

SaaS based ERP Platform

The Client is a London based software solutions company delivering high-quality, high-value business and mobility solutions that allow organizations to integrate their employees, customers and partners into business processes.

Overview

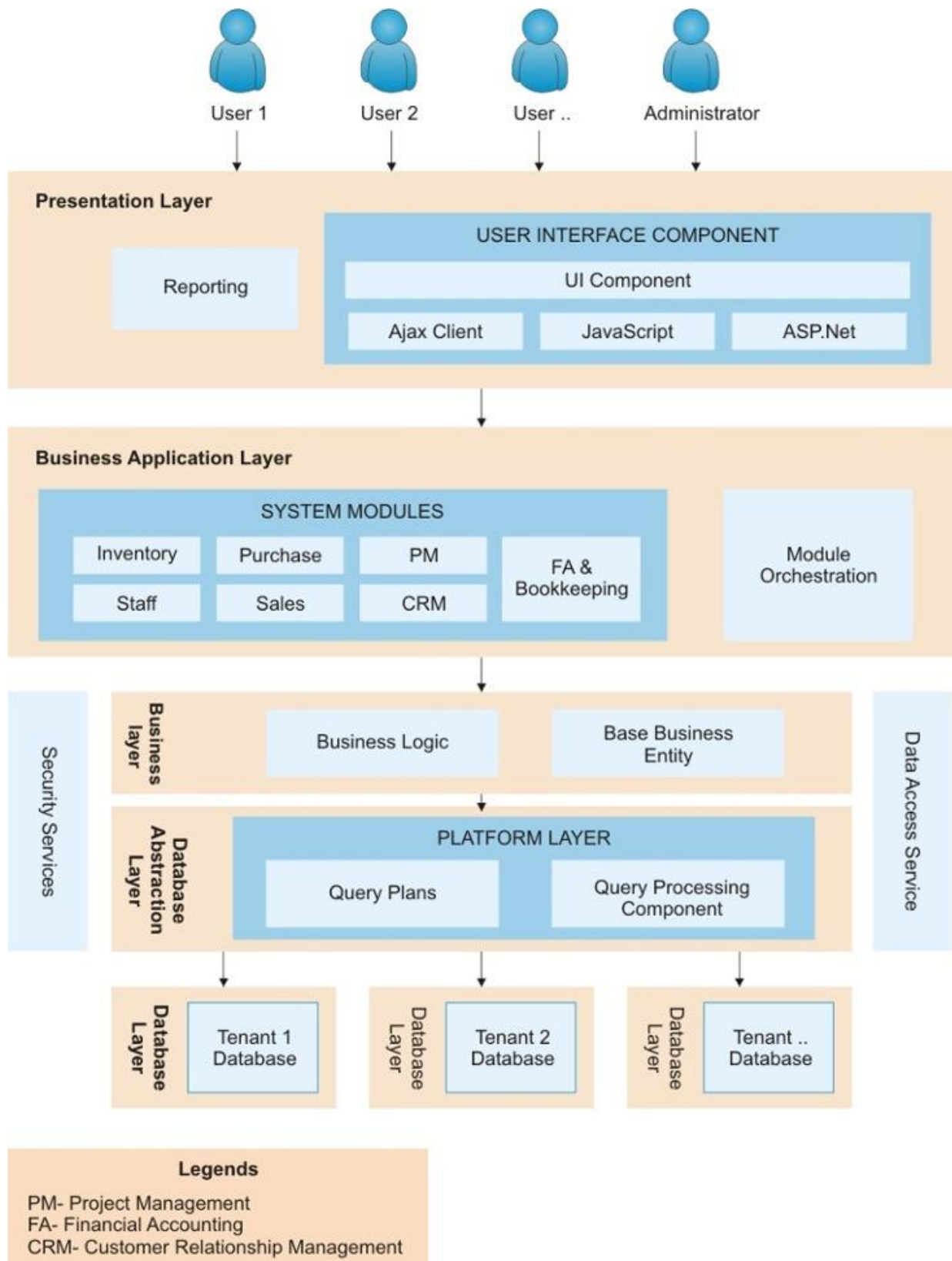
The Project was the development of an integrated business suite supporting ERP, CRM and e-Commerce capabilities.

Challenges

The Project was the development of an integrated business suite supporting ERP, CRM and e-Commerce capabilities targeted at small and medium enterprise where application modules can be accessed using Software as a Service (SaaS) delivery model and where application users would have the flexibility to configure and subscribe a set of application modules. The application modules can work seamlessly in integration with other modules or independently depending on user subscription module configurations.

Solution

e-Zest's solution architect group architected a SaaS based application architecture with following highlights:



- Development of multi-tier architecture using .NET technologies with Web Forms with AJAX for presentation tier, C# for business logic components and ADO.NET for data access layer accessing persistent data store from SQL Server 2005 database.

- Object based model using UML for overall software design. System architecture was modeled in such a way that all objects in the system are communicating with each other in the system with the help of multiple interfaces provided.
- Architecture provided loose coupling between components.
- Scaling to maximize concurrency, and using application resources more efficiently for example, optimizing locking duration, statelessness, sharing pooled resources such as threads and network connections, caching reference data and partitioning large database.
- Provided extensible interfaces for different capabilities such as connection detection and queuing.
- Proprietary highly secure, stable and high performance relational database MS-SQL Server 2005 was used for centralized persistent storage of object information.
- A working architectural prototype was prepared to evaluate architectural framework; address risks by measuring performance, scalability, and ease; as well as to gain confidence that proposed approach works.

Technology

Microsoft.NET, SQL Server 2005

Conclusion

e-Zest successfully developed and implemented a SaaS based ERP platform which takes advantage of the benefits of centralization through a single-instance, multi-tenant architecture. It further provides a feature rich experience competitive with comparable on premise applications using a subscription based licensing model.