Delivering testing automation for the next-generation free-flow tolling system

THE COMPANY: KAPSCH TRAFFICCOM AG

Kapsch TrafficCom is a provider of intelligent transportation systems in the fields of tolling, traffic management, smart urban mobility, traffic safety and security and connected vehicles.

As a one-stop solutions provider, Kapsch TrafficCom offers end-to-end solutions covering the entire value creation chain of its customers, from components and design to the implementation and operation of systems.

The mobility solutions supplied by Kapsch TrafficCom help make road traffic safer and more reliable, efficient, and comfortable in urban areas and on highways alike while helping to reduce pollution.

THE CHALLENGE

Kapsch TrafficCom developed a set of world-class Freeflow Tolling Systems which includes specific sensors and software behind the scenes to control them.

One of the key software pieces included in these solutions is the Customer Back Office system. This is a CRM solution responsible for managing the entire Customer Lifecycle, from acquisition through to collections, including transaction registration, billing, payment and collection processes.

The challenge faced by the development team was adding a solution to the main tolling system that would allow them to automate its testing in a scalable and sustainable way. And the test automation piece needed to be provided to their customers as one of the deliverables within the main free-flow tolling solution.

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> Crowdar satisfied our specific needs with specialized resources in Automation, helping us build the capacity of our Automation team at the Solution Center Back Office (SCBO) in Argentina, both with techniques and automation tools.
> "

THE SOLUTION

Crowdar selected a team of QA automation engineers to develop a new framework to provide testing automation capabilities to the Phoenix Project (CRM application) in an initial MVP of 3 months.

During the initial process, Kapsch built a new team of automation engineers, with the most experienced professionals from different areas, including QA, business analysts and developers. This team was later trained by Crowdar on test automation techniques and Agile methodologies.

After a period of three months, the combined team formed by Crowdar and Kapsch engineers built the testing automation foundation for the Phoenix project.

To date, over 500 scenarios have been automated using the framework provided by Crowdar and enriched by the combined team's experience.

After the MVP was completed, the combined team continued working together. The team are currently extending the test automation practices acquired by implementing other branches of the initial project with the same approach.

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> Crowdar provided us with the necessary framework, working with an AGILE approach that suited our needs, setting the grounds for the Phoenix Automation's discipline.
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> **Fabián Oubiña**
> **Business Support Manager**
> **Global Back Office Solution Center**

PROJECT HIGHLIGHTS

Duration: 1 year
Test scenarios automated: 500+
Team: 1 Agile PM, 1 Architect, 6 Automation Engineers
Platform: Crowdar Test Automation Framework
Methodology used: BDD, Agile
Language & Tools: Java, Selenium, JBehave, Jenkins