

## 1. Introduction

Overview of the purpose of the requirements gathering process.

Importance of understanding stakeholder needs for successful project outcomes.

## 2. Stakeholder Analysis

Key Stakeholders:

Project Manager: Responsible for overall project coordination.

Developers: Users of the automation tool for testing web applications.

QA Engineers: Primary users who will execute tests and analyze results.

Product Owners: Interested in the quality and performance of the web applications.

Stakeholder Needs:

Efficient testing processes to reduce time and effort.

Comprehensive reporting features to analyze test results.

Integration capabilities with existing CI/CD pipelines.

## 3. User Stories & Use Cases

User Stories:

As a QA Engineer, I want to automate regression tests so that I can save time on repetitive tasks.

As a Developer, I want to receive immediate feedback on code changes through automated tests to ensure quality.

As a Product Owner, I want to view detailed reports on test results to make informed decisions about releases.

Use Cases:

Use Case 1: Automating a functional test for a login feature.

Use Case 2: Running performance tests to assess load handling during peak traffic.

Use Case 3: Conducting security tests to identify vulnerabilities in the web application.

## 4. Functional Requirements

The tool must support the following functionalities:

Ability to create, edit, and delete test cases.

Support for various types of tests (functional, performance, security).

Integration with popular web browsers (Chrome, Firefox, etc.).

Scheduling of automated tests to run at specified intervals.

Generation of detailed test reports with pass/fail status and logs.

## 5. Non-Functional Requirements

Performance:

The tool should execute tests within a reasonable time frame (e.g., under 5 minutes for a standard test suite).

Usability:

The user interface should be intuitive and easy to navigate for non-technical users.

Security:

The tool must ensure secure handling of sensitive data during testing.

Reliability:

The tool should have a high success rate in executing tests without failures.

## 6. Conclusion

Summary of the key requirements gathered from stakeholders.

Emphasis on the importance of these requirements in guiding the development of the Website Testing Automation Tool.