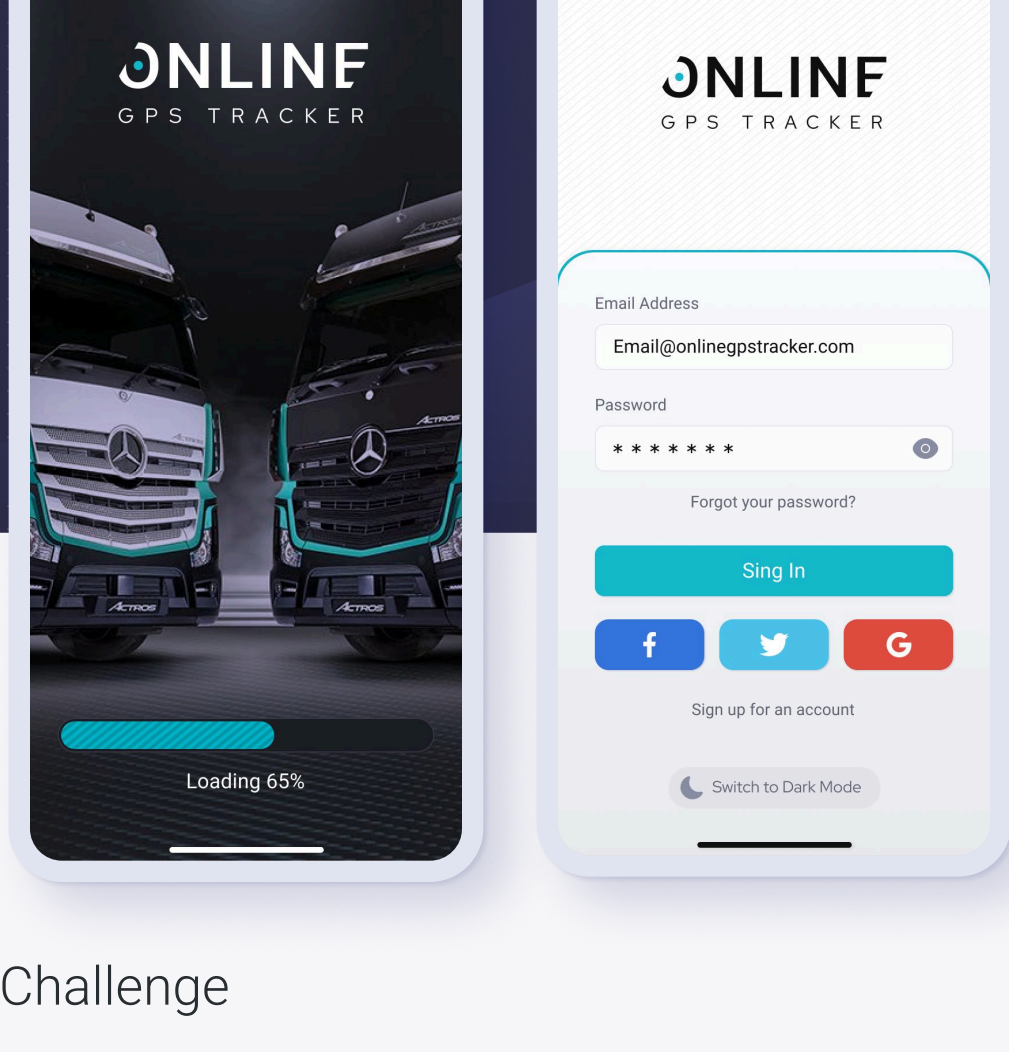


## GPS Vehicle Tracking System

A GPS vehicle tracking system keeps your fleet on schedule and helps your drivers to choose quicker routes and avoid costly delays.



## Business Challenge

The world is changing rapidly and all business goals and tasks are becoming smarter and more complicated every minute, so special software must be created to help solve and facilitate business processes. A GPS vehicle tracking system should simplify every driver's journey, increase the efficiency of working vehicles, and allow efficient tracking and routing of vehicles. A GPS vehicle tracker would also help to optimize operations and complete more orders. The application had to give entrepreneurs great control functions, quick and accurate feedback, and provide drivers with reliable and timely information about vehicle condition (oil and fuel level, seat belt, and battery charge) and traffic.

The customer asked us to develop an easy-to-use vehicle tracking system based on GPS technology that helps to track the position of a fleet, keep on hand the onboard information about working cars, and therefore minimize vehicle expenses. The system also had to provide the security of all data. The main function of this GPS vehicle tracking system should be the possibility of real-time routing optimization for increasing the efficiency of the working vehicles.

## Solution

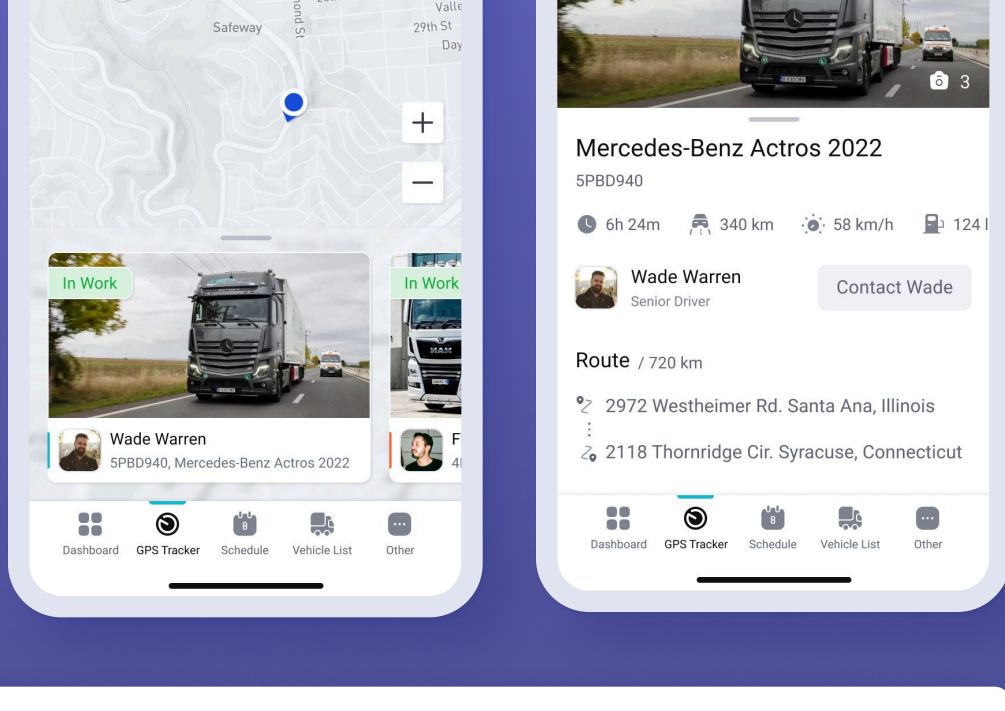
The vehicle tracking system was required to be built in accordance with the latest IT and design trends, and with the possibility to use it on all mobile platforms. That's why XB Software team selected React Native technology for the future GPS vehicle tracking system.

The tracking system includes user accounts to support the level of access appropriate for each driver, custom groups that allow organizing vehicles, planning dashboard, vehicle condition (oil and fuel level, seat belt and battery charge tracking) and onboard information tracking tables (fuel consumption, distance, etc) and a set of additional tools.

The ability to use a map to get the current location of vehicles or to find the nearest vehicle is a useful function for entrepreneurs. The GPS tracking system provides the possibility to show information about traffic jams which might help drivers to choose the best way to get to the place of destination which should increase productivity and reduce driving time. These features were implemented through Yandex.Kit components.

Laravel was used as a framework for the back-end. It is one of the most innovative and popular frameworks because of its simplicity and speed.

One of the important functions of a GPS vehicle tracking system is the ability to review route histories. The GPS tracking application allows you to look back at a vehicle's location and driver performance over time through an animated, interactive route replay that breaks each day down into detailed trip segments. Moreover, collected onboard information (fuel consumption, distance, etc) on that day or previous days is always available to analyze.



## Project in Figures

**6+**

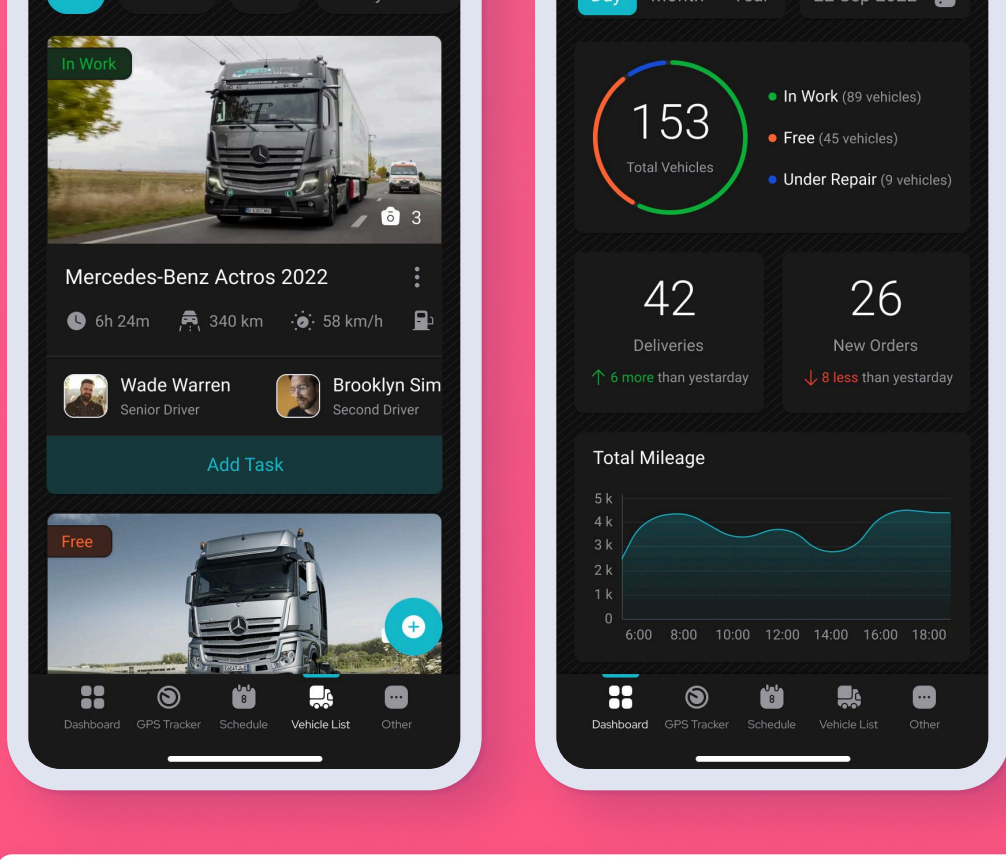
Months

Duration

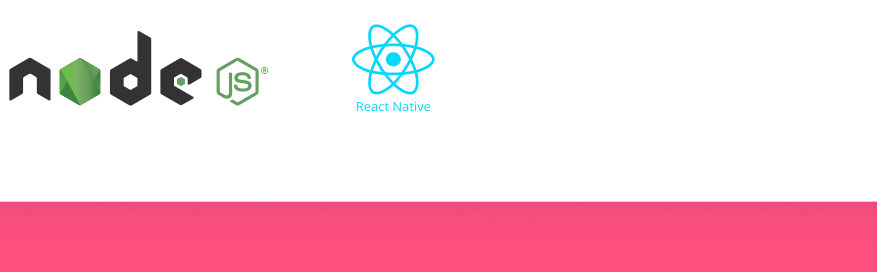
**1000+**

Estimated

man-hours



## Applied Technologies



## Results

The customer got an easy-to-use mobile application that can be securely accessed from any device all over the globe. The developed GPS vehicle tracking system allows optimizing operations via real-time fleet tracking.

Using this vehicle tracker based on GPS, users can:

- ✓ view the current location of any car or equipment
- ✓ see the speed and direction the vehicle is traveling
- ✓ plan routes more effectively to achieve the best result and reduce operational costs
- ✓ and check the route history.

The [custom logistics software](#) allows tracking:

- ✓ vehicle condition (oil and fuel level, seat belt and battery charge tracking)
- ✓ on-board information (fuel consumption, distance, etc)
- ✓ and a set of additional useful tools.

**Your questions and requests are always welcome!**

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