Medexter Healthcare

ZK is used in the Medexter ArdenSuite CDS platform supporting clinicians and medical personnel in their daily decision-making processes.

About Medexter
Our core competence and expertise are focused on solving methodological and practical questions related to the representation and processing of clinical knowledge. These efforts culminate in the creation of highly structured digitalized clinical knowledge. This is accomplished through the application of various formal methods from the fields of medical expert and knowledge-based systems. We have extensive experience in the application of such systems in hospitals, wards, laboratories, outpatient departments, and more.

“ZK allows fast frontend development”

ZK x Medexter’s ArdenSuite Server
The ArdenSuite clinical decision support (CDS) technology platform aims at providing clinicians and other medical personnel in your hospital with highly efficient medical-knowledge-based support in their daily decision-making processes. Its CDS is patient-specific, as it is based on a person’s latest data. For quality management and study support, it can be extended to population-specific analyses.

At locations where our CDS solution is implemented, ArdenSuites are integrated in or connected with the EMR systems and use structured data as input. In Austria’s largest University Hospital (about 2,100 beds) in Vienna, i.s.h.med runs as EMR system with the ArdenSuite as integrated CDS solution. At the University of Colorado Health System, U.S.A., the ArdenSuite has been integrated into Epic in several hospitals, and at the University Hospital Erlangen, Germany, the
ArdenSuite is connected with Dräger’s intensive care solution ICM.

Architecture
The architecture of our project revolves around ZK in combination with standard Java EE. We use Payara 4.1.1.171.1 as our application server and an embedded Derby database for JPA persistence. Our Software is separated into individual components, which communicate with each other via REST.

The Best of ZK
ZK was selected because it allows fast frontend development, and supports the MVC pattern.

We especially like the Event Listener Annotations for buttons, menus, etc. using the SelectorComposer (e.g., @Listen("onClick = #btnLogin"). This allows for a cleaner separation of frontend view code (xml files) and the actual logic code (in java files).

The Result
We have been using ZK for more than 5 years in multiple mission critical projects. We are happy with it and will continue to use ZK for future projects including the upcoming releases of Momo and Moni, two clinical solutions for infection control in hospitals.

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.