NETJAY/FANORAKEL
NETJAY BUILDS COMPLEX FANORAKEL WEBSITE FAST WITH GROOVY AND GRAILS

FANORAKEL.DE
DIE STIMME DER FANS

RESULTS

Groovy and Grails deliver the following business results to the Netjay and Fanorakel:

• Accelerated Development – 50% faster

• Fast Time to Market and More Features

• Leveraging the Benefits of Java

• More Creative Development and Competitive Edge

• Easier Maintenance and Fast Developer Ramp Up

• Support for Graph Database

TESTIMONIAL

"We get a huge productivity boost using Grails. Grails is about 50% faster than traditional development."

"We could not have completed the website in the tight timeframe without Grails – it would have taken too long. With the resources we had available for this project, in this timeframe, the website would not be as advanced as it is now."

"Using Groovy and Grails is like using the same technology as Spring, but with an additional abstraction layer on top of it that makes it very simple and does not require too much configuration. Everything just works."

Netjay/Fanorakel

Netjay, based in Munich, Germany, is a developer of websites and web applications. Netjay provides development, hosting and other technical services for customers in Germany and throughout Europe.

Application

Netjay was hired by Fanorakel to build the fanorakel.de website. The goal of the website is to collect opinions from German soccer fans. Questions are asked in real time during the games, as well as outside the regular match schedule. Fanorakel continually uses this data to create an aggregated fan opinion. The site currently has a 10,000 registered users and served a maximum peak of 3.5 million+ pages during the FIFA soccer world championship per day, and this traffic is expected to grow significantly.

The website keeps track of multiple objects – including players, teams, matches and fans – and the greatest challenge of the website design was the complex relationships between all the objects. The site must consider potential relationships between every object type, and the objects can change over time. For example, a player moves from one team to another during the season.

"This is a case where a classical relational database doesn't fit very well," explains Stefan Armbruster, technology lead, Netjay. "That is why we decided to use Neo4j, a graph database from Neo Technology. The Fanorakel website is a unique combination between Grails and a graph database, which has not been done before."

Challenge

Netjay faced a very tight development deadline of six months, combined with the complex requirements of the site.

"We wanted to stay in Java," Armbruster explains. "We come from the Java world. We trust in all the technologies that have been around for many years in Java. And yet traditional Java development would have taken too long to complete the site on time."

Solution

To accelerate the process and meet the time-to-market window, Netjay developed the entire Fanorakel website in Groovy and Grails, including building a Grails plugin for the Neo4j database. Groovy is a dynamic language for the Java Virtual Machine that offers a flexible Java-like syntax that developers can learn in a matter of hours. Grails is an advanced and innovative Web application framework based on Groovy, and built on proven open source technologies such as Spring.

"Grails has great community support," Armbruster notes. "I just love that about Grails. There is a mailing list where we get answers very fast. We have contact with the core developers, and they are

responsive. That is why we contributed a Neo4j plugin for Grails, because we get so much from the community and we felt it was our duty to give something back."

Benefits

GROOVY AND GRAILS DELIVER THE FOLLOWING BUSINESS RESULTS TO THE NETJAY AND FANORAKEL:

Accelerated Development
"We get a huge productivity boost using Grails," Armbruster confirms. "Grails is about 50% faster than traditional development.In Grails, we always have a possibility to solve problems, and Grails comes with very rich plug-in system, with more than 400 plug-ins available."

Groovy made it possible to use the Neo4j database, for example. On one hand, Netjay had classical domain objects in Grails and on the other hand they had to map them onto the Neo4j database structure. "That works simple with the meta programming we can do in Groovy," adds Armbruster. "If I had to do that in Java, it would have taken me a long time to think about whether it was even possible in a simple way."

Fast Time to Market
"Time to market was a very important issue on this project," says Armbruster. "There is nothing that allows us to be faster than Grails. No other tool kit in the Java world can offer this level productivity."

Netjay started on the project in December 2009 and was in the testing phase by March 2010. The website went live in June 2010, based on a project requirement to be up and running for the 2010 FIFA World Cup. "We could not have completed the website in the tight timeframe without Grails – it would have taken too long," he adds. "With the resources we had available for this project, in this timeframe, the website would not be as advanced as it is now."

More Features
Saving time on development not only means meeting tight market windows for Netjay, but also provides more time to produce more valuable features for the website.

Leveraging the Benefits of Java
"Before Grails, I used the Spring platform," says Armbruster. "Using Groovy and Grails is like using the same technology as Spring, but with an additional abstraction layer on top of it that makes it very simple and does not require too much configuration. Everything just works." Netjay wanted to stay in the Java world, and Grails allows Netjay to leverage the solid base of Java with the flexible top of Groovy and Grails. Armbruster makes a comparison to Ruby and Rails, which he says may also be flexible but does not provide the stable, well-proven foundation of Java and Spring.

More Creative Development
"Groovy and Grails inspire us to be more creative," says Armbruster. "Grails offers a richer tool set, and it encourages us to think about problems in a different way. We can also see our changes faster, and make changes more easily, so we can try more different, innovative approaches to problems."

Competitive Edge
Groovy and Grails makes Netjay more competitive with other firms because they are able to meet tight deadlines, like the Fanorakel project, with a small team of only two core developers.

Easier Maintenance
"The code base is significantly reduced in Groovy," says Armbruster. "In Groovy, we can write very expressive code. The Groovy code is much more focused on the problem we want to solve and not on the ceremony around it. We can write only a few lines and we can understand what is happening by reading the code. When we use Java, we need a lot more code to do the same task, and when we read the code it is easy to be confused. The advantage is that the code can be more easily maintained and updated."

For example, Armbruster explains that they might write some code, and two months later the customer requests new functionality. The developer has to look at the code and figure out what they did previously. If the code is very expressive, the developer understands what they did very quickly and can change it easily. If the code is polluted by a lot of boilerplate code, Armbruster says, the developer has to take more time and effort to figure out the code.

Fast Developer Ramp Up
Netjay is currently planning to expand the development team, and Groovy and Grails makes this more efficient and less costly by enabling fast developer ramp up. In addition, it allows Netjay to remain in the Java world, where they have the most confidence in the technology.

"We can take any good Java developer and get them started in Grails in a very short time," Armbruster concludes. "If we need a Groovy and Grails developer, the learning curve is not as dramatic when compared to switching to a completely different language. The Groovy and Grails syntax is very close to Java, so any Java developer will be able to read Groovy code almost instantly."

Support for Graph Database
Groovy and Grails were also the perfect fit to enable Netjay to incorporate the Neo Database into the Fanorakel website. "Groovy and Grails are a very good match for a graph database like Neo4j," says Emil Eifrém, CEO of Neo Technnology, creators of the Neo4j Database. "The era of a one-size-fits-all relational database is over. That means five years from now there are going to be a lot of non-relational databases. If you want to be a application development platform that people are using five years from now, you need to have first-class support for this. SpringSource and Groovy and Grails are at the forefront of supporting graph databases."

About SpringSource

SpringSource, a division of VMware, Inc., builds Java infrastructure software which eliminates the complexity of enterprise Java. SpringSource created Spring, the de facto standard platform to build, run and manage enterprise Java applications. SpringSource also employs the leading committers forApacheTomcat and is the leadingTomcat support provider Nearly half of the Global 2000, including many world's leading retail, financial services, manufacturing, healthcare, technology and public sector clients are SpringSource customers. For more information please visit springsource.com.