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MS-Share / Neuroshare Labs Test plan

Confidential

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**Document purpose** This document describes the context, assumptions and conditions for testing the MS-Share / Neuroshare Imaging Graph Component according to Master Spec Document 05 - TECH TEAM 5\_MS\_MasterSpec\_Clinic App\_Graph Labs.docx

**Objective** Estimate project timeline, scope, deliverables and

resources

**Deliverables** Test scenarios and log book

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**1. General Considerations**

1.1 Introduction

The purpose of this document is to define the testing plan’s scope and limitations, as well as the project’s

acceptance criteria.

1.2 Description

Refers to this project’s applicable test plan and entry / exit criteria.

1.3 References

This test plan is tailored to / or references any of the following document(s):

• 05 - TECH TEAM 5\_MS\_MasterSpec\_Clinic App\_Graph Labs

**2. Test Objectives**

Software testing is an integral part of the software development lifecycle. Its objective is to adhere to the proposed requirements in terms of quality and usability from both the end-user and stakeholder’s perspective. To achieve this, this test plan will:

• **Verify functionality**. The system’s functionality should be implemented as specified.

• **Report Errors**. Test object shortcomings should be detected and described to facilitate correction.

• **Generate information**. Software related risks should be disclosed before client acceptance.

The project’s overall test strategy will follow the Master Test Plan (MTP) guidelines and objectives for every

implementation stage and service release.

**3. Test Scope**

The following test types will be executed on the following components:

|  |
| --- |
| **Components** |
| MS Share Screen with all Imaging component |
| Data Layer 1 validation |
| Data Layer 2 validation |
| Initiate Actions from Data layers |

**Test types:**

• **Progression Tests**. These black box tests (not peering into the application inner workings) verify application

functionality when upon release to production environment.

• **Regression Tests.** These tests verify that previously accepted and implemented changes or improvements do

not affect other modules not requiring changes or improvement.

**4. Assumptions**

The described testing procedures have been planned and will be executed under the following assumptions:

• **The developer** performs unit testing on the specific toolkit that is being used for development.

• The production environment is in optimal operational condition.

• Risk and change impact have been considered.

• A contingency plan is in place.

• User acceptance testing has been signed off by a project lead or equivalent stakeholder.

• The end-users are aware of changes introduced to the application (if any).

• **Knowledge of the different defect types according to their severity:**

o **Improvements**. Not an anomaly as such, but it’s an enhancement to improve the system.

o **Defects**. Are classified according to the following severity and impact:

§ **Priority 1 (Very High)**. The component can’t be used or interrupts further testing and operation. No alternate path is available to continue testing.

§ **Priority 2 (High)**. Critical functions are affected without viable alternate testing path affecting a

considerable amount of test cases.

§ **Priority 3 (Medium)** Functions performed incorrectly by the system. The component can be

utilized with restrictions, there is an alternate path for testing.

§ **Priority 4 (Low).** Minor inconveniences to end-users with no affected functionality such as

cosmetic enhancements, which can be later implemented.

**5. Test Strategies**

Performance testing analyzes application requirements by executing various test scenarios to validate that the

desired functionality is present. It will log either success or failure on the incidents report.

5.1. Entry Criteria

Entry criteria to initiate project testing:

|  |  |
| --- | --- |
| **Deliverable or Activity** | **Person(s) in charge** |
| Application functionality | Implementation team |
| Unit Testing must have been completed for all the units and all the defects except Minor defects must have been fixed.  System Test scenarios, cases and scripts must have been prepared and approved wherever appropriate/required.  Test environment and Test data are available.  Sanity Testing of the Application by the Development team to ensure that the Application Under Test is stable.  Entry Criteria should be signed off by the Project Manager. | Implementation team |

5.2. Exit Criteria

Acceptance or exit criteria (to finalize project testing):

|  |  |
| --- | --- |
| **Deliverable or Activity** | **Person(s) in charge** |
| Stable modules. No unresolved priority 1 ‘critical’ or priority 2 defects. Less than 10% of priority 3 and 15% priority 4 defects are pending resolution. | Implementation Team |

At least 80% of the test cases are executed and 90% of

them are successful. Test engineer

5.3. Suspension Criteria and Resumption Requirements

Suspension and Resumption or exit criteria (to resume the project testing):

|  |  |
| --- | --- |
| **Suspension Criteria** | **Resumption Requirements** |
| Non-availability of the Application.  Show stopper defects, which prevent further testing along any path.  All the possible test cases have been tested with the failure notified and the fixes for the same have not arrived for re-testing. | The Application should be available in ST Environment.  Show-Stopper Defects have to be rectified on a priority basis.  All the Defects should be fixed and the Application should be re-deployed. |

**6. Test types**

6.1. Functional Tests types

• **(User) Documentation and Procedures** Verifies a consistent and coherent interface. **Error handling**

• Error and exception handling determines the application’s usability and ensures incorrect transactions or

exceptional conditions are handled appropriately.

• **Progressive**

Verifies every business function operates in accordance to internal and external design documents.

• **Interface / Inter-system**

Verifies connectivity between the application and underlying system.

• **Transaction flow (Path)**

Verifies end-to-end completeness and correctness of transactions from initial to final output.

6.2. Test levels

|  |  |
| --- | --- |
| **Level types** | **Operative** |
| Documentation and procedures | n |
| Error Handling | n |
| Functions | n |
| Interface / Inter-system | n |
| Regression | n |
| Transaction Flow | n |
| Usability | n |

**. Test Plan**

7.1. Schedule

7.1.1. Adjusted Trial Balance

|  |  |
| --- | --- |
| **Test Activities** | Time (Hrs.) |
| Management | 2 |
| Test case setup | 4 |
| Test case execution per cycle | 4 |
| Defect logging / reporting | 2 |
|  | **12** |

**8. Test Environment**

Testing will be conducted in a controlled (or testing) environment before moving to production. At this latter

stage, complete workflow functionality will be tested to ensure consistency with controlled environment.

Two environments will be maintained at offshore for System Testing. The Test Lead and Config Lead will work with the Infrastructure Team to ensure that there won’t be any ‘bottle neck’ during System Testing execution due to non availability of Environments or lack of data. Any suspected issues / concerns needs to be reported to the Off-shore Management and Test Leads well in advance of the start of the System Testing Phase.

**9. Test Data SetUp**

Test Data setup is one of the most important aspect of any Testing phase. Lot of defects recorded during Testing depends on the data. Improper data setup may increase number of defects which could have avoided with clean data setup.

The list below depicts the input data sheet required for System Testing of Neuro Share will be conducted

• Multiple data sets to plot the graph of boundary conditions

**10. Test Execution**

System Testing for Neuro Share application would be done in two cycles. There would be a Bug – Closure phase at the end of two cycles.

Following points need to be adhered during Test execution

• All show-stopper defects should be addressed and resolved by the Dev. Team within eight hours of logging of the defect.

* All major defects logged in each cycle need to be resolved by the end of the cycle.
* 90% of the minor defects should be resolved at the end of the Test execution phase.
* Revised application with resolution of major defects will be deployed at the end of each cycle. However in case of show-stopper defects the revised application may need to deploy as and when required.

**11. Defect Management**

System Tester will log the defects in Excel sheet and update the status as per test result.

**12. Test Report**

Upon completion of all test activities a report will be made available with test results, outstanding events and

overall feedback.

**13. Key Test Deliverables**

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| **Deliverable Activities** |
| Test Plan |
| Test Scenarios |
| Test Execution Result |
| Release Notes |

**14. Logbook**

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| --- | --- | --- | --- | --- | --- |
| Date | Version | Made by | Checked by | Approved by | Reason and/or Short  description of changes |
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