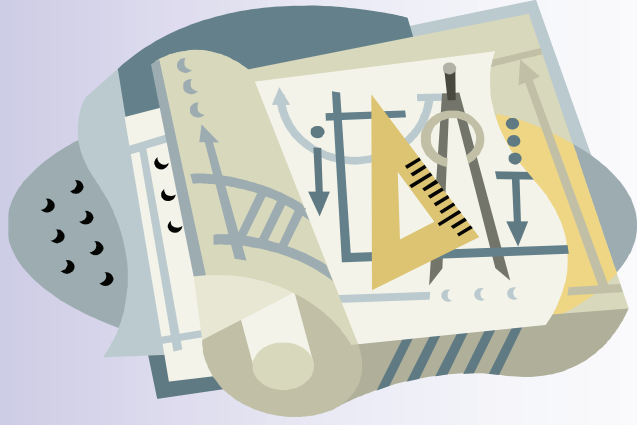


Etude Application Architecture



Leading to
remove
dependencies



Service Oriented Architecture:

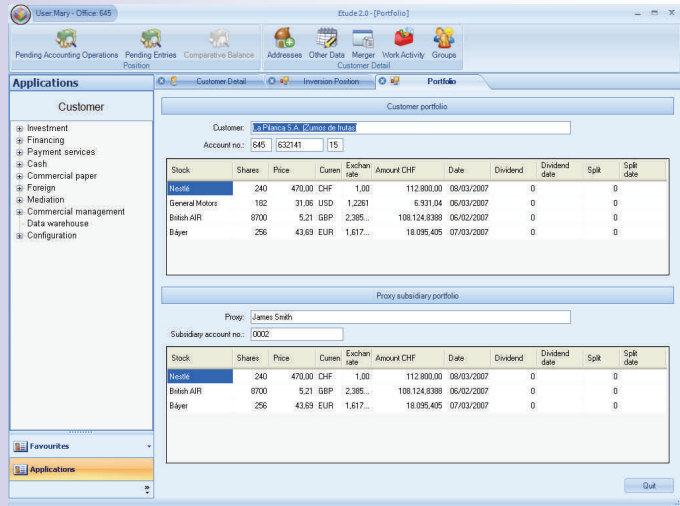
Object Oriented programming within each layer

The Application Architecture defines the standards of development to be followed in the creation of the application. Each layer of the Application is built with decoupled nature, leading to remove dependencies between them, so that the specific implementation of one layer will not directly impact the others.

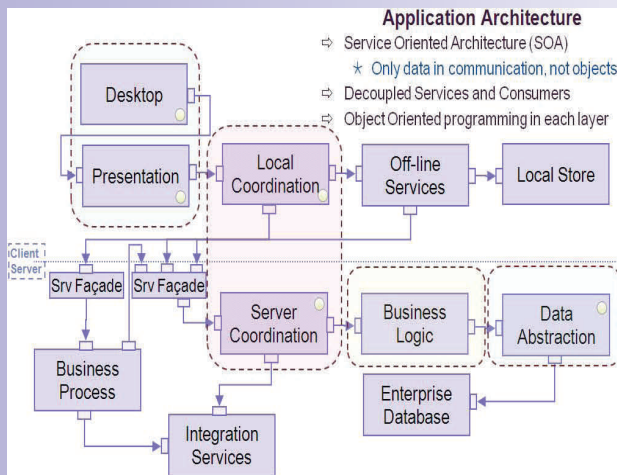
Presentation Level:

Working with the application desktop provides the user interface of the application, allows accessing all the permitted functionality, being customized to the client requirements.

The Desktop: will contain an applications menu, a list favourite links, contextual status bar and a working area. The applications menu will contain all the available links to open application windows divided by functional areas and presented in a hierarchical way, subdividing contexts of functionality.



The favourite links will be pre-configured by user profile and susceptible of user modifications to adapt to each user needs. The contextual status bar will show icons and data representing the status of the application, allowing to access to main information that the user needs to know during the work. The working area will contain all the windows that the user opens from either the applications menu or from the favourites list.



Coordination Level: Ensures the coherence of the operation execution, applying the needed validation in terms of resources, security and data correctness, registering the execution in the journal of operations and saving traces of execution for the monitorization system.

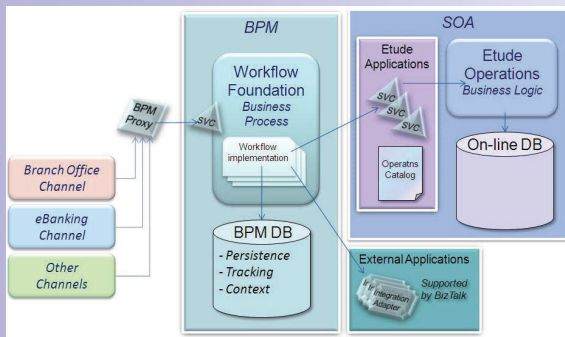
Service Façade layer:

The application services are exposed through WCF, what encapsulates the communications

layer providing independency to the application from the specific protocol of communications used. This technology also allows defining more than one way of exposing the service.

Business Process Management: The Business Process Management involves support for Long Running Processes and complex Business Processes with demanding requirements for flexibility. The solution must provide a high level view of the business carried out by the process, as well as permitting to get closer the definitions given by a Business Analyst to the final implementation of the process. At the time it must not compromise the performance and scalability levels of the system.

Business Rules Catalogue: Based on a Business Rules Catalogue, the decisions to be taken by the process must be totally decoupled from the implementation, so permitting to alter the conditions without affecting the process modeling. Additionally, these rules must be available for re-use from the Business Logic implementation of the Services as well as form the Client side.



Business Logic layer: This layer implements the functionality of application operations; this is where the main banking functionality is present. This layer is build isolated from culture and customer dependencies, representing the application base that through parameterization could modify its behaviour to adapt to the needs of the environment of execution.

Data Architecture:The data architecture is based on the design of the physical and logical levels of the data structures used in the Etude Programme. The logical level of the data is the base used for analysis of the applications, providing, furthermore, the necessary knowledge needed to understand the functional architecture of the applications.

Data Abstraction layer: This layer abstracts the business logic layer from the physical implementation of the data persistency in the database storage. The exposed logical entities are the direct implementation of the logical Data Model, at the time that data access objects, DAOs, encapsulate the physical model implementing the correspondence with the logical structure.

Independent: The development of this layer will be also abstracted from the chosen database server, and so features such as the common database driver will be used in the implementation. Nevertheless, being SQL Server 2005 the preferred Database Engine for the solution, the creation of dependencies on vendor database engines is acceptable meanwhile the acquired performance benefit compensate the need of managing a different set of Data Access Methods for each engine.



About SlaterLabs

SlaterLabs focuses on the design, development and deployment of mission critical application software to financial services organisations worldwide. The SlaterLabs team combines over 500 man years of core banking business and technical experience. The company is 100% dedicated to developing and delivering the first end-to-end core banking system, The Etude Programme, built entirely using the Microsoft Windows platform and Microsoft's .Net. For more information about SlaterLabs, visit www.slaterlabs.com.

About The Etude Programme from SlaterLabs

The Etude Programme is a collaborative programme which aims to deliver a significantly different offering to the financial services sector which is currently faced with the build versus buy dilemma. The Etude Programme will let customers in-house staff lead the integration and implementation phases, with SlaterLabs development team effectively becoming the customer's own support system, providing consultancy, installation support and expertise to provide customers with the best of both the buy and build worlds. For further information about The Etude Programme from SlaterLabs, visit www.slaterlabs.com/etude.html