Internet based DTS (IDTS)

Test Strategy

Revision History

Date	Version	Author	Description
02-11-2021	1.0	ABC	QA for test strategy
05-11-2021	1.1	ABC	QA for test strategy [owner mod]

Table of Contents

1. Scope

It defines parameters like

- Who will review the document? → Developer
- Who will approve this document? → Test Manager
- Testing activities carried out - Functional testing,Unit testing , System testing
- Not in scope - performance and load testing

2. Test Approach

It defines

- Process of testing
- Testing levels
- Roles and responsibilities of each team member

TESTER	MODULE	TIME	RESPONSIBILITIES

- Types of Testing (Load testing, Security testing, Performance testing etc.)
- Testing approach & automation tool if applicable
- Adding new defects, re-testing, Defect triage, Regression Testing and test sign off

3. Test Environment

- 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 an 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

4. Testing Tools

• Automation and Test management tools needed for test execution • Figure out number of open-source as well as commercial tools required, and determine how many users are supported on it and plan accordingly.Some of the tools used in testing DTS services are

5. Release Control

• Release management plan with appropriate version history that will make sure test execution for all modification in that release

6. Risk Analysis

• List all risks that you can estimate
• Give a clear plan to mitigate the risks also a contingency plan

7. Review and Approvals

• All these activities are reviewed and sign off by the business team, project management, development team, etc.
• Summary of review changes should be traced at the beginning of the document along with approved date, name, and comment