

[COMPANY NAME]

[PROJECT NAME] System Test Plan

Prepared for [Company]

(Project Test Lead)

7/30/2022

[This document is meant to help the parties involved know the testing approach that will be taken by [COMPANY NAME] to test the [PROJECT NAME] The resources required, deliverables expected, timelines expected, completion criteria.]

Approval

AUTHOR		
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APPROVED BY		

Related Documents

Ref #	Document Name
01	Scope of WorkDocument_[PROJECT NAME]_InVenture_v1.0
02	Business Requirement Document [PROJECT NAME]
03	[PROJECT NAME] Status Report
04	[PROJECT NAME] Final Report
05	[PROJECT NAME] Work Breakdown Structure

Glossary of Terms

Term	Definition
Bug /Defect	Application function does not work as per specification
Defect Owner	The person who created the defect
Issue	Software function does not work as expected or is not specified
RDT	Requirement Driven Testing
RTM	Requirements Traceability Matrix
SDLC	Application Development Life Cycle
SME	Subject Matter Expert
TDE	Test Driven Environment
Team	Testing Team
UAT	User Acceptance Testing
WBS	Work Breakdown Structure

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Introduction

This test plan document describes the scope, approach, test strategy, resources and schedule of intended testing activities to be undertaken for the [PROJECT NAME] project.

Purpose

This document provides the following guidance:

- Testing Scope;
- Entry and exit criteria for each test level;
- A description of resources and tools to be used to conduct testing;
- An overview of test schedules per development cycle;
- An overview of the types of testing that is to be conducted;
- Defect management work flow.

Project Overview

[PROJECT NAME] is [

].

Testing objectives

The goal of the testing team will be to achieve the following objectives:

- Validate and verify application functionality works to specified requirements.
 - ❖ To demonstrate to the developer and the Application customer that the application meets its requirements;
 - ❖ A successful test shows that the application operates as intended.
- Provide confidence for business owner that the solution meet business needs
- Defect testing
 - ❖ To discover faults or defects in the application where its behaviour is incorrect or not in conformance with its specification;
 - ❖ A successful test is a test that makes the system perform incorrectly and so exposes a defect in the system.

Features to be tested

ID	FEATURE NAME	MODULE	STATUS
A	REGISTRATION		
1	Login	Registration	
2	View Loan Application		
3	Edit Loan Application		
4	Submit Loan Application		
5	View qualification status		
6	Accept Loan Terms		
7	View loan Status		
8	Edit contact us Information		
9	Submit contact us information		
10	View FAQs		
11	Pay loan using Mpesa	Communication	
12	Receive SMS on loan acceptance		
13	Receive SMS on loan payment received		
14	Receive SMS on loan missed daily for 3 days after missed loan		
15	Receive SMS 3 days before a loan payment is due if outstanding		
16	Receive SMS a day before loan payment is due if outstanding		
17	Receive SMS to confirm loan received after money sent		
18	Receive SMS on Educational drip 1		
19	Receive SMS on Educational drip 2		
20	Receive Email on loan acceptance		
21	Receive Email on Loan payment received		

Testing Approach

The purpose of the team is to verify the functionality of all components/modules, ensuring they satisfy the defined and agreed technical and business requirements. The testing team will make use of the Requirement Driven Testing as the preferred approach focussing on the following:

1. Building business requirement traceability matrix where test cases will be derived from;
2. Requirement will be used to select which test case(s) to execute and;
3. Report will be based on business requirements achieved instead of test cases executed.

Static Testing

Static testing is testing of a component or specifications without execution of that application. The team will use this approach to review all related system documentations to ensure that they are conforming to the requirements specified.

System Testing

The purpose of the system testing is to validate that the complete and integrated system complies with functional requirements and business requirements.

Entry Criteria

System testing may commence when the following criteria have been satisfied:

- Component Testing has been completed.
- No change to business requirements and test cases are up to date.
- Scenario based test cases have been reviewed by business owners or business users.
- Test environment is up and running
- Availability of test data

Suspension Criteria

System Testing will be suspended under the following condition:

- ❖ Critical error(s) found affecting functionality of the whole application.
- ❖ Change of business requirements
- ❖ Unavailability of the test environment

Resumption Criteria

System Testing will resume when the following criteria have been satisfied:

- All issues in suspension criteria have been resolved or mitigated
- New build with fixed Critical and Medium severity defects has been deployed into Test.

Exit Criteria (Test Completeness)

System Testing will be considered complete when the following conditions have been met:

- ❖ All High and Medium priority requirements have been tested without Critical or Medium severity defects.
- ❖ Business owner(s) and/or business user(s) have been notified with any remaining defects and understand the risks or limitations of current release.
- ❖ All defects found during testing have been recorded in defect management tool.

Defect Status

Every defect must be assigned a status to identify its place in the defect management workflow.

Status	Description
New	A defect will be given this status when a tester finds an issue for the first time during the testing process
Active	A defect will be considered with this status when the issue found in a test cycle but is still to be resolved by the developer in the next testing cycles
Resolved	A defect will be assigned this status when the developer has made changes and tested that the issue raised is no longer in the application
Investigate	A defect will be assigned this status by the developer when he/she is unable to recreate the given issue in his environment
Closed	A defect will be assigned this status by the testers once the (s)he confirms that the issue raised was resolved by the developer

Table 1 shows the various statuses a defect can be considered to be in

Defect Severity Levels

Every defect must be assigned a severity level according to the following table. If the tester is unsure what level to assign to a defect, then advice must be taken from the business owners or business users.

Level	Type	Description
1	Critical	A defect will have this severity when its effect in the application affects other functionalities to be able to be executed.
2	Major	A defect will have this severity when it's effect in the application only affects the specific functionality alone.
3	Minor	A defect will have this severity when its effect is minimal in application execution and will not have a huge impact to the business process

Table 2 shows the severity statuses a defect can be considered when raised

Test Activities and Schedules

The following section covers the work schedule and deliveries required from the team as agreed in the project [PROJECT NAME].

KEY

Term Definition

Done Task Complete

In progress Currently working on it

Not started Planned tasks

Pending Ready to start but waiting for requirements

Removed Task no longer required

Week 1 (28/07/2022 – 01/07/2022)

Activities	Entry criteria	Exit Criteria	Priority	Status
Application Walkthrough	Demo Data	All Application modules gone through	High	In Progress
Develop Test Plan	High level architecture and scope for user story.	Document completed and reviewed	High	In Progress

Week 2 (04/08/2022 – 05/08/2022)

Activities	Entry criteria	Exit Criteria	Priority	Status
Test Case Creation	Requirements document & Application walkthrough complete	Functional Test cases with both positive & negative paths covered, RTM documents completed & reviewed	Medium	In progress
The following tasks are carried over from last week or added				
Application Walkthrough	Demo Data	All application modules gone through	High	In Progress
Develop Test Plan	High level architecture and scope for user story.	Document completed and reviewed	High	In Progress

Week 3 (11/08/2022 – 15/08/2022)

Activities	Entry criteria	Exit Criteria	Priority	Status
Test Case Creation	RTM document & application walkthrough complete	Functional Test cases with both positive & negative paths covered	High	In Progress
Test Data Generation	Test Cases Document	Test Dummy Data Complete	High	Not Started
Static test	Business requirements documentation and application functionality documentation have been documented.	Application functionality documentation conform to the Business requirements	High	Not Started
Test Environment Setup	Complete application developed, Unit & Component Testing complete	Application deployed to Testing environment	High	Not Started
Pre-System Test	Test Data	Pre-System Test Run Successful	High	Not Started
Test Tools Setup	System deployed to Test environment	Demo Runs successful	High	Not Started
Security Test	Test Environment set up	Developer Report & Executive Summary Report Complete & Reviewed	Medium	Not Started
The following tasks are carried over from last week or added				

Week 4 (18/08/2022 – 22/08/2022)

Activities	Entry criteria	Exit Criteria	Priority	Status
Application Test	Successful Pre-Application Test Run	Defect Report & Test Summary Report	High	Not Started
The following tasks are carried over from last week or added				

Week 5 (25/08/2022 – 29/08/2022)

Activities	Entry criteria	Exit Criteria	Priority	Status
Application Test	Successful Pre-Application Test Run	Complete Test Cycle Run	High	Not Started
Application Testing reports	Complete Test Cycle Run	Scorecard, Dashboard, Test Results, Test Summary Report Documents	High	Not Started
Review	Scorecard, Dashboard, Test Results, Test Summary Report Documents	Deferred defects for Impacts/Approvals, Link Defects to Failed TC/Outstanding Defects for Closure Plan	High	Not Started
The following tasks are carried over from last week or added				

Test Deliverables

Testing Team will provide specific deliverables during the project. These deliverables fall into the following basic categories:

1. Documents

- 1.1. Test Plan
- 1.2. RTM
- 1.3. Test Cases
- 1.4. Daily Scorecards

2. Reports

- 2.1. Bug / Defect Reports
- 2.2. Test Summary Reports

Test Reporting

The following test reports will be used to monitor and manage test progress:

- The number of requirements (passed and failed results);
- The number of defects (bugs) identified over the test cycle sub-categorized by severity level as shown in the following example.

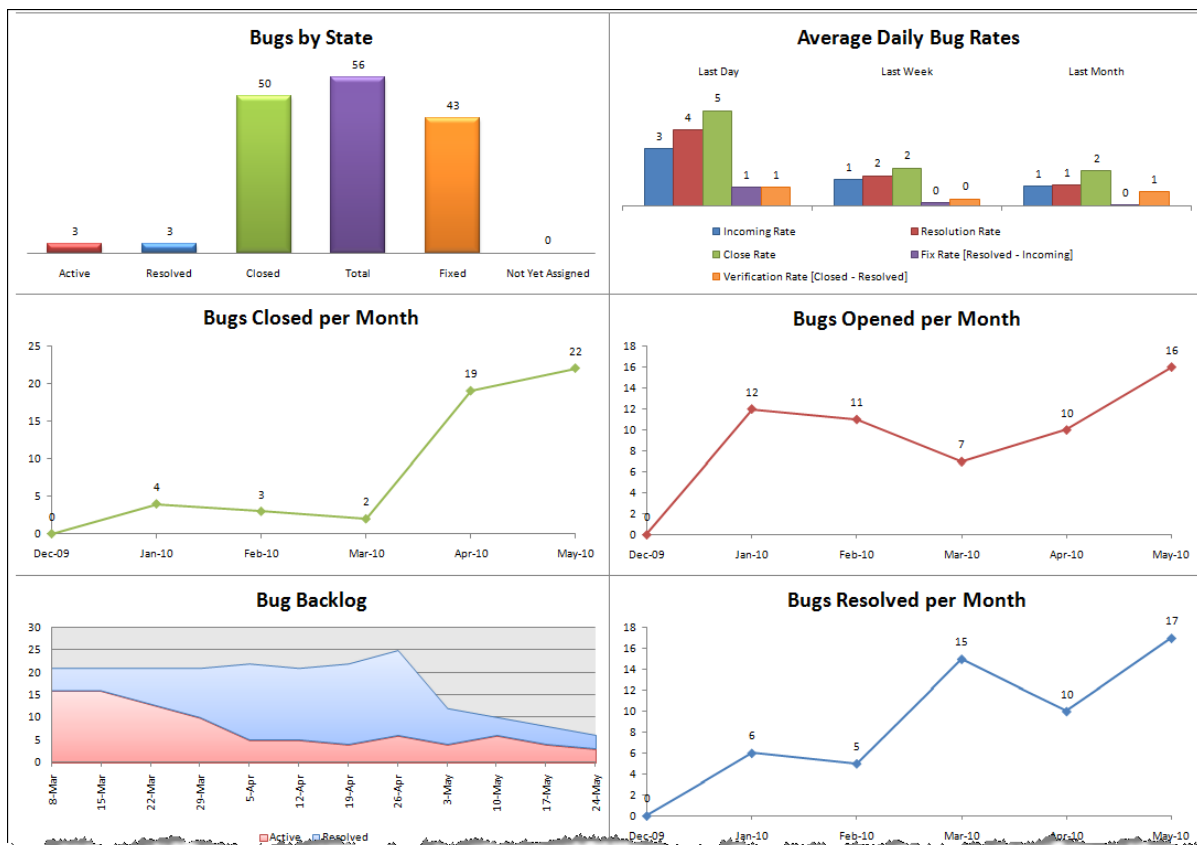


Figure 1 - Defect Report Example using JIRA Platform

- A Final Test Summary Report will be issued by the []. It will certify the extent to which testing has been completed, and provide an assessment of the product readiness for Program End-to-End Testing.

Test Environment Control

Summary

The developers will ensure that during the test cycles, the official release is not touched/modified until the cycle is over. The only allowed distortion would be to restart the server / service in case of application downtime.

Release Versioning

We recommend that Release Versioning be done in two ways according to official releases meant for testing cycles and for releases that will have been returned back for development.

The table below shows the versioning system that will be used to handle releases that are for testing and those that have been returned back to development

Version #	Description of version
0.0.1, 0.0.2 ... etc	This will be used by developers to version releases that were returned for development
1.0.0, 1.0.1 ...etc.	This will be used by testers to version releases that are meant for testing and have been staged for testing cycles

Testing Resources

[]

Responsible for:

- Ensure Project goals are met
- Ensure Project timelines are according to schedule
- Ensure Project Scope Creep is limited
- Ensure Project resources are available

[]

Responsible to:

- Write Test Plan
- Define / Setup Defect Tracking System
- Identify Test Data
- Approve Test Cases
- Complete Environment / Data setup
- Produce System Test Reports
- Facilitate Defect triage / status meetings
- Conduct End of Cycle Review
- Updating Test Plan
- Perform static tests
- Create application test cases
- Perform application test
- Perform application integration test
- Perform regression test
- Come up with defect logs

Testing Tools

Term	Definition
BSR Screen Recorder	Will be used to record screen for defects that cannot be captured by screenshots
JIRA	Will be used to track defects and all official releases for each testing cycle
Microsoft Office	Will be used to create all documents that will be used in the project
Snagit	Will be used to capture screenshots of defects found during testing