Version: 1.2.0

Date: Feb 24th 2022

**Documents Required**

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| Title: | Internet based Derivative Trading System |
| Version: | 1.2.0 |
| Date: | 24-February-2022 |
| File Name: | DTS Report |
| Author | Banca Valla |

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**Scope and Overview**

Banca Valla had decided to design and develop an Internet based Derivative Trading System (IDTS). The IDTS system which Banca Valla had decided to design and develop has to provide the given functionalities to the following categories of users.

* Administrators
* Manager and members of the Derivatives Trading Division
* End Users (Customers of Banca Valla)

The IDTS system must be complaint with the rules and regulations of internet based trading set by the security exchange board.

There are also certain limitations with respect to the given requirements such as, the expected launch date given by Banca Valla is 3 months but the estimates reveal it would take 5 months to complete this system with all identified functionality.

**Test Approach**

In the Test approach section for this release, we will be defining the following:

1. Test Levels

* Component Testing
* Integration Testing
* System Testing
* Performance Testing
* Regression Testing
* User Acceptance Testing

1. Testing types

* White box testing
* Black box testing

1. Roles and Responsibilities
2. **Test Levels**

* Component Testing: Component testing is a level of testing in which each component in modules such as login , registration, home page etc. are been tested.
* Integration Testing: Integration testing is a level of testing in which we test the integration between each module such as login page, home page, etc.
* System Testing: System testing is a level of testing which is done to test the whole application.
* Performance Testing: Performance testing is done here to check our system performance with respect to reliability and stability under a certain workload.

Here we have used load testing, stress testing and endurance testing under performance testing.

* Load Testing: It is a type of performance testing which is done to test the performance of the system or software application under extreme load.
* Stress Testing: It is a type of performance testing which is done to understand the upper limits of a system's capacity using a load beyond the expected maximum
* Endurance Testing: It is a type of performance testing which is done to test whether an application is able to withstand the workload for the endured period of time.
* Regression Testing: Regression testing is performed to check the overall stability and functionality of the existing software applications that is it ensures that the existing software application still functions as expected after certain updates or changes in the code.
* User Acceptance Testing: User acceptance testing is a level of testing which is done by the end user or client. Here the client performs User Acceptance testing to check whether the software application or product is ready to be produced in the production environment.

1. **Testing Types**

* White Box Testing: White box testing is a type of testing which is also called as software evaluating method. White box testing is been performed by the Developers to test the internal structure, coding part, design part and the internal working of the software.
* Black Box Testing: Black box testing is a type of testing which is performed by the Testers. Here the testers will test the functionality and non- functionality of the given application or product and will also test each model with all possibilities of inputs and outputs and their expected result. Now they will compare the expected result with the actual result.

1. **Roles and Responsibilities**

|  |  |  |
| --- | --- | --- |
| Serial Number | Role | Responsibility |
| 1. | Project Manager | Sunil |
| 2. | Project Team | Aishwarya |

**Test Environment**

1. **Hardware Configuration**:

* **OS:** Windows 10 and Windows11
* **Processer:** 2 GHz, Intel core i7
* **RAM:** 8 gb
* **Hard disk**: 1 TDD

1. **Software configuration :**

**Browsers:**

* IE
* MOZILLA
* NETSCAPE
* EUDORA

**System Requirements needed for the developing the IDTS**

* Database DB,
* Application server APPS
* Programming platform PROG.

**Testing Tools**

The testing tool which is used for this release is SELENIUM.

**Test Deliverables**

* Functional Requirement Documentation
* Business Requirement Documentation.
* Requirement Traceability Matrices
* Test Case Requirement
* Test Summary Report

**Risk and Contingencies**

|  |  |  |
| --- | --- | --- |
| RISK | MITIGATION STRATEGY | IMPACT |
| An impact on the project submission dates due to delay in TAT that is turnaround time in fixing the critical bugs which leads to re-testing. | The Development team must ensure that the bugs are fixed and sent for testing on the scheduled date and time | High |
| Untested features | The Testing team will record untested features and request the Product Management team to assess business risk in support of the release of untested features. | Medium |
| Team’s Domain knowledge and coordination with respect to the project | The Product management team, Development team and Testing team must have good domain knowledge and work hand in hand for the project submission on time. | Medium |

**Review and Approval**

The people mentioned below are required for the approval for this test strategy.

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| --- | --- |
| Approval by Role | Approval by Name |
| Project Manager | Sunil |
| Project Team | Aishwarya |