



FORWARD THINKING IT SOLUTIONS

JAVA COMPETENCE CENTER

Success through quality

 **ergonomics**

# JAVA COMPETENCE CENTER

## Key concept

Ergonomics has been successfully implementing customized Java solutions for various industries since 1995. With these numerous projects, we have acquired comprehensive knowledge and built up a wealth of experience in this environment. This know-how needs to be available to all current projects - and thus to all our customers.

The Java Competence Center (JCC) is an internal unit and ensures cross-project know-how in the field of Java as well as the related tools and methods. The JCC ensures the continuous expansion of our Java competence.

All our customers benefit from the combined knowledge and the best possible support of an experienced team.

## High efficiency

By focusing on selected technologies and standardization in project implementation, we achieve a high degree of efficiency for the benefit of our customers. In particular, we emphasize:

- » Review of the selected software architecture and design
- » Continuous review of the source code (code re-views)
- » Generation and review of program documentation (Javadoc)
- » Sales support with presentation documents and argumentation aids

This process excellence gives us the freedom to examine your requirements in depth and to offer you quickly and profitably well-thought-out solutions, from the idea to the successful implementation.

## Our Services

Ergonomics accompanies the successful implementation of your project along the entire life cycle with the following core processes:

- » Requirements definition and analysis
- » Architecture, design, and prototyping if necessary
- » Programming and validation

- » Implementation
- » Maintenance

Of course, we accompany the projects with proven expertise in project management, quality assurance, configuration management and documentation.

## Always up to date

In order to keep the level of knowledge up to date at all times, the Java Competence Center is essentially entrusted with the following tasks:

- » Ensuring the ongoing experience exchange between the development teams
- » Conducting internal training courses and workshops
- » Broadening and deepening know-how through participation in external training courses
- » Introduce new tools and methods for the development process
- » Join Java interest groups (e.g., Oracle Developer Connections, User Groups) and actively participate in events.
- » Manage and update the company's Java competence library
- » Evaluate and assess new Java libraries and middleware products.



## Technologies

- » JVM with Springboot, Hibernate, Gradle, Maven
- » Kotlin
- » Angular, Vaadin (for UI resp. web interface)
- » PostgreSQL, Oracle, MariaDB (additional DB's on request)

## Tooling

- » Eclipse IDE / IntelliJ IDEA
- » Sonar (static code analyses for quality)
- » Gitlab (für Issue Management, Build Chain, Release Management, project Documentation)
- » Dependency- und Vulnerability Scan
- » Docker, Kubernetes
- » Managed Services (CH-Cloud, Big Cloud, On Premise)

We would be happy to advise you on the implementation of your project with well thought-out customer-specific solutions and develop complete software applications for you, from the idea to the successful introduction.

# SUCCESS STORIES

## **Parking Platform**

Customer: Touring Club Schweiz

Design and implementation of a multi-mandate and multi-vendor parking platform that offers the sale of parking tickets from all leading parking providers on mobile applications. Currently, around 10,000 parking areas and 50,000 end customers are managed and processed.

## **Product Platform für SmartGridready**

Customer: Verein SmartGridready

Conception and realization of a platform for the technical specification of flexibilization functionalities of energy consumers and generators with focus on self-consumption optimization and grid-serving functionalities. The platform allows the search for products, specific functionalities and compatible controls.

## **Specialist application FiVer**

Customer: Bundesamt für Sozialversicherungen

Support and further development of the FiVer application for processing applications for financial support in the area of the Child and Youth Promotion Act. The web application enables eligible organizations to submit applications for funding, coordinates their evaluation by experts from the Federal Social Insurance Office, and creates decisions based on templates and the evaluations of the applications.

## **Software Systems for Automated Teller Machines (ATMs)**

Customer: NCR

Software for bank-owned ATM services for the banks UBS, AGI/SCIS, Finnova and Raiffeisen. Software for SIX Card Solutions' interbank services (Bancomat), including implementation of EMV technology at the ATM. Solutions for real money recycler systems for banks in Switzerland and Germany. Services in the scope of about 80 person-years.

Implementation, maintenance and support of the Swiss-wide standard application ATMfutura

for all banks and hardware manufacturer platforms.



## **EAS Authentication Server**

Kunde: Credit Suisse

Server system for strong two-factor authentication of e-banking users (mTan Mobile SMS, hardware token) with web solution for configuration, administration and hotline according to CS standard Internet guidelines for layout and flow.

## **Mobile Wallet**

Kunde: Payment Solutions

Realization of a platform with mobile app for customer-specific means of payment. The solution allows payment with mobile phones at participating acceptance points. The solution was used, among others, in the football stadium of 1. FC Kaiserslautern or in handball stadiums and, thanks to efficient payment processing, led to increases in sales during the breaks in play.

## **Mobile Payment Gateway**

Kunde: e24 AG

Realization of a complete payment system for processing mobile transactions for the leading Swiss mobile payment service provider (mPSP) e24. Payment options with in-app payment, SMS and NFC technologies. Web-based B2B merchant information system.

Detailed information about the individual projects can also be found on our website:

[www.ergonomics.ch](http://www.ergonomics.ch)

# CERTIFICATONS

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Ergonomics is a member of the Java User Group Switzerland and has been a Microsoft Certified Partner for over 10 years.

Ergonomics AG covers the following certifications with its employees:

## Software Development

- » Member Java User Group Switzerland
- » IBAE Business Analyst
- » Oracle Certified Java Programmer
- » Oracle Certified Web Component Developer
- » Certified Vaadin Professional

## Project Management

- » HERMES Advanced
- » IMPA Project Manager

## Quality Assurance

- » ISTQB Certified Tester (International Software Testing Qualifications Board)

## Software Management

- » ITIL V3 Foundation Certificate
- » Swiss Government PKI LRA-Officer Class B

For inquiries and information regarding Software Engineering, please contact our division manager:

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