**Internet based DTS (IDTS): Total Marks (50)**

Banca Valla had decided to design and develop an internet based DTS

The system was to provide functionalities to the following categories of users

# Administrators

* Ability to setup access rights to various parts of this application for other classes of users

# Manager and members of the Derivatives Trading Division

## Expected to be used regularly

* Approve registered users for providing them access to the site
* Ability to setup the transaction limits for each customer based on the customer’s credit assessment and past performance record
* Ability to set up the customers in terms of whether they are allowed to deal in international derivatives or not
* Ability to setup commission rate for domestic derivatives, commission rate for domestic derivatives, commission rates for transactions settled within the same transaction period, graded commission rates for various levels of trading volumes
* Ability to prepare and send messages to a customer
* Ability to prepare and send messages to groups of customers
* Ability to generate a register of transactions during a given period
* Should not have access to view the stop loss / book profit orders
* Should not have access to view time driven orders
* Ability to print a transaction record along with a duplicate copy of all successfully executed transactions

## Expected to be used occasionally

* Ability to place a customer on hold after which the customer would not be able to continue to trade
* Ability to release a customer on hold
* Ability to close a customer account and remove the customer from the customer list of the system and the bank
* Ability to generate customer trading details including payment track record

**Customers of Banca Valla (End Users)**

* Ability to register as a customer for the internet derivative trading service
* Ability to view derivative prices online in the form of a price ticker
* Ability to place orders to buy and sell selected derivatives
* Ability to place stop loss / book profit orders
* Ability to place time driven orders
* Ability to view the balance of derivatives in their derivative account
* Ability to view the cash balance in their trading account
* Ability to view the history of transactions for the last n months
* Ability to cancel placed orders prior to their execution
* Ability to send derivative trading related queries to manager and members of derivatives trading division
* Ability to send queries / suggestions on the internet based system to the system administrator
* Ability to log in into the system
* Ability to log out of the system
* Ability to set preferences in terms of bank’s products, receipt of mailers, ….
* Ability to set x, y and z aspects of user interface based on their preferences
* Ability to view successfully executed orders
* Ability to print a transaction record

# System Requirements

* The IDTS is to be developed using database DB, application server APPS and programming platform PROG.
* The IDTS customers would access the application using browsers. Expected distribution of browsers that would be used by customers are :
* IE – 45 %
* Mozilla – 35 %
* Netscape – 17 %
* Eudora – 3 %
* The Securities exchange board of Vietaly has laid out the rules and regulations for internet based trading as well as derivative trading. The application must be compliant with these rules and regulations.
* Certain Revisions to these rules and regulations are expected in about x weeks
* An audit trail of all transactions as well as the actual transaction records themselves must be available for a period of 12 years. They must be available in archives for a further period of 12 years before they can be destroyed
* The system should receive a live feed provided by the national stock exchange to display the derivative price related information to the customers
* The system should use the information from user security management system at the time of user login to determine validity of user’s login details
* The system should interface with the bank’s core banking module to give effect to the financial transactions
* The system should interface with the bank’s demat management system to give effect to the derivative related transactions
* The system should interface on a real time basis with the DTS of NSE to place orders and obtain details of their execution status. These can be performed asynchronously
* The system should handle the various types of orders appropriately viz.,. regular orders, stop loss orders, and time based orders
* A newer version of this system is expected to be installed by NSE in the next x weeks
* The users of this system are expected to have past hands on experience on using internet based systems, specifically trading systems
* A user session with no activity for more than 3 minutes must be terminated (after providing a warning at the end of 2 minutes and 30 seconds)
* The system should accept and process orders only when they are within the limits setup for the given customer
* All user interface screens are expected to demonstrate a performance of less than 5 secs at all points of time
* The system is expected to have a maximum concurrent user load of x users
* The system must pass a information security assessment that would be carried out by NSE before it would be allowed to interface with the NSE’s systems, both test and live.
* NSE would conduct this information security through a scrutiny of the design and the code using its publicly published standards
* NSE would provide access to its test systems for any testing of this application and NSE would charge at the rate of Rs. R for every hour of usage of these test systems
* The system should calculate the commissions based on user setup and system setup and debit the same to the customer’s account

# Other Stakeholder Needs

* Banca Valla wants to launch this system in 3 months, even though the estimates reveal that it would take 5 months to complete this system with all the identified functionality

# Caveat

* Note : All references to organizations and individuals are imaginary and these do correlate to any real organization or individual

Prepare a test strategy and test plan for IDTS. State your assumptions