TeST PLAN

**Project: “Internet Based DTS” (IDTS)**

**23/08/2022**

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**1.** **Overview:**

* As part of the project, ‘Internet Based DTS’ and Banca valla had decided to test few functionalities of ‘Internet Based DTS” web application.
* This document serves as high level test Strategy document with details on the scope of the project, test schedule and resource requirements, test deliverables and schedule.

**2. Objective:**

The objective of Test Plan is to define scope of the testing, schedules and deliverables of Project.

**3. Scope:**

The scope of the project includes testing the following features of ‘Internet Based DTS’ web application.

**In Scope:**

* **Administrators:-**
* Ability to setup access rights to various parts of this application for other classes of users
* **Manager and members Page Features 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
* **Customers Page:**
* 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

**Out scope:**

* 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

**3. Quality Objectives:**

* Ensure the Application under Test conforms to functional and non-functional requirements.
* Ensure the AUT meets the quality specifications defined by the client.
* Bugs/issues are identified and fixed before go live.

**4. Test Methodology:**

1. Functional and Non-functional:

**Functional testing includes:**

a) Unit testing

b) Integration testing

c) System integration testing

d) Smoke testing

e) Sanity testing

f) System testing

g) User acceptance testing

h) Regression testing

**Non-functional testing includes:**

a) Performance testing

b) Compatibility testing

c) Load testing

d) Stress testing

2. Verification and Validation

**5. Test Level:**

* Unit Testing
* Integration Testing
* System Testing
* User acceptance Testing

**6. Testing Tools:**

* Issue Tracking Tool (JIRA)
* Test Management Tool (Zephyr)
* Performance Testing Tool (Jmeter)
* Automation Tool (Selenium)
* Defect Management Tool (Bugasura)
* Security Testing Tool (Burp Suite)

**7. Test Environment:**

**Software Configuration:**

* + Operating System: Windows 10
* 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 IDTS is to be developed using database DB, application server APPS and programming platform PROG.

**Hardware Configuration:**

* + Processor: i5 10th Generation
  + Ram: 8 GB
  + Hard Disk: 512 GB SSD

**8. Test Coverage:**

* Finding the area of a requirement not implemented by a set of test cases
* Helps to create additional test cases to increase coverage
* Identifying a quantitative measure of test coverage, which is an indirect method for
* quality check
* Identifying meaningless test cases that do not increase coverage
* Implementing Test Design Techniques

**9. Roles & Responsibility:**

**(a) QA Analyst -** Analysis the product to ensure product is free of defects

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Roles | Responsibilities | Duration |
| Sakshi | Tester | Login and logout feature | 1 Week |
| Alok | Tester | Orders Feature | 2 Week |
| Abhishek | Tester | Transaction feature | 2 Week |
| Neeraj | Tester | Trading feature | 2 Week |
| Sourabh | Tester | Accounts Feature | 3 Week |
| Sai Kiran | Tester | Language Feature | 1 Week |
| Chander Prakash | Tester | Communication Feature | 1 Week |

**10. Test Completeness:**

**(a)** Specifies the criteria that denote a successful completion of a test phase

**(b)** Run rate is mandatory to be 100% unless a clear reason is given.

**(c)** Pass rate is 80%, achieving the pass rate is mandatory

**11. Schedule:**

* **Employee and project deadline**: The working days, the project deadline, resource
* availability are the factors which affected to the schedule
* **Project estimation**: Base on the estimation, the Test Manager knows how long it
* Takes to complete the project. So he can make the appropriate project schedule
* **Project Risk:** Understanding the risk helps Test Manager add enough extra time to the project schedule to deal with the risks.

**12. Suspension and Resumption Criteria:**

* Unavailability of external dependent systems during execution.
* When a defect is introduced that cannot allow any further testing.
* Critical path deadline is missed so that the client will not accept delivery even if all testing is completed.
* A specific holiday shuts down both development and testing.

**13. Test Deliverable:**

**13.0** Test Strategy

**13.1** Test Plan

**13.2** Test Scenarios

**13.3** Test Cases

**13.4** Test Data

**13.5** Requirement Traceability Matrices

**13.6** Test Matrices

**13.7** Test Incident Report

**13.8** Daily Status Report

**13.9** Test Summary Report

**13.10** Traceability Matrices