





Project Brief

- Founded by Vittorio Pineli, ASAP introduces a concept centered on the seamless delivery of goods or products from the pickup point to the end user. In this app, individual carriers owning one or more vehicles will deliver the product. The app is designed to be highly flexible, allowing carriers and end users to tailor operations to their specific requirements. This app prioritizes the customers' needs, ensuring they are user-friendly and accessible.

Key Challenges

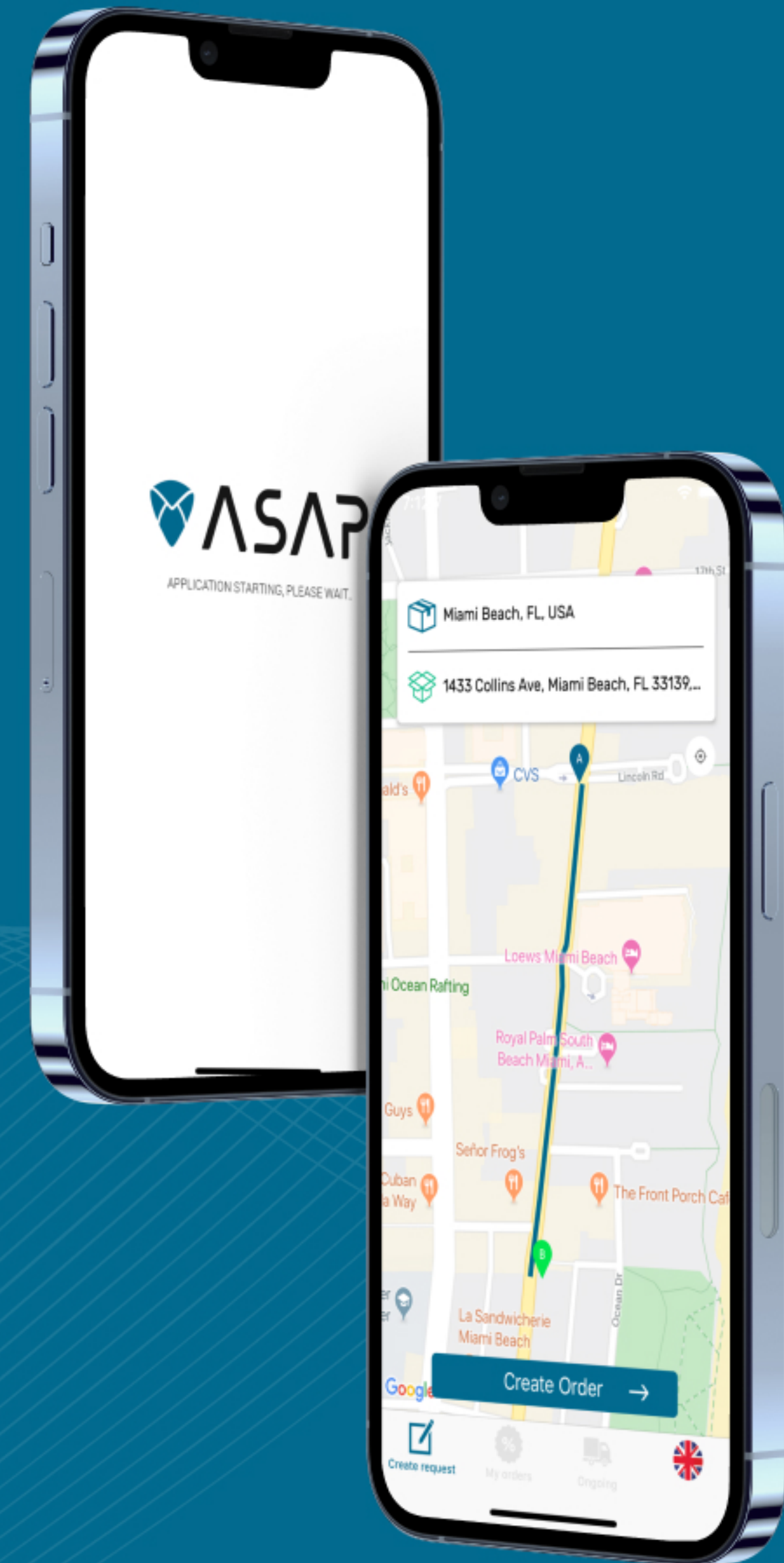
- **Route Planning:** Integrating Google and Apple Maps for Effective Route Planning.
- **Data Handling:** Implementing Local Storage for Efficient Data Handling.
- **Local Storage:** Difficulty in storing data locally on the user's device.
- **Map Functionality:** Difficulty in implementing maps and location-based services in the application.
- **Realtime chat:** Integrating Firebase for Real-time Chat Functionality.
- **Filter by Area:** Difficulty in filtering search results based on the user's location or a specific geographical area.
- **Push Notifications:** Difficulty in sending timely notifications to users even when the app is not in use.
- **Cheapest Driver Bid:** Difficulty in implementing a bidding system for drivers to provide the cheapest fare to users.
- **Refund:** Establishing a Refund System for Task Failures.
- Upload photos before transmission starts

Solution Delivered

- Integration of Google Maps to accurately track vehicles and provide location services.
- Implementation of a robust event management system to efficiently handle notifications and background processes.
- Establishment of a secure payment flow using 3D Secure authentication within the Stripe payment system.
- Implementation of a well-structured and scalable microservices architecture for enhanced performance.
- This project is completely based on microservice architecture, where the project is bifurcated into multiple microservices with .NET Core as a tech stack, MSSQL database for Relational data, cache management using Redis, chat data management via MongoDB, and background processing events are managed via RabbitMQ.
- Configuration of RabbitMQ to ensure reliable sending of background events and messages.
- Implementation of a route-drawing feature that calculates the best transportation route from pickup to drop-off stations.
- Enabling of Firebase Chat, providing users with a seamless communication channel to resolve any transportation-related issues.
- Utilization of Firebase push notifications to keep users informed about important updates and announcements.
- Display of the cheapest driver bids on top, ensuring that users can easily find the most cost-effective transportation solutions.

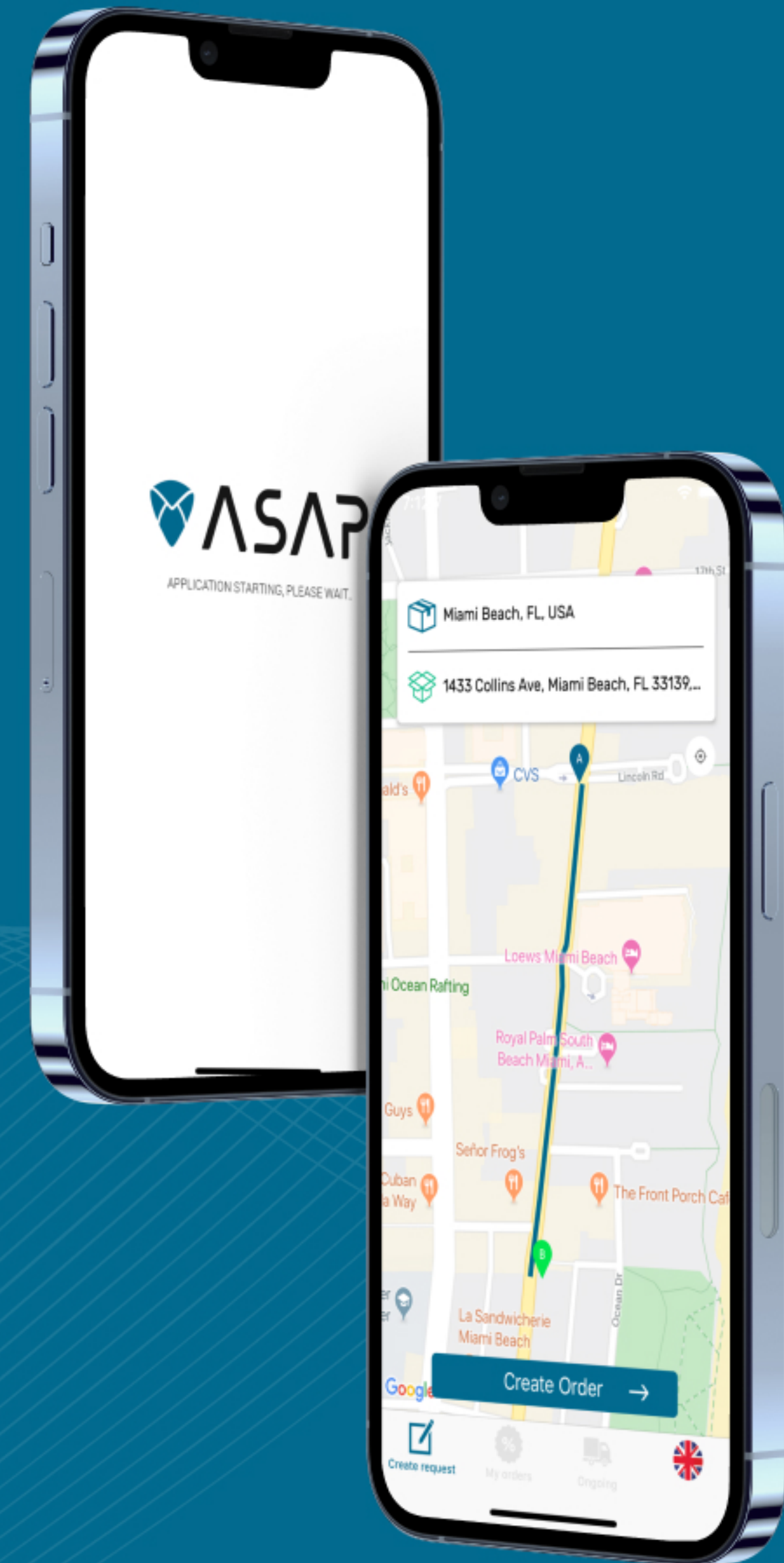
Highlighted Features

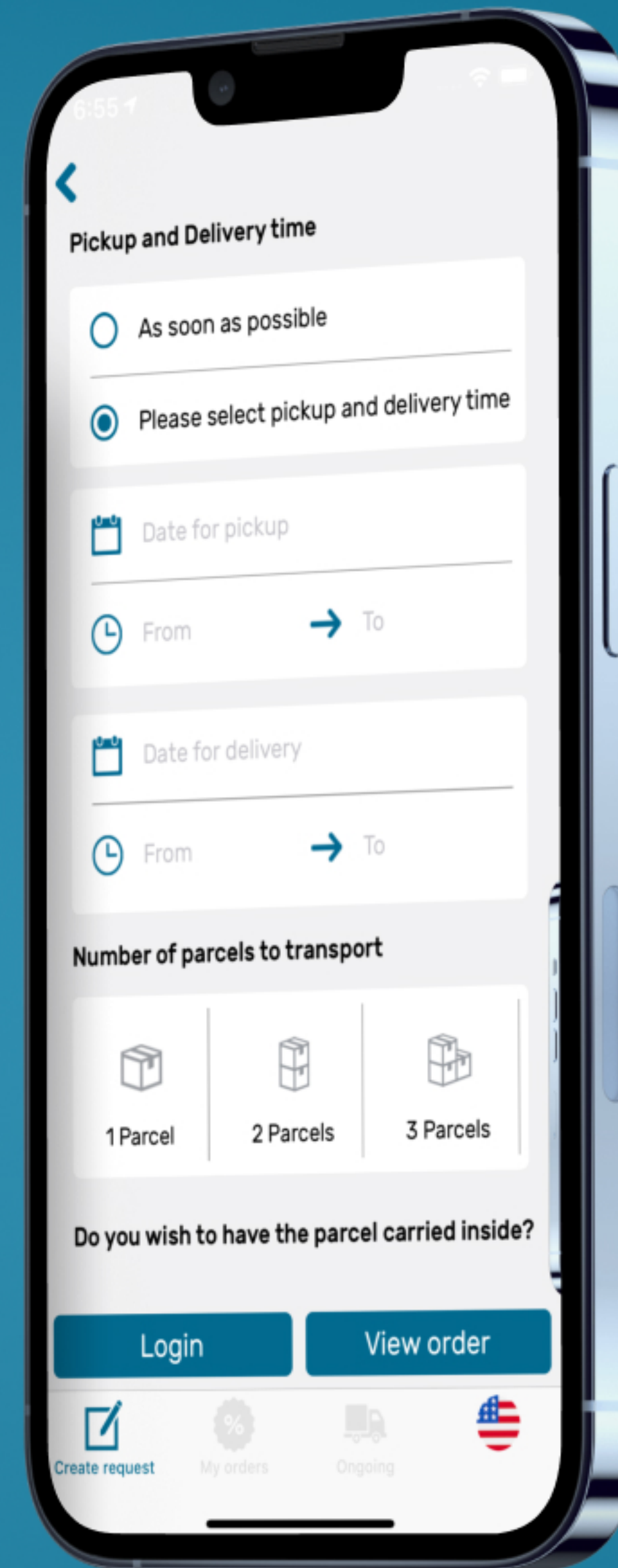
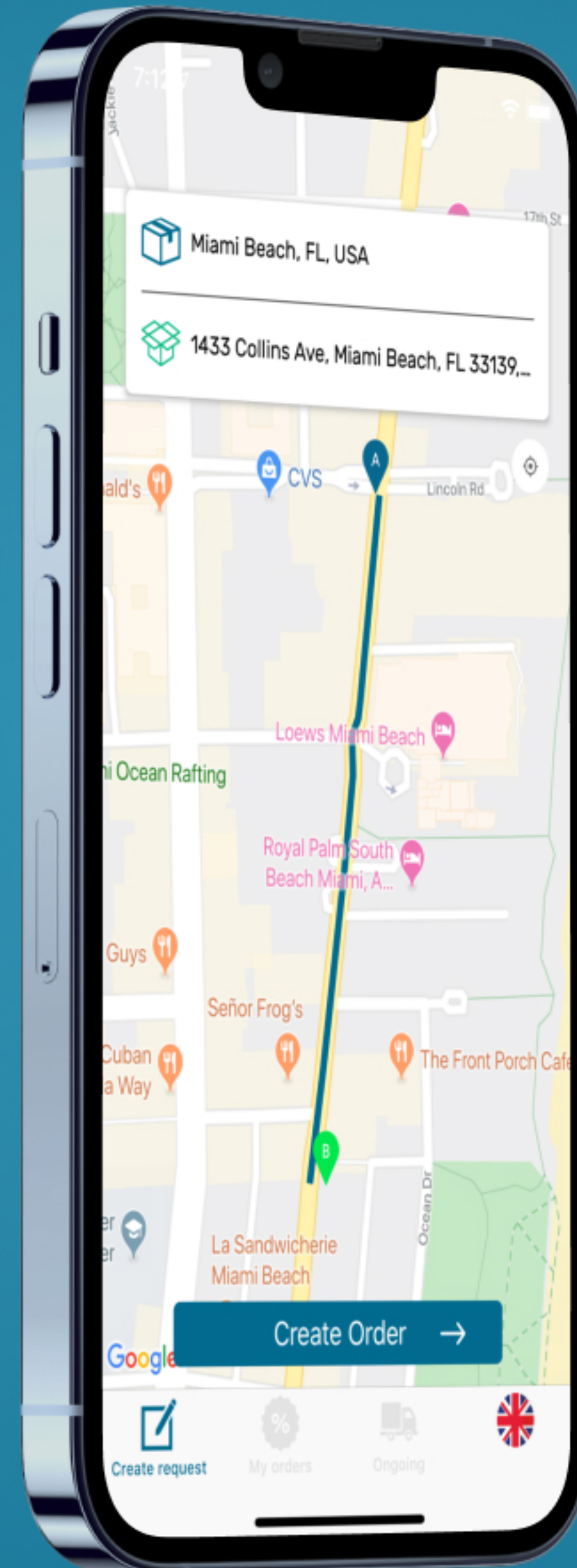
- **Vehicle Selection:** Provides a range of vehicle options to choose from depending on the size and type of items to be transported.
- **Offline Store Data:** In case of network issues, the app stores data offline to ensure that important information is not lost.
- **Driver Availability:** Maintains a comprehensive list of available drivers, allowing you to quickly assign tasks to them.
- **Real-Time Location Tracking:** Enables you to track the real-time location of goods and items, allowing you to plan the transportation route accordingly.
- **Photo Upload:** Allows you to upload photos of the items before the transmission begins, ensuring that the recipient receives the correct items.
- **Delivery Verification:** Enables you to verify the delivered items by reviewing the photos uploaded before the transmission.
- **Signature Collection:** Allows you to collect the recipient's signature upon delivery, ensuring that the items have been received by the right person.

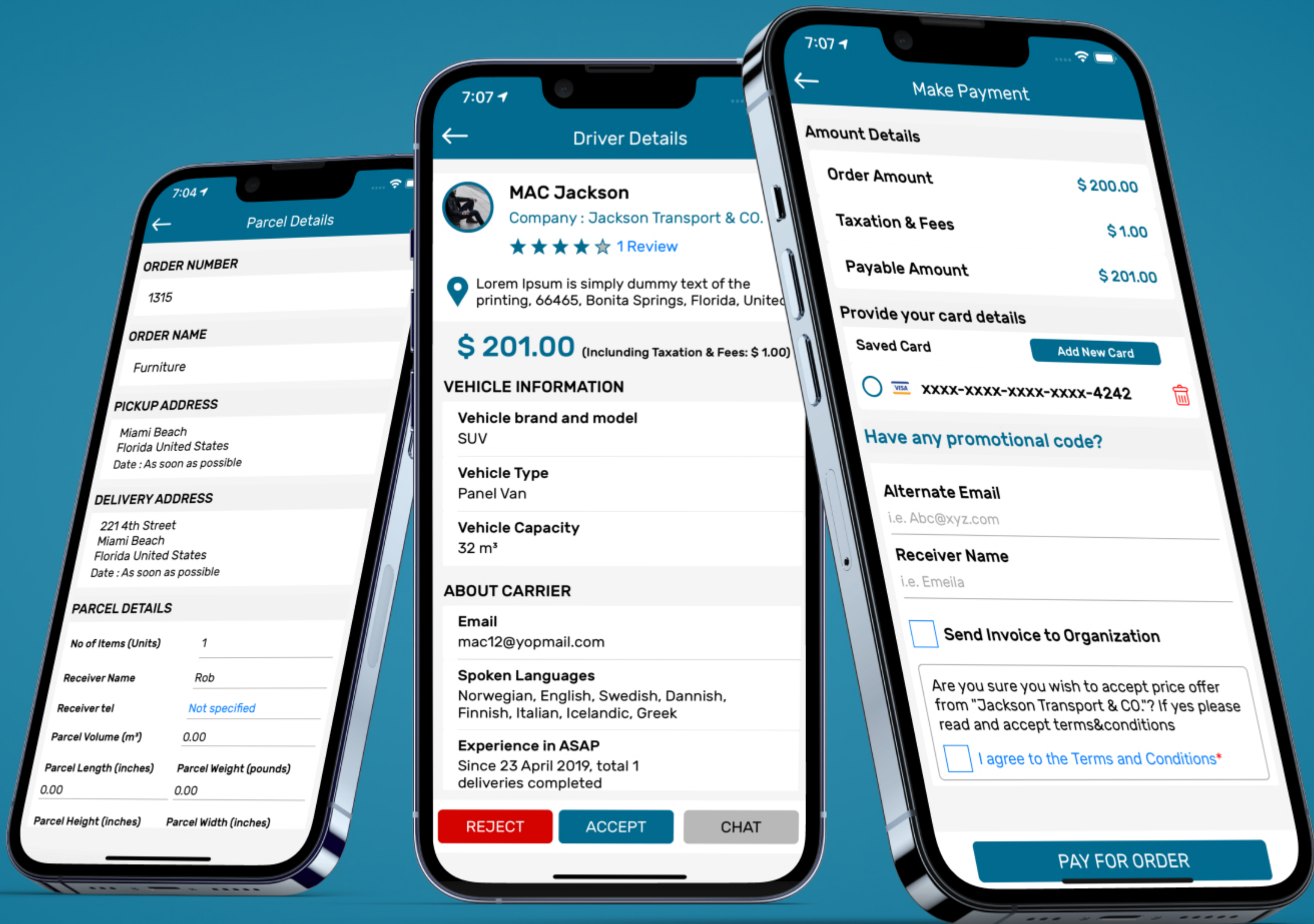


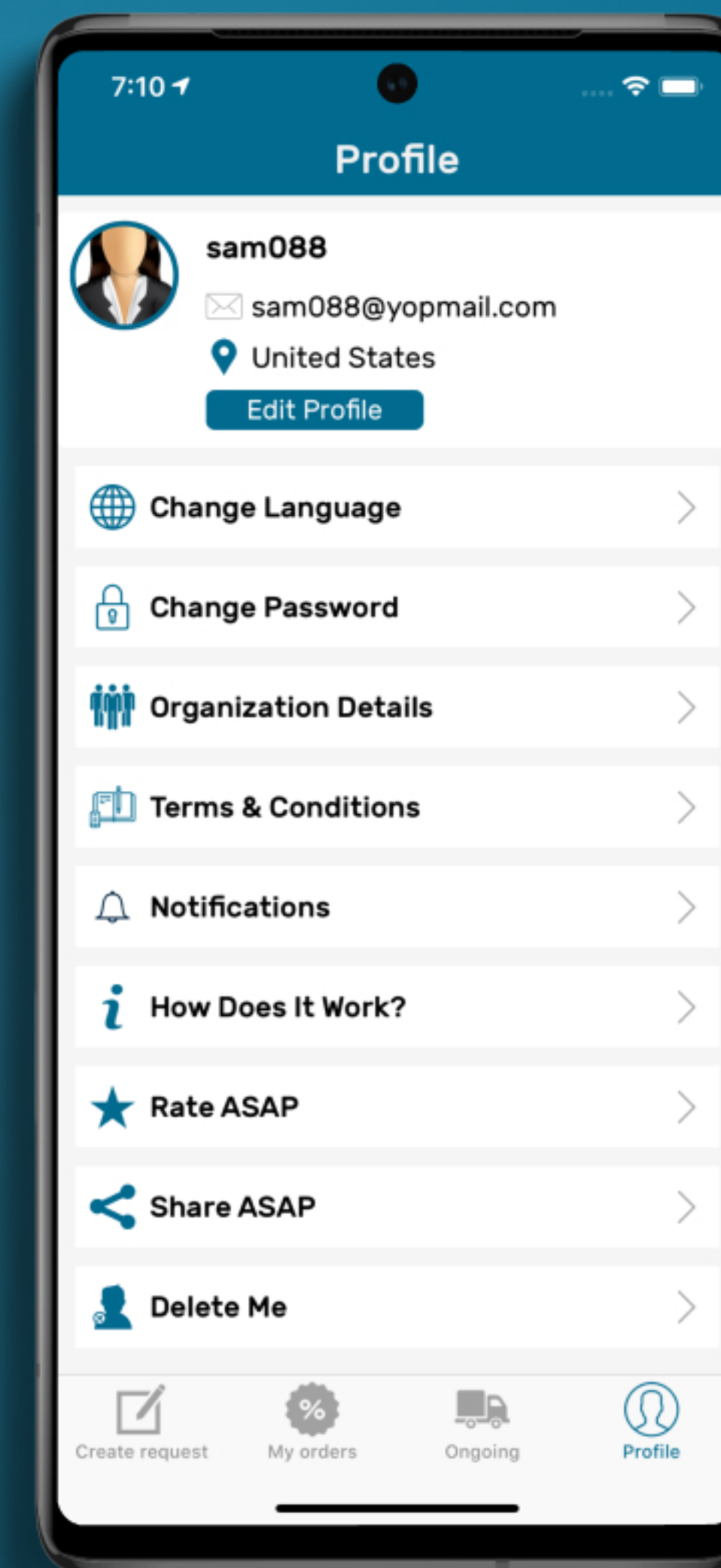
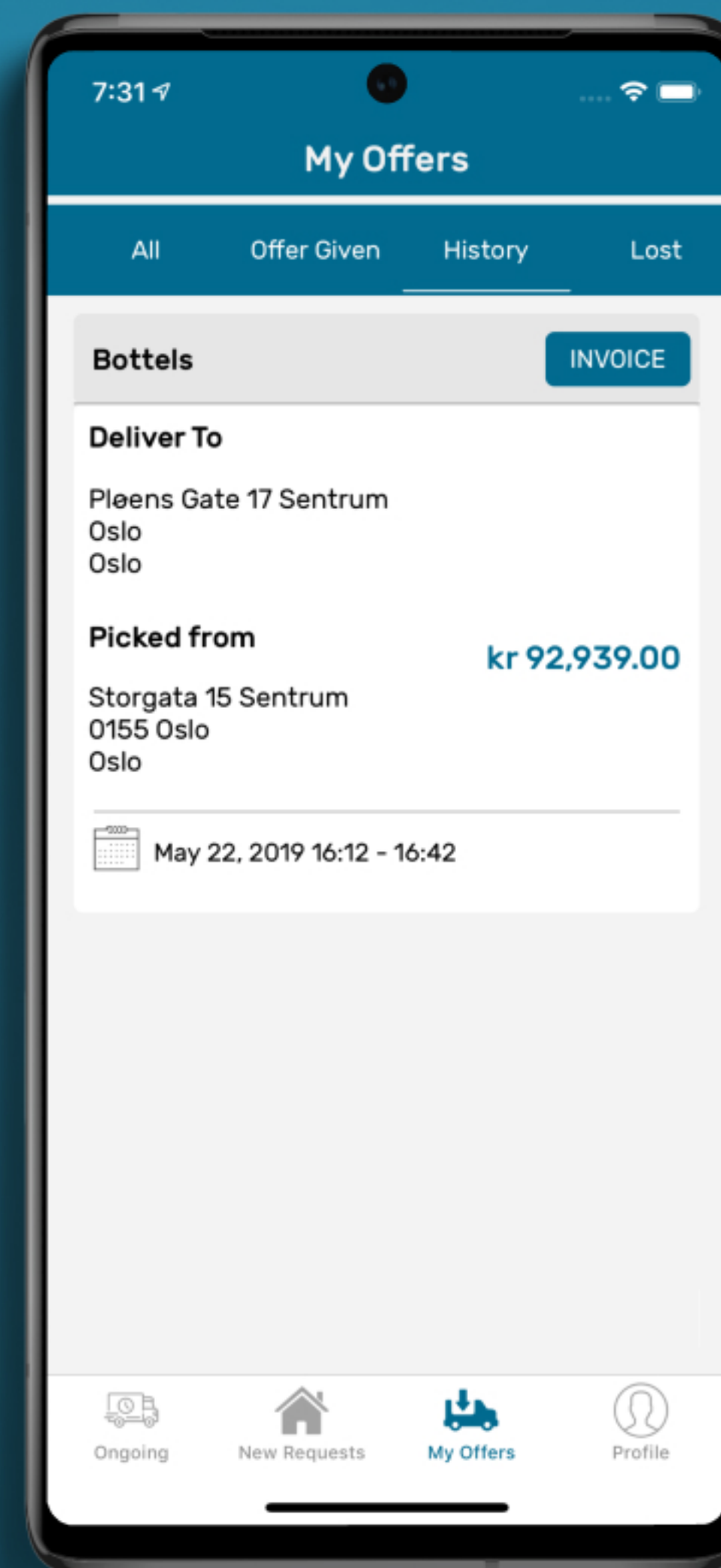
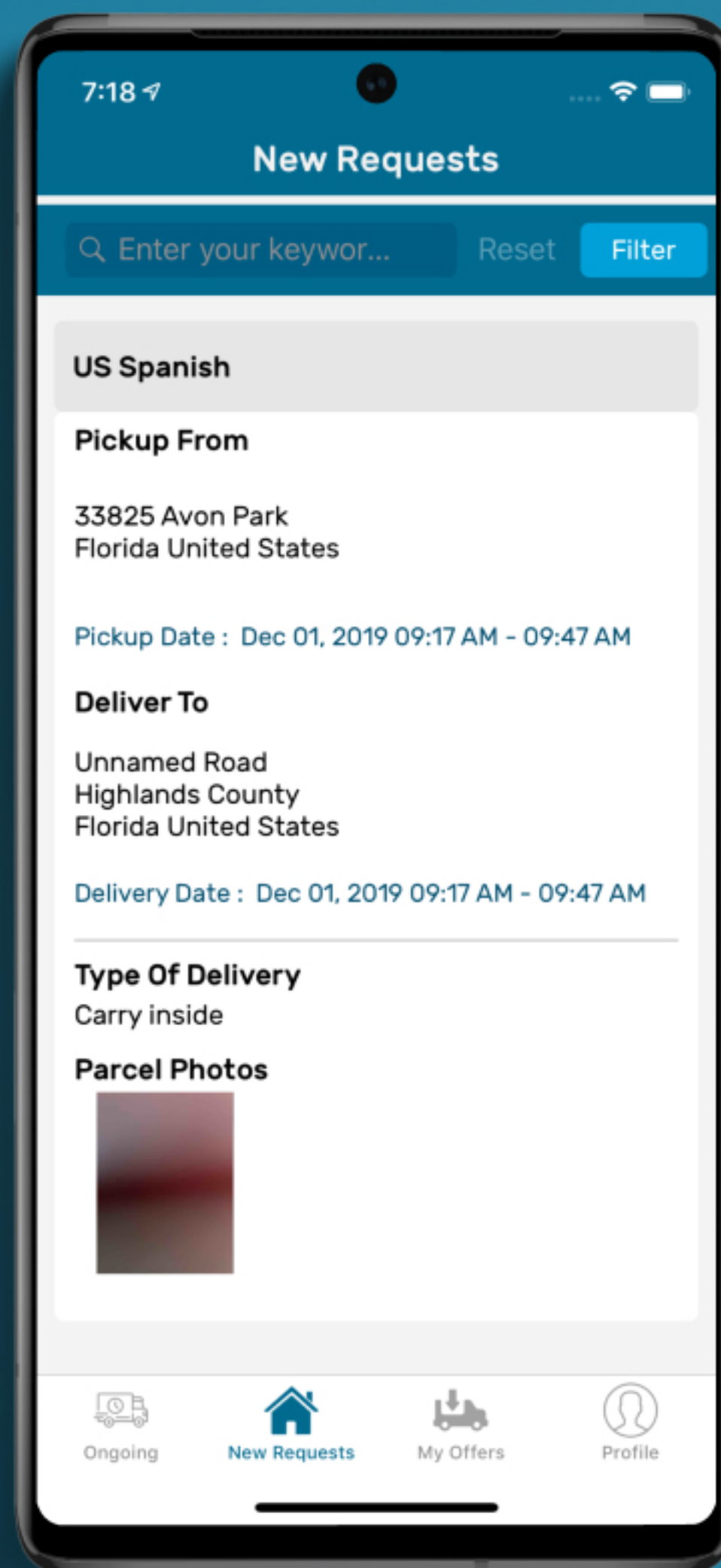
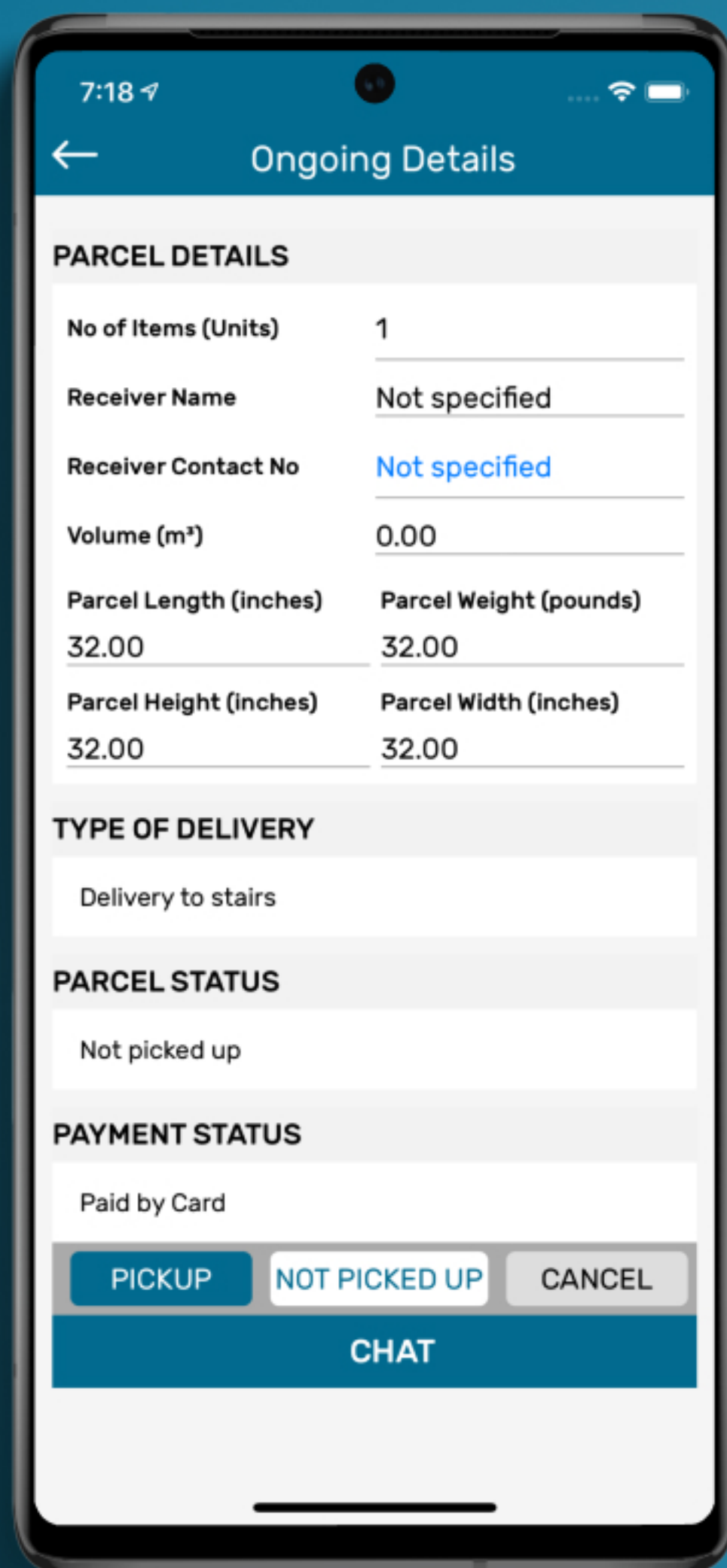
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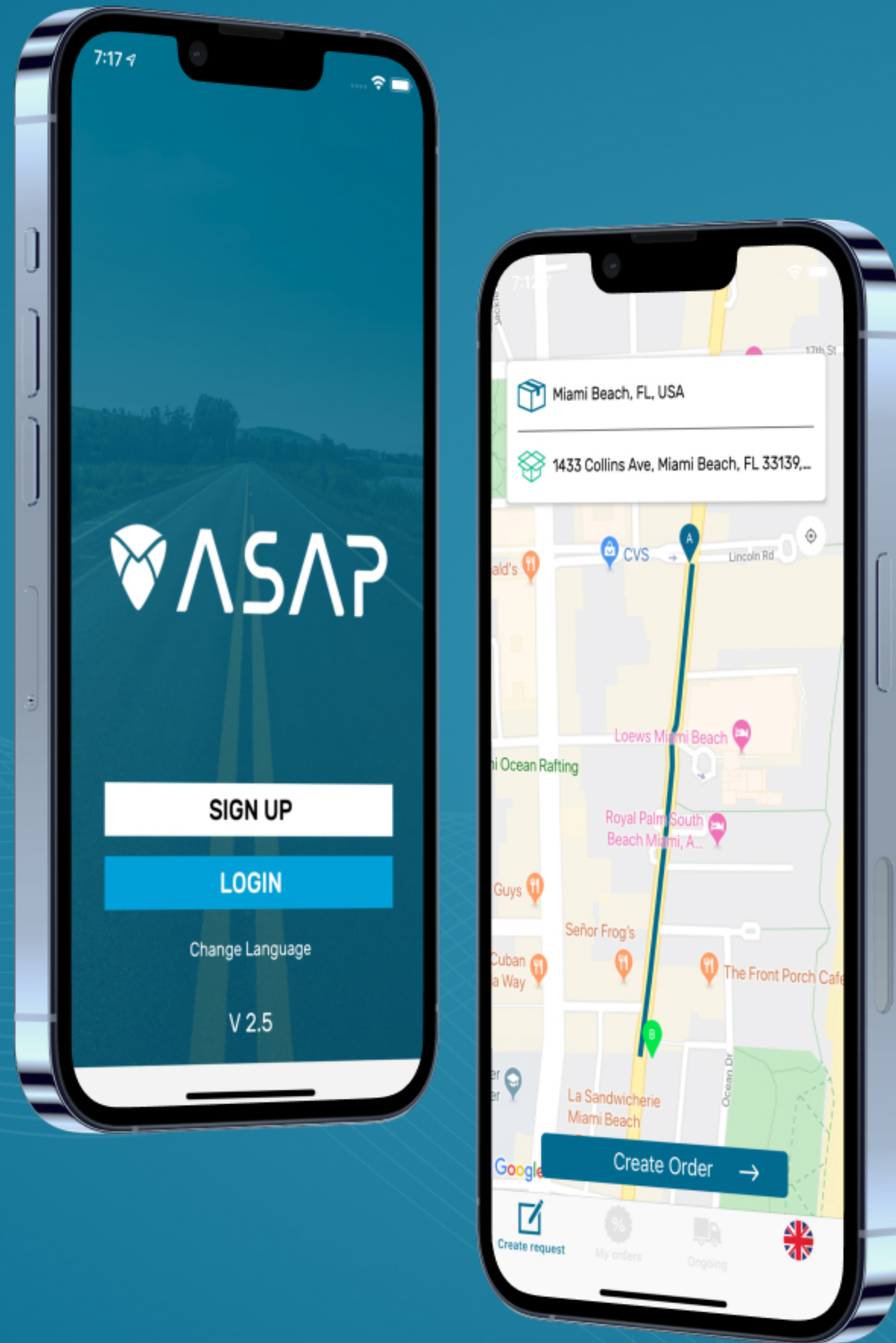
- **Refund Policy:** In case of driver failure or any unexpected event, the app provides a refund policy to ensure that your investment is protected.
- Driver Earnings and Income Monitoring.
- Secure Chat System between End User and Driver.
- Payment Processing for Services.
- Option for End User to Give Tips to Driver.
- Selection of Driver based on Price, Time, and Ratings.











Technology Overview

- **Mobile Technology**
iOS-Swift | Android-Kotlin
- **Database**
MySQL
- **Supported Device**
iOS & Android

- **API Technology/Backend**
ASP.NET MVC
- **Design Tool**
Figma
- **Industry Domain**
Transportation & Logistics