***System Test Plan***

***For***

***<Project>***

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*Date: <Month DD, YYYY>*

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# Introduction

* 1. ***Purpose***

This section provides a brief overview or summary of the product. It could also give background information as to how the product came about or specific information about the users, or anything that may be important to mention.

* 1. ***Objective***

This section of the Test Plan defines the objectives of the Test Plan along with the tasks that are included in completing the test plan.

# Functional Scope

This section documents the specific items that are included in the release. If it’s a brand new product, it should provide a functional description of the product. If it’s an update to an existing product, it should itemize all changes included in the release.

This section may also refer to any pertinent documentation that can be used for reference, the Requirements Document, the Design Documentation, the Specification Documentation, etc.

# Overall Strategy and Approach

* 1. ***Test Strategy***

This section of the Test Plan describes the test strategy. The Test Strategy should identify the test approach in relation to the defined risks. The test strategy may identify the test cases that will be created for the areas of the application to be tested. It may also indicate what testing tools will be used for the test execution.

## *System Test Entrance Criteria*

The entrance criteria should be specified by the test manager before testing can commence.

* 1. ***Testing Types***

The selection of test data may also be discussed in this section.

This section should also identify what type of testing should be performed, whether it be system test, Usability Test, Functional Test, Performance test, security test, automated test, stress and volume test, recovery test, documentation test, beta test, and user acceptance test. It must indicate what features of the application should be tested and when they should be tested.

### System Test

The System tests will focus on the behavior of the system. User scenarios will be executed against the system as well as screen mapping and error message testing. Overall, the system tests will test the integrated system and verify that it meets the requirements defined in the requirements document.

* + 1. **Usability Test**

Usability tests evaluate a product by testing it on users.

* + 1. **Functional Test**

Functional tests is a type of [black box testing](http://en.wikipedia.org/wiki/Black_box_testing) that bases its test cases on the specifications of the software component under test

### Performance Test

Performance test will be conducted to ensure that the system’s response time meet the user expectations and does not exceed the specified performance criteria. During these tests, response times will be measured under heavy stress and/or volume.

### Security Test

Security tests will determine how secure the system is. The tests will verify that unauthorized user access to confidential data is prevented.

### Automated Test

A suite of automated tests will be developed to test the basic functionality of the system and perform regression testing on areas of the systems that previously had critical/major defects. The tool will also assist us by executing user scenarios thereby emulating several users.

### Stress and Volume Test

We will subject the system to high input conditions and a high volume of data during the peak times. The System will be stress tested using twice the number of expected users.

### Recovery Test

Recovery tests will force the system to fail in a various ways and verify the recovery is properly performed. It is vitally important that all data is recovered after a system failure & no corruption of the data occurred.

### Documentation Test

Tests will be conducted to check the accuracy of the user documentation. These tests will ensure that no features are missing, and the contents can be easily understood.

### Beta Test

The IT department will beta tests the new system and will report any defects they find. This will subject the system to tests that could not be performed in our test environment.

### User Acceptance Test

Once the system is ready for implementation, the IT department will perform User Acceptance Testing. The purpose of these tests is to confirm that the system is developed according to the specified user requirements and is ready for operational use.

* 1. ***Suspension Criteria or Resumption Requirements***

The suspension criteria specify the criteria to be used to suspend all or a portion of the testing activities while resumption criteria specify when testing can resume after it has been suspended.

## Test Data

Data which has been specifically identified for use in tests, typically of a computer program

1. **Test Execution Plan**

This section of the Test Plan describes the steps for Test Execution, along with the procedures, tools and communications used during testing.

Test Execution steps include:

* Ensure the code, the test environment and the database is in place
* Execute the test cases according to the pre-defined test sequence
  + Document the actual results
  + Compare the actual results against the expected results
* Document any discrepancies in the “incident tracking tool” according to the incident tracking procedures
  + Assign incident to applicable owner (notify, email, etc).
* Publish periodic report of incidents
* Define any other Test Deliverables (i.e. Test Status Reports)
* Re-test issues that are turned back for re-test
  + Regression test any code which may have been affected as a result of the fixes

1. **Defect Reporting**

## *Defect Tracking*

This section identifies the Incident Tracking Tool you are going to use for reporting an incident.

## *Defect Reporting and Reports*

This section identifies the procedures for reporting an Incident and for re-testing that incident. These procedures should identify basically what happens when a discrepancy is found during test and should include:

* Proper identification and description of an incident
* Incident severity assignment
* Definition of severity types
* Types of incidents (requirements issue, design issue, code issue, test case issue, database issue)
* Incident assignment and status
* Who gets assigned what types of incidents
* LifeCycle (status) of the incident (assigned to analyst, assigned to developer for fix, assigned to tester to be re-tested, assigned to DBA, etc)
* Staging procedure to turn code over for re-test (refer to the Code Control Procedures)
* Re-test procedure
* Re-test incident and status incident to ‘closed’ or ‘failed retest’
* Regression test to insure other functions weren’t affected
* All test cases must be documented

## *Defect Management Process*

This section defines the defect management process. Will there be a bug review or any other types of reviews.

* 1. ***Defect Severity and Priority Definitions***

This section defines the severity level, such as critical, high, medium, and minor. What bugs cause functionality problems due to failure, does it cause non-recoverable conditions, does the system crash or database, etc . This section should also include priority levels, such as must fix, should fix, fix when you have time, low priority, or trivial.

# Resource and Environment Requirements

This section of the Test Plan lists the resources necessary to accomplish the Test Plan. This includes personnel resources along with hardware and software resources.

Personnel resources should include:

* Project Management Personnel
* Test Personnel
* Development Personnel
* Database Administrators
* System Administrators
* Other Support Personnel

Hardware and Software resources should include:

* PC’s and workstations
* Server
* Operating System and software
* Database
* Application Code
* Network Printers
* Communication equipment
* Test Tools

1. **Test Schedule**

A test schedule should provide a list of major tasks that are important to the test process, with their scheduled start and end dates.

# Risks and Assumptions

This section of the Test Plan should identify and prioritize risk areas of the application. This involves the participation of many team players, users, and Information Systems personnel who must evaluate the application and identify the testing focus.

Any assumptions related to the risk assessment should be documented in this section. For instance, one assumption could be that the design of the application is complete and that any changes to the design may impact the test schedule.

1. **Contact**

This section lists any contact information of the test team or anyone who can answer questions regarding this test plan.

1. ***Appendices***

Attach any supporting documents such as any test matrices or test deliverables.