Test Plan of Google Translator

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Approvals and Sign off.

Name	Role	Date	Signature
QA Lead	QA Lead	20/4/2024	

Document History

Date	Authour	Updated Summary	Version
17/4/2024	QA Lead	Initiated Draft for review	v1.0
20/4/2024	QA Lead	Completed the document with the review comments	v1.1

Related Documents

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1. INTRODUCTION

Google translator is to translate the user content to the language that the user is requesting. It allows users to input via text, file, and images content into the selected language.

1.1. Purpose

Test Plan is designed to
- provide understanding of the testing process in terms of approach, Techniques, methodologies.
- Testing effort which leads to achieving the project goals.
- Identifying the risk in the early stage will help to reduce the impact of the timeline.
- Resource Allocation and the estimations make visible the timelines.
- communication tool between the stakeholders to understand the testing objectives, scope, and expectations.

1.2. Project Overview

Google Translator is a powerful tool providing a translation facility via text, images, Voice, Documents and websites by allowing input using any language. Also users can copy and share the generated output.

1.3. Audience

- Project team members perform tasks specified in this document, and provide input and recommendations on this document.
- Project Manager Plans for the testing activities in the overall project schedule, reviews the document, tracks the performance of the test according to the tasks.
- Technical/Dev Team ensures that the test plan and deliverables are in line with the design, provides the environment for testing and follows the procedures related to the fixes of defects.
- Business analysts will provide their inputs on functional changes.

1.4. Scope

1.4.1. In Scope

Testing includes all the functionalities in the requirement level. Verification by file, text, image as input and verify the translation process with the supported languages.

1.4.2. Out of Scope

Performance testing excluded in this phase.

2. TEST STRATEGY

2.1. TEST OBJECTIVES

The objective of the test is to verify that the functionality of Google translator works according to the specifications. The test will execute and verify the test scripts, identify, fix and retest all high and medium severity defects per the entry criteria, prioritize lower severity defects for future fixing via Change Request.

2.2. TEST ASSUMPTIONS

- Production data backup should be restored to the system prior to start of Functional Testing
- Performance testing is not considered for this phase.
- All the defects would come along with Test evidence and steps to recreate.
- The Test Team will be provided with access to Test environment via VPN connectivity
- Only QA team have access to the QA ENV
- The Test Team assumes all necessary inputs required during Test design and execution will be supported by Development/BUSINESS ANALYSTs appropriately.
- Test case design activities will be performed by QA Group
- Test environment and preparation activities will be owned by Dev Team
- Dev team will provide Defect fix plans based on the Defect meetings during each cycle to plan.
- There is no environment downtime during the test due to outages or defect fixes.

- UAT test execution will be performed by BA Team and QA team will provide their support on creating UAT script.
- Since QA team does not having fluency in all the languages testing will be focused on selected languages(English, Sinhala, Tamil, Hindi,Japanese)

2.3. Data Approach

In functional testing, Google Translator will use pre prepared test data which is used for testing activities.

2.4. Scope and Level of Testing

Followings are the testing types are planned.

Testing Type	Description	Responsible Parties
Exploratory Testing	Explore the application and continue the testing	QA Team
Smoke Testing	Verify does system works with the basic functionalities to continue the testing	QA Team
System and Integration Testing	Verify the System testing and integration point testing	QA Team
User Acceptance Testing	Continue the testing from user perspective.	BA Team/ UAT Team
Regression Testing	Verify the application works as expected after the changres.	QA Team
Automation Regression Testing	Automate the regression test cases.	QA Team

2.4.1. Exploratory Testing

The purpose of this test is to make sure critical defects are removed before the next levels of testing can start.
SCOPE: Navigate to the Google Translator and continue the translation functionalities and verify the generated output.
TESTERS: Testing team.
METHOD: this exploratory testing is carried out in the application without any test scripts and documentation
TIMING: at the beginning of each cycle.

2.4.2. Functional Test

Functional testing will be performed to check the functions of the application.
SCOPE: Navigate to the Google Translator and conduct the test execution following the functional test cases.
TESTERS: Testing team.
METHOD: this functional testing is carried out in the application following functional test cases.
TIMING: at the beginning of each cycle.

2.4.3. Regression test

Regression testing will be performed to check the functions of the application after the modifications are done.
SCOPE: Navigate to the Google Translator and conduct the test execution following the functional test cases.
TESTERS: Testing team.
METHOD: this functional testing is carried out in the application following functional test cases.
TIMING: at the end of the test cycle.

3. TEST ACCEPTANCE CRITERIA

- Approved Functional Specification document, Use case documents must be available prior to the start of the Test design phase.
- Test cases approved and signed-off prior to start of Test execution
- Development completed, unit tested with pass status and results shared to Testing team to avoid duplicate defects
- Test environment with application installed, configured and ready to use state

4. TEST DELIVERABLES

No	Deliverable Name	Author	Reviewer
1	Test Plan	Test Lead	Project Manager/ Business Analyst's
2	Functional Test Cases	Test Team	Business Analyst's Sign off
3	Logging Defects in Jira	Test Team	Tech Lead
4	Daily/weekly status report	Test Team/ Test Lead	Test Lead/ Project Manager

5.   MILESTONE LIST

The milestone list is tentative due to reasons such as scope/addition in scope, Any other dependency that impacts efforts and timelines.

- Test Planning
- Test Environment Setup
- Test Case Development
- Test Execution
- Functional Testing
- Regression Testing
- Usability Testing
- Compatibility Testing
- Defect Resolution
- UAT Release
- Production Release

6.   TEST DELIVERABLES

6.1.   Test Effort Estimate

	Duration (Hr)
Requirement Analysis	2
Test Scenario Identification	2
Test Case Designing	10
Test Data Preparation	1
Test Execution in QA ENV	10
Test Execution in STG ENV	10
Bug Verification	2
PRD verification	1
Total Hours	38

7.   EXECUTION STRATEGY

7.1.   Entry and Exit Criteria

The entry criteria refer to the desirable conditions in order to start test execution; only the migration of the code and fixes need to be assessed at the end of each cycle.
1. Test Environment needs to be ready.
2. Test Data should be available.
3. QA release should be available.
4. Test cases should be available.
5. QA Resources should be available.

The exit criteria are the desirable conditions that need to be met in order proceed with the implementation.
1. 100% Test Scripts executed
2. 95% pass rate of Test Scripts
3. No open Critical and High severity defects
4. 95% of Medium severity defects have been closed
5. All remaining defects are either canceled or documented as Change Requests for a future release

7.2.   Test Cycles

There will be two cycles for functional testing. Each cycle will execute all the scripts . The objective of the first cycle is to identify any blocking, critical defects, and most of the high defects. The second cycle is to identify remaining high and medium defects, removing the work-around from the first cycle.

7.3.   Validation and Defect Management

It is expected that the testers execute all the scripts in each of the cycles described above. The identified defects will be assigned to the technical team from jira. The technical team will work on fixes. Tester to open the defects, link them to the respective testcase, assign an initial severity and status, retest and close the defect once it's fixed.

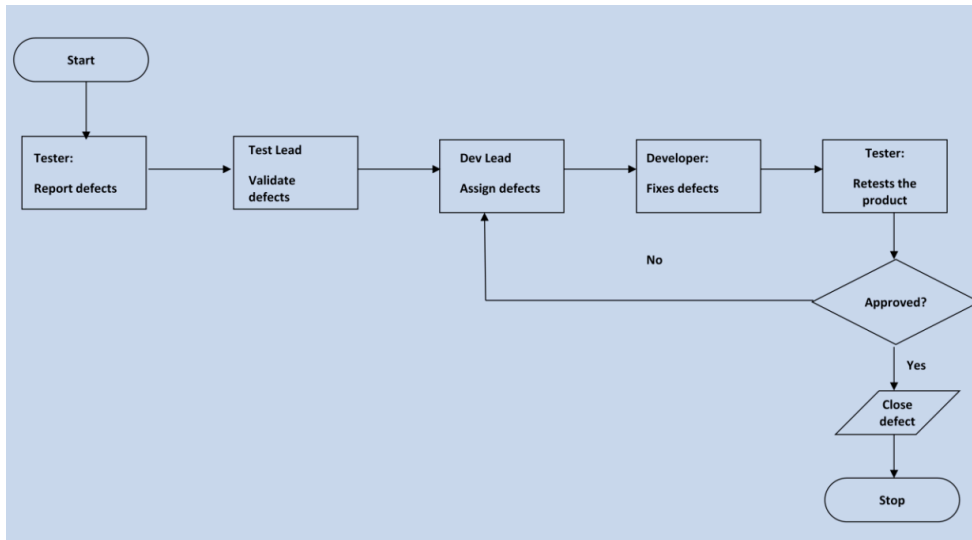| Severity	Impact
1- Critical	This bug will crash the system, cause file corruption, or cause potential data loss.
2-High	It causes a lack of vital program functionality with workaround.
3-Low	There is an insufficient or unclear error message, which has minimum impact on product use.
4- Cosmetic	There is an insufficient or unclear error message that has no impact on product use.

7.4.　Test Metrics

Test metrics to measure the progress and level of success of the test will be developed and shared with the project manager for approval. The below are some of the metrics

- Test preparation & Execution Status
- Daily execution status
- Project Weekly Status report

7.5.   Defect tracking & Reporting

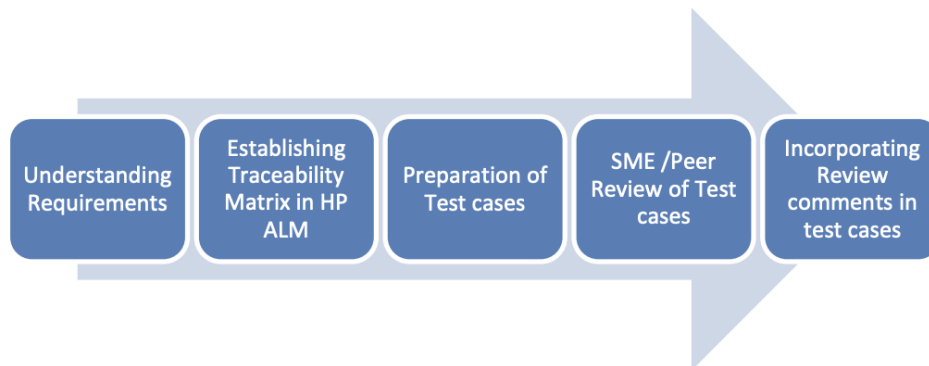Please refer below flowchart for defect tracking process.

8.   TEST MANAGEMENT PROCESS
8.1.   Test Management Tool

TestRail is the tool used for Test Management. All Test cases, Test Cycles, test results are updated in the jira. Project specific folder structure will be created and Each resource in the Testing team will be provided with Read/Write access to add/modify.
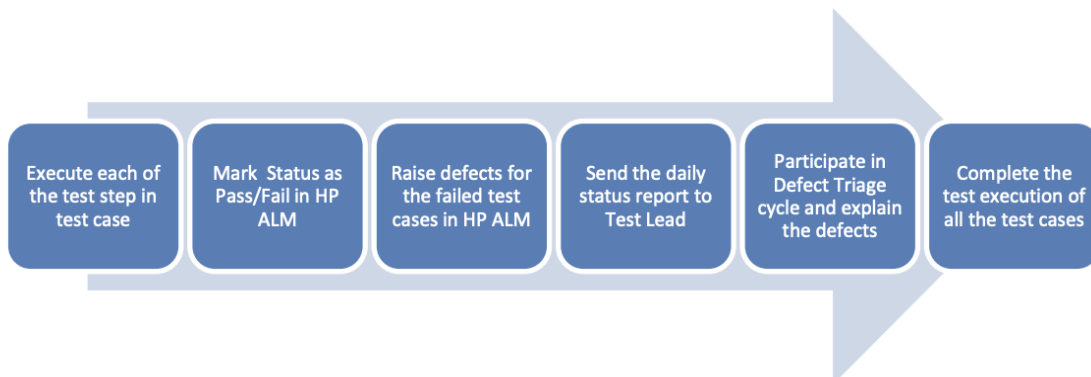
8.2.   Test Design Process.

Please refer to the flow of the Test design process below.

| Understanding Requirements | Establishing Traceability Matrix in HP ALM | Preparation of Test cases | SME /Peer Review of Test cases | Incorporating Review comments in test cases |

- Understanding Requirements
- Establishing Traceability Matrix in HP ALM
- Preparation of Test cases
- SME /Peer Review of Test cases
- Incorporating Review comments in test cases

8.3.   Test Execution Process

Please refer to the flow of the Test execution process below.

| Execute each of the test step in test case | Mark Status as Pass/Fail in HP ALM | Raise defects for the failed test cases in HP ALM | Send the daily status report to Test Lead | Participate in Defect Triage cycle and explain the defects | Complete the test execution of all the test cases |

- Execute each of the test step in test case
- Mark Status as Pass/Fail in HP ALM Raise defects for the failed test cases in Jira
- Send the daily status report to Test Lead
- Participate in Defect Triage cycle and explain the defects
- Complete the test execution of all the test cases

8.4. Test Risks and Mitigation Factors

Followings are the identified risks and mitigations Plans for those.

Risk	Impact	Mitigation Plan
Not enough resources, resources on boarding too late (process takes around 15 days	High	Holidays and vacation have been estimated and built into the schedule; deviations from the estimation could derive in delays in the testing.
Defects are found at a late stage of the cycle or at a late cycle; defects discovered late are most likely be due to unclear specifications and are time consuming to resolve.	High	Defect triage meetings will ensure the communication and priority of fixing those issues.
Scope completely defined	Medium	Scope is well defined but the changes in the functionality are not yet finalized or keep on changing.

8.4.1. Communications Plan and Team Roster

Project Manager or BA/Product owner review the content of the Test Plan, and Test Estimates signs off on it.

8.4.2. Role Expectations

Role	Name	Contact Info
Project Manager		
Tech Lead		
Business Analyst		
QA Lead		
QA Team		
Dev Team		

9. TEST ENVIRONMENT

- Supported browsers: Chrome, Firefox, Safari, Edge.
- Supported devices: Desktop, tablet, mobile.
- Operating systems: Windows, macOS, iOS, Android.