

Test Plan for Google Translate

1. Introduction

1.1 Project Overview

Google Translate is an online tool that allows users to translate text across different languages. This test plan will describe the strategy, resources, timetable, and method for testing Google Translate with a focus on functional, user interface, performance, and security aspects.

1.2 Objectives

- Ensure that Google Translate accurately translates text between English, Sinhala, and Tamil.
- Validate the functionality of in-app functions such as Voice Translation, Listen, SWAP, Language selection, History, and Saved.
- Evaluate the usability and user interface of the application.
- Test how effectively the program performs under different workloads.
- Identify and address security vulnerabilities.

2. Scope

2.1 In-Scope

- Functional testing for translating text between Sinhala, English and Tamil.
- Testing the user interface (UI) on different web browsers and devices.
- Performance assessment for translating lengthy text sections.
- Security testing is performed accordingly, to achieve confirmation of private data is encrypted.

2.2 Out-of-Scope

- Verifying translations across all supported languages.
- Offline features (if any).
- Testing mobile applications, if they're not incorporated with the website.

3. Test Approach

3.1 Testing Types

- **Functional Testing:** Verify the correctness of translations and other functionalities.
- **UI Testing:** Ensure the interface is user-friendly and works seamlessly across different browsers and devices.

- **Performance Testing:**Evaluate the application's performance in different load conditions.
- **Security Testing:** Identify potential security vulnerabilities and ensure data protection.

3.2 Test Levels

- **Unit Testing:** Conducted by developers to test individual components.
- **Integration Testing:** Ensure that separate modules work together as intended.
- **System Testing:** Perform a comprehensive testing of the entire application.
- **Acceptance Testing:** Evaluate the application against user requirements and business goals.

4. Test Environment

4.1 Hardware

- **Desktop:** Intel i7, 16GB RAM
- **Mobile:** Samsung Galaxy S21, iPhone 11 PRO

4.2 Software

- **Operating Systems:** Windows 10, macOS, Android 11, iOS 14
- **Browsers:** Chrome, Firefox, Safari, Edge

4.3 Network

- Standard broadband internet connection

5. Test Schedule

Activity	Start Date	End Date
Test Planning	June 20, 2024	June 21, 2024
Test Case Development	June 22, 2024	June 23, 2024
Test Environment Setup	June 24, 2024	June 24, 2024
Test Execution	June 25, 2024	June 27, 2024
Defect Reporting	June 25, 2024	June 27, 2024

Test Summary Report	June 28, 2024	June 28, 2024
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6. Resources

6.1 Human Resources

- **Test Lead:** Veronica Kuverova
- **Test Engineers:** QA Team Members

6.2 Tools

- **Test Management Tool:** JIRA
- **Version Control** - Git
- **Automation Tool:** Selenium
- **Performance Testing Tool:** JMeter

7. Risk Management

7.1 Risks

- Possible delays in the setup of the test environment.
- Unavailability of required resources.
- Identified defects may require an excessive amount of rework.

7.2 Mitigation

- Make sure the test environment's early setup and configuration.
- Allocate backup resources.
- Set priorities for tasks like regression testing, bug fixes, and new scope.
- Conduct regular defect triage meetings to priorities fixes.
- Hold regular catch-ups to determine the team members' current work status, daily tasks, any obstacles, and future plans.

8. Test Deliverables

- **Test Plan Document:** This document.
- **Test Case Document:** Detailed test cases for functional, UI, performance, and security testing.
- **Bug Report:** Documentation of identified defects with details.
- **Test Summary Report:** Summary of testing activities, results, and key findings.

9. Entry and Exit Criteria

9.1 Entry Criteria

- The test environment is set up and stable.
- Test cases are reviewed and approved.
- Test data is prepared.

9.2 Exit Criteria

- All planned test cases are executed.
- Critical and high-severity defects are resolved.
- Test summary report is completed and reviewed.

10. Approval

Name	Role	Signature	Date
Veronica Kuverova	Project Manager	[Signature]	June 20, 2024
Chathuranga Wijewardana	Test Lead	[Signature]	June 20, 2024