



# Corona avto

## An online store for truck parts

### About client

The "Corona-Avto" group of companies is one of the five largest wholesale distributors of parts for trucks in Russia, Belarus and Kazakhstan. It supplies spare parts for commercial vehicles from manufacturers like Scania, Volvo, Mercedes-Benz, MAN, Renault and others. The product range includes 120,000 items, delivered free of charge to Russian regions within a day.

#### Duration

1 year






#### Industry

E-commerce

#### Team

Analyst — 3  
QA engineer — 2  
Project manager — 1  
UI/UX designer — 1  
Back-end developer — 3  
Front-end developer — 2

#### Technologies

 TypeScript  
 Angular  
 Java  
 Spring  
 PostgreSQL

### Challenge

The original version of the online store was based one of the standard CMS systems and included over 100,000 product items. It eventually became outdated and no longer met company requirements. The old engine could not be used to offer personalised experience to customers and enhance the site's functionality, which was a serious obstacle to business growth. A new, scalable and highly configurable system had to be developed. CMS available on the market could not be used to implement the desired features. Creating its own online store was the best solution, but the deadline was very tight which was an additional challenge for the customer. So, the customer came to our company with this problem.

### Solution

We were to create the online store from scratch and include in it a vast number of features available in most popular CMS, with the addition of some absolutely new functions. To make the system easily scalable horizontally and vertically, we decided in implement it on a microservice-based architecture. Tight deadlines for putting the project into operation imposed additional limits on the development team. Integration of the online store with internal systems was one of the priority tasks. It was also crucial to make the store resistant to hackers and implement an easy-to-use product search system. The project was being developed in close contact with the customer to make the final results completely compliant with the requirements. A team of 12 had been working on the project for a year. Back-end of the store was written in Java with the Spring framework and the front-end was written in TypeScript with the Angular.



## Result

Although development deadlines were extremely tight, the complex functionality was implemented in full, and the project was launched successfully. Apart from flexible settings and well-designed internal business processes, the online store had robust security in its design. Unique algorithms prevent malicious bot attacks and detect user-based security threats on the website. The system analyses the customers' behaviour and offers personalised discounts for the products they may be interested in. Due to well-designed integration into the existing infrastructure all the data on the product items, prices and discounts are loaded from the company's internal systems. Putting an updated online store into operation increased buyer loyalty and had a positive effect on the customer's financial results.

