TEST PLAN FOR

<<Internet based DTS

(IDTS)>>

ChangeLog

Version	Change Date	By	Description
version number	Date of Change	Name of person who made changes	Description of the changes made
1	2/11/2021		Banca Valla had decided to design and develop an internet based DTS

1 Introduction

- The Test Plan is designed to prescribe the scope, approach, resources, and schedule of all testing activities of the project **Internet based DTS (IDTS)** .
- Banca Valla had decided to design and develop an internet based DTS.
- The system was to provide functionalities to the following categories of users like **Administrators,Manager and members of the Derivatives Trading Division,Customers of Banca Valla (End Users)**
- The plan identifies the items to be tested, the features to be tested, the types of testing to be performed, the personnel responsible for testing, the resources and schedule required to complete testing, and the risks associated with the plan.

1.1 Scope

1.1.1 In Scope

Module Name	Applicable Roles	Description
Access right and Register	Administrators Manager & members Customers	**Administrators**: Ability to setup access rights to various parts of this application for other classes of users **Manager & members**: Approve registered users for providing them access to the site **Manager & member**: Should not have access to view the stop loss / book profit orders **Manager & member**: Should not have access to view time driven orders **Customers:** Ability to register as a customer for the internet derivative trading service

Transaction and Balance	Manager & members Customers	**Manager & member**: Ability to setup the transaction limits for each customer based on the customer's credit assessment and past performance record **Manager & member**: Ability to generate a register of transactions during a given period **Manager & member**: Ability to print a transaction record along with a duplicate copy of all successfully executed transactions **Customer**: Ability to view the history of transactions for the last n months **Customer**: Ability to print a transaction record **Customer**: Ability to view the balance of derivatives in their derivative account **Customer**: Ability to view the cash balance in their trading account

Derivatives	Manager & members Customers	**Manager & member**: Ability to set up the customers in terms of whether they are allowed to deal in international derivatives or not **Manager & member:** 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 **Customer**: Ability to view derivative prices online in the form of a price ticker.
Messages and queries	Manager & members Customers	**Manager & member**: Ability to prepare and send messages to a customer **Manager & member**: Ability to prepare and send messages to groups of customers **Customer**: Ability to send derivative trading related queries to manager and members of derivatives trading division. **Customer:** Ability to send queries / suggestions on the internet based system to the system administrator.

Customer handling(used occasionally)	Manager & members	**Manager & member**: Ability to place a customer on hold after which the customer would not be able to continue to trade
		Manager & member: Ability to release a customer on hold
		Manager & member: Ability to close a customer account and remove the
		  customer from the customer list of the system and the bank
		Manager & member: Ability to generate customer trading details including
		  payment track record

Orders	Customers	**Customer**: Ability to place orders to buy and sell selected derivatives
		Customer:
		  Ability to place stop loss / book profit orders
		Customer:
		  Ability to place time driven orders
		Customer: Ability to cancel placed orders prior to their execution
		Customer: Ability to view successfully executed orders

Login/Logout and user preferences	Customers	**Customer:** Ability to log in into the system
		Customer: Ability to log out of the system
		Customer:
		  Ability to set preferences in terms of bank's products, receipt of mailers.
		Customer:
		  Ability to set x, y and z aspects of user interface based on their preferences

1.1.2 Out of Scope

User Interfaces
Hardware Interfaces
Software Interfaces
Database logical
Communications Interfaces
Website Security and Performance

1.2 Quality Objective

The test objectives are to **verify** the Functionality of website **Internet based DTS (IDTS)**, the project should focus on testing the **web applications** such as Access right and Register,Transaction and Balance,Derivatives,Messages and queries,Customer handling(used occasionally),Orders,Login/Logout and user preferences…etc. to **guarantee** all these operation can work **normally** in real business environment.

1.3 Roles and Responsibilities

Detail description of the Roles and responsibilities of different team members like
- QA Analyst -Take in charge of quality assurance.Check to confirm whether the testing process is meeting specified requirements.
- Test Manager -Manage the whole project,Define project directions,Acquire appropriate resources.
- Developers - Implement the test cases, test program, test suite etc.

2 Test Methodology

2.1 Overview

2.2 Test Levels

In the project **Internet based DTS (IDTS),** there are 3 types of testing that should be conducted .
1. Integration Testing(Individual software modules are combined and tested as a group)
2. System testing(conducted on a complete , integrated system to evaluate the system compliance with specified requirements
3. API Testing(test all the API's create the software under the tested)

2.3 Bug Triage

The goal of the triage is to

1. To define the type of resolution for each bug
2. To prioritize bugs and determine a schedule for all "To Be Fixed Bugs'.

2.4 Suspension Criteria and Resumption Requirements

If the team members report that there are 40% of test cases failed, suspend testing until the development team fixes all failed cases.

2.5 Test Completeness

1. Specifies the criteria that denote a successful completion of a test phase
2. Run rate is mandatory to be 100% unless a clear reason is given.
3. Pass rate is 90%, achieving the pass rate is mandatory.

2.6 Project task and estimation and schedule

Task	Member	Estimate Effort
a.Create the test specification	Test Designer	170 man-hour
b.Perform test execution	Tester, Test Administrator	80 man-hour
c.Test report	Tester	10 man-hour
d.Test delivery		20 man-hour
Total		280 man-hour

3 Test Deliverables

Test deliverables are provided as below

Before testing phase

.Test plan document

.Test cases document
.Test design specification

During the testing

- Test tool Simulators
- Test data
- Test trace-ability matrix- error logs and execution log

After the testing cycles is over

-Test result
-Defect report
-Installation/test procedures guidelines
-Releases notes

4 Resource & Environment Needs

4.1 Testing Tools

Make a list of Tools like
- Requirements Tracking Tool- Jira software,Acooma
- Defect management- Bagasura
- Test case creation-Microsoft excel
- Bug Tracking Tool- Bugzila,Fossil
- Automation Tools-Selenium,Appium
- Security tools-Skillfish
- Performance testing tool-Jmeter

Required to test the project

4.2 Test Environment

It mentions the minimum **hardware** requirements that will be used to test the Application.

Following **software is** required in addition to client-specific software.

No.	Resources	Description
1.	Server	Need database server and web server

2.	Test tools	Develop the test tools which can auto generate the test result. E.g: Jmeter,Selenium,Skillfish & Microsoft excel.
3.	Network	Set a LAN gigabit and 1 internet line with the speed 10 Mb/s
4.	Computer	At least 4 computer run windows 7,ram 2gb

Following people are involved in test environment setup-
System admin
Developer
Tester

5 Terms/Acronyms

Make a mention of any terms or acronyms used in the project

TERM/ACRONYM	DEFINITION
API	Application Program Interface
AUT	Application Under Test
LAN	Local Area Network