



FORWARD THINKING IT SOLUTIONS

WEB APPLICATIONS WITH VAADIN

Efficient digitization of business processes

vaadin}>

ergonomics

VAADIN

With Vaadin to Success

Modern web-based business applications must be able to be created quickly and efficiently in today's dynamic business environment. Vaadin as an established and free web framework enables exactly this requirement.

While classical web developments require two-part teams with front-end designer and back-end programmer, the complete application is implemented directly in Java with Vaadin. This results in many advantages:

- » Less complexity in the technology stack
- » No frontend / server context change necessary
- » Simplified data validation and session handling
- » Large selection of standard GUI components
- » Responsive design (desktop / tablet / mobile) Web-Framework

In contrast to classic JavaScript libraries and other frontend-heavy web frameworks, Vaadin allows the implementation of the application in the same context as the classic server-side part of the application. This significantly simplifies the technology stack of web applications. Vaadin takes over the typical tasks such as provisioning and synchronization of client data, client- and server-side data validation and session handling. Vaadin's standard components are designed for both desktop and mobile devices (Responsive Design) and can be extended with custom controls.

In contrast to traditional web development with HTML and JavaScript, the framework guarantees a clean modular structure, good testability and high productivity.

Your benefits

- » Over 1000 companies worldwide rely on Vaadin
- » Security by Default offers maximum security and minimum attack surface
- » 20 years of experience and a support promise of 15 years guarantee investment protection and predictability

Our conclusion

Ergonomics has been developing Java-based solutions for over 25 years. Vaadin enables our developers to develop the entire program code of both frontend and backend modules in the same programming language. This unification of tools significantly reduces the effort for setup and maintenance of a software project and allows to realize software solutions elegantly and price-consciously "from one source".

Services

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

- » Requirements development and analysis
- » Architecture, design, and prototyping if necessary
- » Programming and validation
- » Implementation
- » Maintenance
- » Project management, quality assurance, configuration management and documentation.



Technologien

- » Vaadin (for UI resp. web interface)
- » JVM with Springboot, Hibernate, Gradle, Maven
- » PostgreSQL, Oracle, MariaDB (additional DBs on demand)

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)

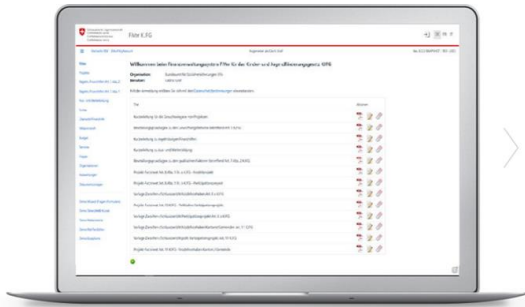
We would be happy to advise you on the implementation of your project with well thought-out customer-specific solutions and develop complete software applications for you, from the idea to the successful introduction.

SUCCESS STORIES

FiVer, Bundesamt für Sozialversicherungen

The Federal Social Insurance Office uses a comprehensive web-based business application to record applications for financial support in the area of the Child and Youth Support Act. The application FiVer supports both the end user and the FSIO in the collection, analysis and evaluation of applications for support in the area of youth support.

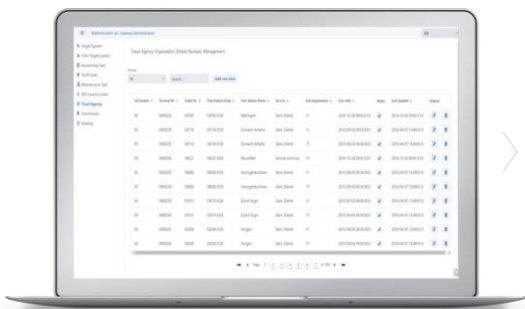
The web application is currently being completely migrated from Google Web Toolkit (GWT) to Vaadin.



RhB Gateway Backend

The Rhätische Bahn AG operates a gateway for reservation requests on trains of the RhB as well as 3 other connected partner railroads. The gateway receives reservation requests from the international UIC reservation system and forwards them to the responsible reservation system of the respective partner railroad. In addition to a simplified integration into the international booking systems for partner railroads, the gateway provides the consolidated booking data for the financial settlement between the participating partners on a monthly basis.

The interface for configuration, maintenance and analysis was implemented as a Vaadin application.

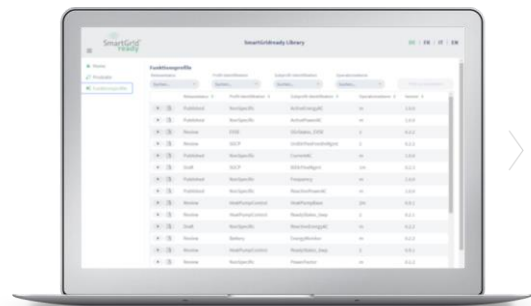


SmartGridready

To implement the Energy Strategy 2050, we need intelligent power grids. The SmartGridready association develops and a recognized label that all players - from production to consumption - can rely on.

One of the features of this label is the standardization of the so-called function profiles. A functional profile is a qualitative description of a group of related data points, which basically describes a data interface for a functional scope. A single function profile is bound to one device, devices use any number of function profiles.

Ergonomics implements a web application based on Vaadin that supports the management and classification of these Smart-Grid-ready devices and the used function profiles. The tool allows manufacturers to declare their products independently, and supports building supports building planners in the selection of possible devices and solutions in order to achieve the to be able to realize the smart grid functionality desired by the building owner.



CERTIFICATONS

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:

Martin Weiss
mweiss@ergonomics.ch
+41 58 311 10 00



Headquarters Zürich
Ergonomics AG » Nordstrasse 15 » CH-8006 Zürich
T +41 58 311 10 00

info@ergonomics.ch » www.ergonomics.ch