

Carsharing platform

Customer

Our client's platform provides the technology needed to run a stand-alone ridesharing or carsharing operation, or a hybrid service that combines both. End-to-end automation covers onboarding new riders, checking IDs, dynamic pricing, driver-rider matching, ride scheduling, payment processing, demand-supply balancing, personalized settings, and even referral programs and promotions. There's also a customizable app that's easy to love for drivers and riders.

General Problem

The client has already had a carsharing platform and mobile app for end users, however, there wasn't any car managing system for their partners.

Every car registered within the platform has been equipped with the monitoring hardware and notification system for monitoring certain parameters, such as low fuel level. When the car needed service, e.g. refueling, the built-in system created tickets for the support which had to call a service employee and ask for the service.

This process was completely manual and error-prone, so the client wanted to have a system that will allow to manage the whole car fleet and automatically dispatch the work for employees. They also wanted to have an app for employees which would help them to complete the jobs faster, with real-time notifications, navigation to the car which needs service and job queue optimization to maintain cars faster.

Technologies

- Python
- Django
- Golang
- Google maps
- Kafka
- Android
- Redis
- React
- IOS
- Google Protocol Buffers

Solution

Acaisoft delivered from scratch a complete, highly scalable multitenancy system for Active Fleet Management as well as a mobile app for service employees (up to 600 service employees per tenant) that automatically dispatch jobs in real-time, optimize the jobs queue and plan the route to the cars for the service employees.

The Results

The previous flow, from an alert sent by car hardware to fix by an employee, took about **17 hours**. Our new Active Fleet Management system integrated with existing carsharing platform allowed to reduce the service time to just 1 hour.



Car service time
dropped from

17 to 1
hour