchronization of shipment and inventory data, reducing manual entry and errors.

7. <u>Order Tracking:</u> Customers could track their shipments in real-time and receive updates on estimated delivery times.

8. <u>Feedback Mechanism:</u> A feature for customers to provide feedback on their delivery experience and report issues.

1

9:41   Skip

Match with the best Shipper through AI

Our proprietary AI algorithm selects the Carrier with the most efficient route each time, reducing empty miles and providing the best price.

Next

2

9:41

Delivered Shipments

Search here

$448   420 lbs
   Dry Van / 163miles

Overdue Claimed

Shipment ID: 56793

260 Avenue Daulac,
Québec, QC G1X 6J6
15/12/24 - 16/12/24, 16:00-18:00

1446 Rue Crescent
Montréal, QC H3G 2B6
16/12/24-17/12/2004, 14:00-17:00

Delivered on : 15/12/2020

$531   140 lbs
Shipment ID: 56794   Car Hauler / 193miles

2340 22 St NE
Calgary, AB T2E 8L9

Overview   Post a Shipment   My Shipments

3

9:41

Quebec City

Sherbrooke

Shipment Details

Shipment ID: 56793   163 miles $448

Shipment Delivered

⚠ Overdue claimed by carrier!

Review Overdue Claim

Scheduled pick up date & time:

4

9:41

Overdue Claim

Reasons for Overdue being charged are as follows

Please find supported documented next to the reason

Accept All Charges

Detention Fee $100
Overdue of 10 hrs : 14 mins

Document

Dispute   Accept

Change in BOL $100
Difference of 40Lbs at the time of loading

Document

Dispute   Accept

Pay Now

Process

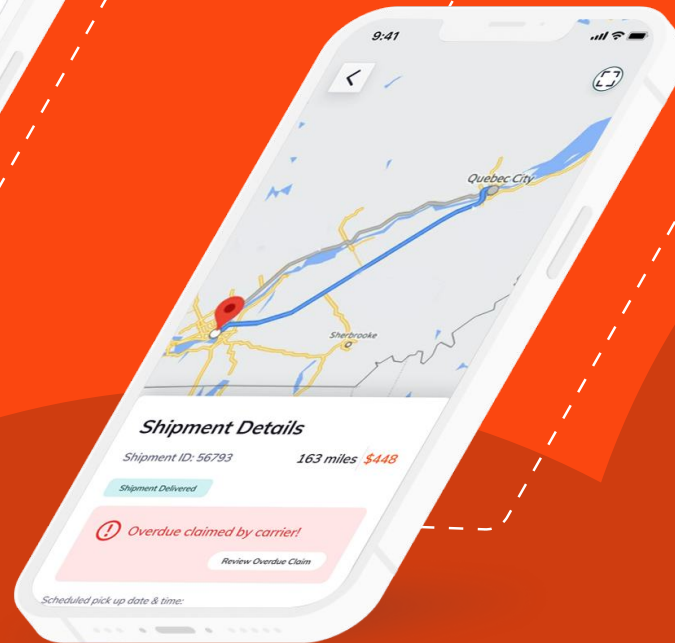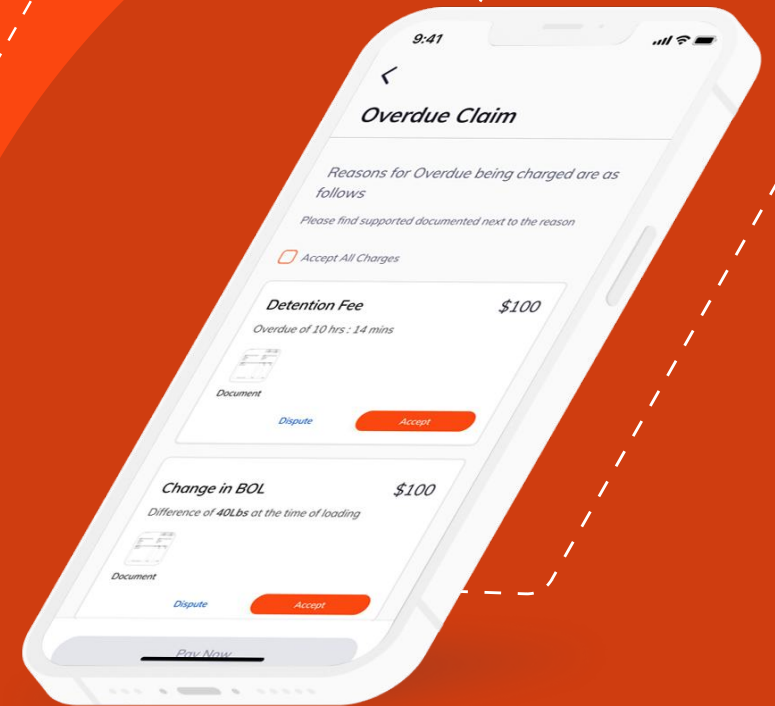| Requirements Gathering	ui/ux Design	Development

Requirements Gathering

- 1. Meeting with Stakeholder
- 2. Objectives and functionalities definition
- 3. Needs understanding

ui/ux Design

- 1. Ui Design
- 2. Intuitive interface creation
- 3. Wireframes, mockups, and prototypes creation
- 4. Usability enhancement

Development

- 1. Server and Database Building
- 2. Server-side setup
- 3. Frontend and Backend Development
- 4. Database and APIs establishment
- 5. Deployment

Features

Real-Time Tracking

- **GPS-Based Tracking:** Real-time location updates for shipments and vehicles.
- **Route Visualization:** Map view displaying current location, route, and destination.
- **Estimated Delivery Time:** Automated calculations and updates on estimated arrival times.

Automated Notifications

- **Status Updates:** Alerts for key milestones such as dispatch, in-transit, and delivery.
- **Delay Notifications:** Automated messages if there are delays or disruptions.
- **Custom Alerts:** User-configurable notifications for specific events or conditions.

Driver Communication

- **In-App Messaging:** Secure chat functionality for communication between drivers and dispatchers.
- **Voice and Video Calls:** Options for voice and video calls directly within the app.
- **Incident Reporting:** Quick reporting feature for issues or incidents encountered during transit.

Fleet Management Tools

- **Vehicle Health Monitoring:** Real-time data on vehicle performance and diagnostics.
- **Maintenance Scheduling:** Alerts and scheduling for routine maintenance and repairs.
- **Fuel Tracking:** Monitoring of fuel consumption and optimization suggestions.

Inventory Management Integration

- **Stock Levels:** Real-time updates on inventory levels at various warehouses.
- **Order Fulfillment Status:** Tracking of order processing stages from receipt to dispatch.
- **Automated Reordering:** Alerts and suggestions for reordering based on inventory levels.

Route Optimization

- **Dynamic Routing:** Automated suggestions for the most efficient routes based on traffic conditions
- **Multi-Stop Planning:** Optimization for routes involving multiple stops or deliveries.
- **Historical Data Analysis:** Insights from past routes to improve future planning.

Reporting and Analytics

- **Performance Metrics:** Dashboards displaying key performance indicators such as delivery times and on-time rates.
- **Incident Reports:** Detailed logs of any issues or incidents that occur during transit.
- **Custom Reports:** Ability to generate and export custom reports based on specific criteria.

User Management

- **Role-Based Access:** Different levels of access and permissions for drivers, warehouse staff, and management.
- **User Profiles:** Detailed profiles with contact information, performance history, and roles.
- **Authentication and Security:** Secure login with options for multi-factor authentication.

Thank you
for watching

We are available for new projects

Contact: ashok@bytecipher.net