Nouméa TownHall
@New Caledonia

About Nouméa TownHall
Nouméa TownHall is a public organization that provides free services for citizens in New Caledonia. It manages data including birth, death, civil actions, elections and passports.

ZK x Nouméa TownHall
The project GPM (Gestion du Parc Motorisé in French, meaning motorized fleet management) is a free service for all agents in Nouméa TownHall (~1000 people). Agents can reserve vehicle / motorized tools via the application (car, truck, bulldozer, chainsaw...) and report any malfunctionality. Each vehicle / tool has its own workflow for maintenance and revision which is implemented directly in the application. It was first released and went in production in 2018, and has been growing steadily ever since.

The main goal of the project was to provide a fast and intuitive interface to see which vehicle / tool is available.

Architecture
It is a ZK + SpringBoot application using Spring version 2.3.x. In the backend we have adopted Kotlin 1.4 instead of Java. In the frontend we use ZK 8.6 with ZK charts.

We use PostgresQL 10.x as the DBB with liquibase for tracking schema changes. The project is deployed on CentOS 8.

The Challenge
Before adopting ZK, we mainly use a mix of JSP and JavaScript for our front-end which proved to be painful to maintain and update.
Therefore we wanted a better tool that allows us to code and maintain easily.

Main factors considered in the evaluation process were:

- Compatibility with java/kotlin
- Development speed
- Ease of maintenance
- Learning curve, ease of on-boarding new developers
- Is the framework being maintained? How fast does it evolve? Does it maintain backward compatibility when a new major version is released?
- Framework documentation
- Is the technology open source
- Cost of the license
- Does somebody provide support for the framework?

Why ZK

After evaluation, we decided upon ZK because of the following reasons:

- Out of the box components for almost everything
- ZK Charts ( and especially x-range series )
- No JavaScript required
- Compatibility with Spring & SpringBoot
- Event / notification system is really simple to understand
- Overall simplicity
- Productivity
- Learning curve, new developers can be productive very quickly
- Strong open-source commitment
- Very responsive support!

ZK Charts was especially useful to show reservations made on vehicle and tools.
The Best of ZK

ZK Charts was really nice, modern and easy to use. We also liked customizable combo box and component templating (to create kanban board).

The Result

The results are very satisfying and the application is now widely used by all the agents of Nouméa TownHall. We plan to keep the same stack (ZK + SpringBoot + kotlin) for our next project, an online payment facility for the inhabitants of the city of Nouméa.

About ZK

ZK is the leading enterprise Java Web framework with more than 1,500,000 downloads. ZK is deployed by a large number of Fortune Global 500 companies, including Barclays, Allianz, Swiss RE, Roche, Deutsche Bank, Sony, Sun Microsystems, and Toyota, providing them with the ability to rapidly create rich Ajax enterprise level applications.