# ABC’s Inventory Management System

## Master Test Plan

## Introduction

This document is used to define the details of the master test plan. Once the test plan is outlined, the document must be reviewed and approved by the lead technical representative of the project as well as the lead business representative of the project. If anything related to the test plan changes during the execution and testing phase of the project, this document should be updated and re-approved by both parties.

## Test Scope

This test plan will test all the requirements for ABC’s Inventory Management System, which will be tested by the ‘Fellowship of the’ team for testing purposes. This Master Test Plan covers unit, integration, user acceptance, and regression testing. It will not include user certification testing, which will be performed by the Finance Team.

## Test Features

This is a description of the features that will be tested within the scope of the test plan.   
The following list represents what will be tested along with the individuals/groups involved with the testing activities. (Note: Integration Test and User Acceptance Test will be conducted once Unit Test for each feature is completed and the whole application is developed. Alpha level User Acceptance Test for the core Use Case (Search Product) will be conducted once Unit Test for Search Product is completed):

|  |  |  |  |
| --- | --- | --- | --- |
| **BR #** | **Feature** | **Description** | **Responsible party or groups** |
| 1. | Login/out | Unit Test, Integration Test and User Acceptance Test to ensure users can log in and out of to use the application as a unit, in an integrated environment and in the production environment respectively. | Store Staff, Warehouse Staff, Hieu Hanh Tran |
| 2. | Search Products | Unit Test, Integration Test and User Acceptance test to ensure users can search for products using product code or product item code as a unit, in an integrated environment and in the production environment respectively. | Store Staff, Warehouse Staff, Shirish Maharjan |
| 3. | Manage Product | Unit Test, Integration Test and User Acceptance test to ensure warehouse staff can add, remove or edit products as a unit, in an integrated environment and in the production environment respectively. | Warehouse Staff, Arik Maharjan |
| 4. | Request Items | Unit Test, Integration Test and User Acceptance Test to ensure users can request for a stock from other locations as a unit, in an integrated environment and in the production environment respectively. | Warehouse Staff, Store Staff, Hieu Hanh Tran |
| 5. | Send Stock | Unit Test, Integration Test and User Acceptance Test to ensure users can send stock to other locations as a unit, in an integrated environment and in the production environment respectively. | Warehouse Staff, Store Staff, Shirish Maharjan |
| 6. | Accept Stock | Unit Test, Integration Test and User Acceptance Test to ensure users can accept stock sent from other locations as a unit, in an integrated environment and in the production environment respectively. | Store Staff, Shirish Maharjan |
| 7. | Manage Cart | Unit Test, Integration Test and User Acceptance Test to ensure users can add/delete/edit items in a cart to request or send stock as a unit, in an integrated environment and in the production environment respectively. | Store Staff, Arik Maharjan |
| 8. | Check Notification | Unit Test, Integration Test and User Acceptance Test to ensure users can check notification when a stock request is sent from a location as a unit, in an integrated environment and in the production environment respectively. | Warehouse Staff, Hieu Hanh Tran |
| 9. | Manage Staff | Unit Test, Integration Test and User Acceptance Test to ensure Warehouse Staff can add, delete or edit staff and staff details as a unit, in an integrated environment and in the production environment respectively. | Warehouse Staff, Shirish Maharjan |
| 10. | Create Report | Unit Test, Integration Test and User Acceptance Test to ensure users can generate a report of stock transfers as a unit, in an integrated environment and in the production environment respectively. | Warehouse Staff, Store Staff, Arik Maharjan |
| 11. | Scan Barcode | Unit Test, Integration Test and User Acceptance Test to ensure users can scan barcode to get delivery details when accepting stock as a unit, in an integrated environment and in the production environment respectively. | Hieu Hanh Tran, Warehouse Staff, Store Staff |

## Test Inputs/Outputs

This is a description of the inputs that will be used to assist with the testing effort and a list of the outputs that will be delivered from the testing effort.

|  |  |
| --- | --- |
| **Inputs** | **Outputs** |
| * Business Requirement Specifications * Software configurations * Search Product Test Case * Search Product Input Data * Login/ Logout Test Cases * Login/ Logout Input Data * Manage Cart Test Cases * Manage Cart Input Data * Send Stock Test Cases * Send Stock Input Data * Accept Stock Test Cases * Accept Stock Input Data * Request Stock Test Cases * Request Stock Input Data * Manage Product Test * Manage Product Input Data * Check Notification Test Cases * Check Notification Input Data * Create Report Test Cases * Create Report Input Data * Scan Barcode Test Cases * Scan Barcode Input Data * Manage Staff Test Cases * Manage Staff Input Data | * Test Results * Result Screenshots * Defect Log * Issues Log * Change Request Log * Search Product Test Script * Login/ Logout Test Scripts * Manage Cart Test Scripts * Send Stock Test Scripts * Accept Stock Test Scripts * Request Stock Test Scripts * Manage Product Test Scripts * Check Notification Test Scripts * Create Report Test Scripts * Scan Barcode and Test Scripts * Manage Staff Test Scripts |

## Test Strategy

This is a description of the recommended testing approach for the project. This describes “how” each test items and features will be tested.

|  |  |  |
| --- | --- | --- |
| **Test Type** | **Description** | **Comment** |
| Integration Test | This test will combine each individual unit and test the system as a group. |  |
| Unit Test | This test will break the program into pieces and subject each piece to a series of tests. |  |
| User Acceptance Test | This test will ensure the system can handle real life user scenarios. | Typically performed by Business User |
| Regression Test | This tests the entire system to ensure that any untouched functionality did not get adversely impacted by the project-related work. |  |
| User Certification Test | This test is performed after the solution has been moved to production to ensure it has been moved successfully. | This will be performed by the Finance Team. |

## Test Environment

This is a list of the testing tools, systems, and databases.

|  |  |  |
| --- | --- | --- |
| **Tools** | **Description** | **Version** |
| Manual input | Manual entry of data onto screen or GUI. | n/a |
| Mockito | Mockito Library included in the Java EE Project. | 2.17.7 |
| JAX-RS (Jersey Rest Service) | Jersey dependency added in the project. | 2.26-b03 |
| MySQL Connector | MySQL Connector dependency | 5.1.38 |
| Java Development Kit | Standard Java Libraries | 1.8 |
| JUnit Dependency | Junit Libraries added in the project. | 4.12 |
| IntelliJ IDEA | IDE for conducting unit, integration and regression testing. | 2017.3 |
| System | At least 4 GB RAM i5 4th Generation processor. | n/a |

## Test Roles and Responsibilities

The following are the general test roles and responsibilities. These roles will be assigned to team members according to the feature that is being tested.

|  |  |
| --- | --- |
| **Role** | **Responsibility** |
| Test Manager/Project Manager | * Provides technical direction. * Acquires testing resources. * Assigns tasks * Communicates test results to management. |
| Test Designer | * Documents test plan. * Identifies, documents and prioritizes test cases. * Evaluates effectiveness of test effort. |
| Tester | * Executes test cases, logs defects, and documents test results. |
| Test System Administrator | * Ensures test environment and assets are installed, managed and maintained. * Includes administration of testing IDs. |

## Test Milestones

The following are the key test milestones:

|  |  |
| --- | --- |
| **Task** | **Milestone Date** |
| Setup Test Environment | 23/05/2018 |
| Prepare Test Cases and Test Scripts for most critical Use Case (Search Product) | 23/05/2018 |
| Conduct Unit Testing and UAT for the most critical Use Case (Search Product) | 25/05/2018 |
| Prepare Test Cases and Test Scripts for all Use Cases | 26/09/2018 |
| Complete Unit Testing | 05/10/2018 |
| Complete Integration Testing | 07/10/2018 |
| Complete User Acceptance Testing | 10/10/2018 |
| Complete Regression Testing | 12/10/2018 |
| Complete User Certification Testing | 14/10/2018 |

## Document Approval

The signatures below acknowledge that the test plan outlined above is complete and accurate. Upon receiving written approval, the project team will proceed to the next step of the project.

If anything changes during the execution of the project, the test plan will be updated and re-approved accordingly. The assigned title below is subject to change according to the feature that is being tested.

|  |  |  |
| --- | --- | --- |
| **Approved by:**  **Printed name** | **Approved by:**  **Title** | **Approved By:**  **Signature/Date** |
| Hieu Hanh Tran | Business Analyst  Project Manager | https://lh6.googleusercontent.com/3ZTy9Hf8Vclg3L8_uURvwJHF_0JGS8AEpS0Lw5yA31yUxCNUPPf3MGMAuaIGgFZpIzIwjgm6bnyiwa55DHIBETjPIYSGUBpYR95OeRZSWwkskH-2zWWXjZf1N_0Twe_5MNT8bGB4 |
| Shirish Maharjan | Software Developer  Database Administrator  System Analyst | https://lh4.googleusercontent.com/l6NJjVuLgfbJbrkcBT5RE4SAiDb2cFr6UDhz4wf_vn5slONb3abn2nUlxKD-Kt4HCL0yfViM9rU7PFQoFRrBjF3Mo5bflB1ogE2QKy0jlmBLuXTwgRhGGFoydiIhk7WkqxWN5PZX |
| Arik Maharjan | Marketing Manager  Test Manager |  |

## Document Tracking

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| --- | --- | --- |
| **Date** | **Action Taken** | **By Whom** |
| 29/03/2018 | Master Test Plan Established | Hieu Hanh Tran |
| 23/05/2018 | Master Test Plan Updated for Search Product Unit Testing in LCAM | Shirish Maharjan |
| 29/05/2018 | Added Test Case, Test Scripts on Input Output section and Test Milestone section | Shirish Maharjan |