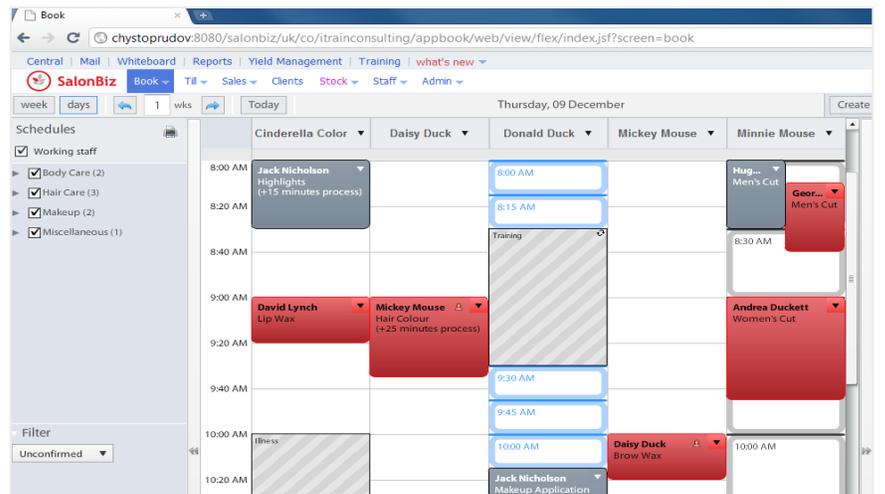


TeamDev SalonBiz: Enterprise Resource Planning System

Neill Corporation is a company providing the most innovative management software and tools for comprehensive processing of customers' cases, efficient staff management and improving business operations.

Industry	JPA
Lifestyle	Hibernate
Health & Beauty	Memcached
Technology	Oracle
Java 6	Communications and
Eclipse	Project Management Tools:
Equinox	Atlassian Confluence
OSGi	Atlassian JIRA
Spring (DM, Security, WebFlow)	Google Apps
JSF	Project Size
Flex	8 software engineers
JavaScript	2 designers
AJAX	5 QA
Web Services	Duration: 2 years



Goal

Creation of fully functional and scalable web-based ERP system, and migration from the existing desktop-based legacy application.

Challenge

The legacy system was developed as a database-centric application where business logic layer was just a set of stored procedures and SQL scripts. The client application was built on Microsoft technologies and required Windows-based workstations to run on, which significantly increased maintenance cost and limited the system to Windows users only. The main disadvantages of the old application were long time period of customization for every new business and necessity to maintain hosting servers separately for every client.

Methodology

Due to the project size and complexity TeamDev suggested iterative approach to the system development. All the scope was divided to monthly iterations and each of them was thoroughly planned with the customer. All requirements and communications on them were managed through an online wiki-based collaboration system. As an iteration result TeamDev prepared a real-time presentation and a current build of the application for the client review. In this manner the client was always well-informed on the project progress and had access to most current product functionality.

Technical Implementation

Since one of the main requirements of the client was easy system adaptation to any new business, TeamDev decided to create a modular system based on OSGi technology. All modules were divided to Core and Business-specific ones. Business-specific were designed to provide easy extension and ability to update at runtime, without restart of the application.

Oracle DBMS was chosen to optimize the data management and simplify data migration from legacy application. The cluster of Oracle servers, configured together with a number of Memcached instances, produced the needed level of performance.

UI layer was built on top of JSF technology. TeamDev used OpenFaces library, providing a wide set of JSF components, which allowed to dramatically decrease development time. Several processing screens were implemented in Flash (Flex) since they required enhanced user experience.

As any large-scale project, ERPs required extensive continuous and integration testing. For this purposes TeamDev used automated testing approach. Load testing was used to verify that application response time with a large number of users working with the system simultaneously conformed to client's requirements.

Results

TeamDev produced an enterprise-level web application with modern graphic design, quick response time and easy adaptation for new customers. Unlike the legacy system, the new SalonBiz application did not require costly hosting, installation and maintenance, which allowed the client to extend their market to small and mid-size businesses as well as continue supporting large-scale clients.

Client's Feedback

"I was glad to have the pleasure to stand in front of the board as the face of development and show off all the great work your team has done."

—Luke Kavanagh, Web Technologies Practice Manager, after presentation of the new version of the application.