Korona Auto

An online store for truck parts

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 It eventually became outdated and no longer met company requirements.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.

Angular   Java

Duration
1 year

Industry
E-commerce

Team
Analyst — 2
QA engineer — 2
Project manager — 1
UI/UX designer — 1

Back-end developer — 2
Front-end developer — 2
Mobile developer— 2

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. The software core was based on the Spring framework for the Java platform, while the front end was written in 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 spam bot attacks and detect users who pose a threat to the site's operation. The system analyses the behaviour of customers and offers personalised discounts for the products they are 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.