Order Management System

Overview:

The intent was to develop an application which serves as an online marketplace to enable both B-to-B and B-to-C transactions. Making it possible for suppliers, business owners and consumers to communicate and transact, it facilitates procurement of raw materials and other required inputs for building finished products which can then be subsequently sold to interested buyers. The application is designed to be totally web based and offers a very flexible and convenient way to setup online stores. There are two sections – backend and frontend. The backend is where most of the transactions get handled and is preferred by the big players to run their operations for e.g. raising orders etc. The online section is generally used by the smaller players who raise orders to buy and sell their products and complete the financial transactions real time. Financial transactions get handled through PayPal. There is provision for a basic inventory system for online store products which automatically adjusts inventory levels depending on customer orders, shipments and purchases from vendors.

Since the customer wanted this application for US and Canadian users, separate taxation logic had to be implemented for the module handling it. The application is also integrated with two accounting tool which are used extensively in the market i.e. Quick Book and Sage.

Client details:

Name: Confidential **Type**: Retail Solution provider **Location**: Canada

Technologies:

Asp.Net 4.0 using C#, SQL server 2012R2, WCF, Web Services, Quick Book

The web interface is interactive and simple to use which involves client side technologies (like JavaScript, CSS). The server technology involves ASP.NET in background which is used to all business logic and database interaction. Third party tools are used for accounting purpose like QB using web service and Sage using WCF. Along with above mentioned technologies it has extensive use of MSMQ services for communication between different instances.

Project Description:

The whole application is divided into two major sections i.e. The Back Office Section and Online Store Section

Back Office Section

Following is the list of modules which comprises this section of the application:

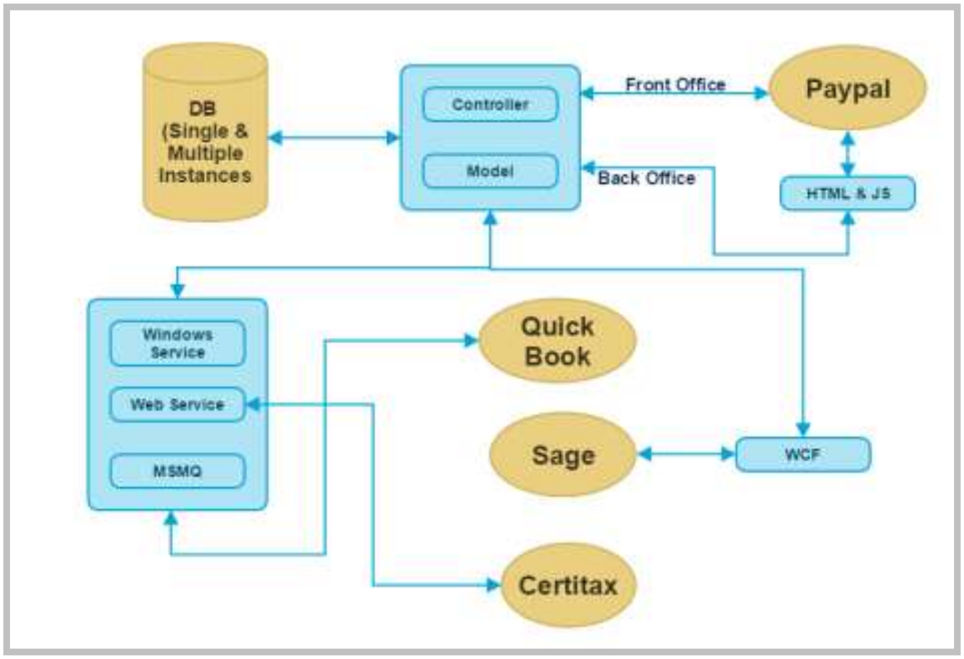
- Manage customer accounts
- Enter proposals and orders
- Store artwork images
- Generate purchase orders
- Set up suppliers
- Manage accounts receivable and payable
- Calculate and track commissions
- Produce reports
- Create product catalogs
- Manage inventory

For a business group, various users of the application are assigned different roles which in turn determine their access to corresponding modules. System administrator has complete access to the entire application.

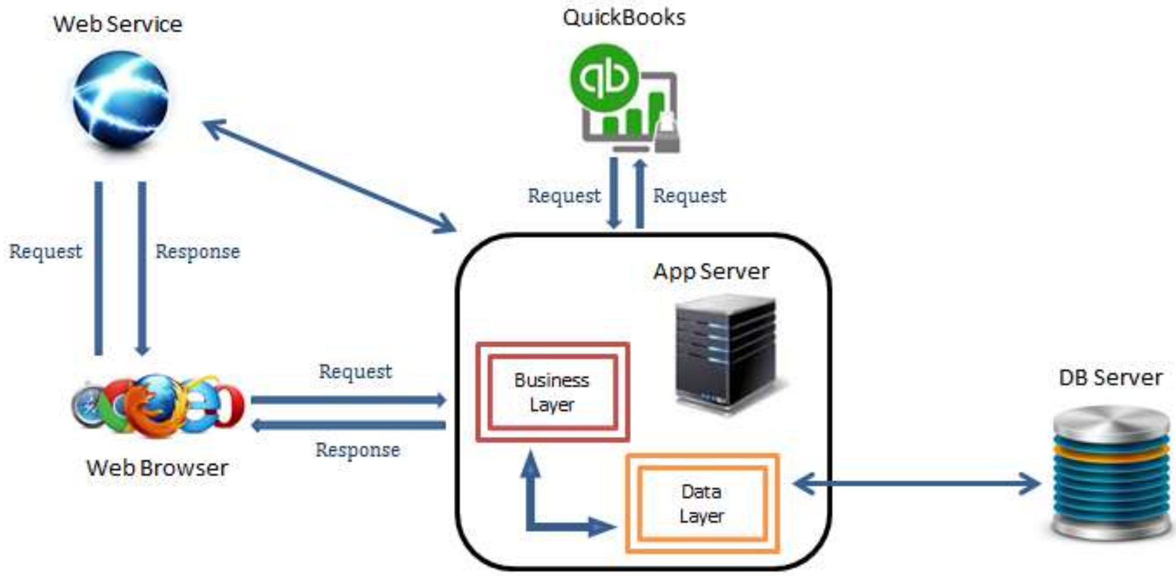
Online Store Section

Online store section allows users to both buy and sell products based on their needs. Usually, users are required to share a password for logging into the online store for creating an order. Settings related to shipping, payment type, commission, tax rules, store catalogs, store contacts are all made at the back office online store module. Account executives of business groups are generally given access to the online store. Commissions related settings are all handled at the back office module. Payment for online stores is handled through PayPal.

Architecture Design:



Flow Diagram:



Screen Shots:

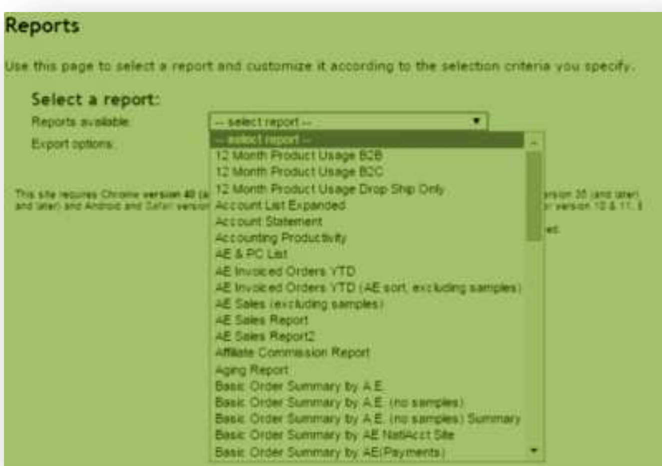
Screen 1: Shows the interface which is used to create new accounts as well as view and edit existing ones for all business groups. Also, online store's accounts can be edited from here.

Screen 2: Shows the interface which can be used by the account executives of business groups to create new orders and view and/or edit existing orders. Proposals also get created from here. This section shows both types of orders (i.e. Orders created from back office and orders created from front office). Taxation policy and other charges can be set from according to the needs.

Screen 3: Shows the screen shot of the interface used to create new business group as well as

view, edit the already existing ones. Various types of setup related to third party tools like Quick Book, Sage and nightly routine process get done from here. This page is responsible for business group settings.

Screen 4: Shows the interface used to create new supplier/vendor accounts besides having the provision to view , edit the existing ones. Setups related to supplier/vendor get done here. Information relating to categorization of suppliers/vendors get defined here . The Information shared here is used during the process of creating order or proposals.



Screen 5: Shows the interface used to view reports. There are more than 50 different types of reports corresponding to each business group. Reports can be made visible in 6 formats:

- Display as web page
- Rich text format
- Acrobat format(PDF)
- Crystal Report(RPT)
- MS Word
- Microsoft Excel
- Microsoft Excel(Data only)