**Test Strategy**

Web Application Tide.com

Version 1.0

28/July/2022

**Document Control**

**Document Detail**

|  |  |
| --- | --- |
| Title: | <Formal name for the Strategy with reference to the area it covers> |
| Version: | Version 1.0 |
| Date: | 01-Aug-2022 |
| Electronic File Name: |  |
| Electronic File Location: |  |
| Author: | Sharad Najan |
| Contributors: |  |

**Change Control**

|  |  |  |  |
| --- | --- | --- | --- |
| Issue Date | Version | Details | Author |
| 01-Aug-2022 | Version 1.0 |  | Sharad Najan |
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**Table of Contents**

[1. Test Strategy Identifier 4](#_Toc182286068)

[2. Introduction 4](#_Toc182286069)

[2.1. Purpose 4](#_Toc182286070)

[3. Test Items 4](#_Toc182286071)

[4. Features to be tested 4](#_Toc182286072)

[5. Features not to be tested 4](#_Toc182286073)

[6. Approach 4](#_Toc182286074)

[6.1. Analysis & Planning Phase Entry Criteria 5](#_Toc182286075)

[6.2. Analysis & Planning Phase Exit Criteria 5](#_Toc182286076)

[6.3. Test Phase Entry Criteria 5](#_Toc182286077)

[6.4. Test Phase Exit Criteria 5](#_Toc182286078)

[6.5. Change Management 5](#_Toc182286079)

[6.6. Notification / Escalation Procedures 6](#_Toc182286080)

[6.7. Measures and Metrics 6](#_Toc182286081)

[7. ‘Pass/Fail’ Criteria 7](#_Toc182286082)

[8. Suspension Criteria & Resumption Requirements 7](#_Toc182286083)

[9. Test Deliverables 8](#_Toc182286084)

[10. Testing Tasks 8](#_Toc182286085)

[11. Environmental and Infrastructure Needs 8](#_Toc182286086)

[12. Responsibility Matrix 9](#_Toc182286087)

[13. Staffing and Training Needs 9](#_Toc182286088)

[14. Schedules and Resource Plans 9](#_Toc182286089)

[15. Risks and Contingencies 9](#_Toc182286090)

[16. Approvals 10](#_Toc182286091)

# Test Strategy Identifier

Home page Allows users to Shop product ,Find Retailer ,Search product by using search box , How to wash clothes , Live chat and contact if user has any query. It is a Web application on which user can find products.It is user supported Web application. If any user want support then various options are available such as Live chat, Contact us to interact us.User can can register by using his Email so that user can special coupons and rewards earn . Find retailer feature is available to find the retailer near him.

# Introduction

Home page Allows users to Shop product ,Find Retailer ,Search product by using search box , How to wash clothes , Live chat and contact if user has any query. It is a Web application on which user can find products.It is user supported Web application. If any user want support then various options are available such as Live chat, Contact us to interact us.User can can register by using his Email so that user can special coupons and rewards earn . Find retailer feature is available to find the retailer near him.

## Purpose

**The objective of this document is to provide overview for system testing of Tide Web**

* Define the activities required to prepare system
* Communicate to all responsible teams the system test strategy
* Define deliverable and responsible teams

# Test Items

|  |  |
| --- | --- |
| 1 | Search Box |
| 2 | User Registration |
| 3 | Live chat |
| 4 | Shop Products |
| 5 | How to wash Clothes |

# Features to be tested

# FEATURES TO BE TESTED

* User registration
* Log in Feature
* Search Box Feature
* Shop product Feature
* Search information How to wash Clothes
* Live chat feature

# Features not to be tested

Actual online buying

# Approach

All testing tasks will be conducted in line with the Software Test Life Cycle (STLC) and in support of the Software Development Life Cycle (SDLC). The documents used within the SDLC will be completed both by the Test Team and the project participants that are responsible for providing information and deliverable to the Test Team.

It should be decided at the start of the project if there will be a Post Implementation Review after project delivery and this should be conducted within two weeks of project completion.

## Analysis & Planning Phase Entry Criteria

The following must be in place prior to the onset of QA System Testing

Business

* The Business Requirement Document Is Frozen
* All new Requirement that arises are initiated Through change Control Process

QA

* Daily Communication plan in place
* Test cases reviewed & sign -Off
* Cross-functional ,dependent teams & Resource identified
* QA Data requirement identified & all necessary password accesses obtain
* Daily Defect Meeting Day/Time attendance established in the execution phase

## Analysis & Planning Phase Exit Criteria

For the Analysis & Planning phase to be completed and allow items to move into the Test Phase the following criteria need to be achieved:

* Test Breakdowns and Test Cases are written and peer reviewed
* Knowledge Share document has been completed and reviewed by the Test Engineers
* Walkthrough and sign-off completed for the Test Plan and Test Breakdowns
* Defined Test Estimate has been published and agreed
* The list of features in the Test Breakdown have been prioritised.

## Test Phase Entry Criteria

Before Test Items are made available for the Test Team to test it’s expected that:

* The *Test Item Transmittal Report* will be completed
* All test tools are available and test infrastructure are available for use during testing
* All Test Items are development complete
* The correct versions of the code have been deployed to the correct test environments
* Sanity and Unit tests have been completed successfully to demonstrate readiness for test

## Test Phase Exit Criteria

For the Test Items to exit testing the following conditions will have to be met:

* All planned testing activities has been completed to agreed levels.
* All high priority bugs have been fixed, retested and passed.
* No defects must be left in an open unresolved status.

## Measures and Metrics

At the Initiation Phase of the project the Test Team will publish a set of measures and metrics related to the test activities of their Planning & Analysis and Execution phases. The Test Plan also defines the milestone dates for key deliverables such as the Test Plan and these are metrics captured for ongoing statistical process analysis across successive projects.

**Test Preparation**

* Number of Test Scenarios v. Number of Test Cases
* Number of Test Cases Planned v. Ready for Execution
* Total time spent on Preparation v. Planned time

**Test Execution and Progress**

* Number of Tests Cases Executed v. Test Cases Planned
* Number of Test Cases Passed, Failed and Blocked
* Total Number of Test Cases Passed by Test Item / Test Requirements
* Total Time Spent on Execution vs Planned Time

**Bug Analysis**

* Total Number of Bugs Raised and Closed per Test Run
* Total Number of Bugs Closed v. Total Number of Bugs Re-Opened
* Bug Distribution Totals by Severity per Test Run
* Bug Distribution Totals by Test Item by Severity per Test Run

# ‘Pass/Fail’ Criteria

Each Test Item will be assigned a Pass or Fail state dependant on two criteria:

* Total number and severity of Bugs in an Open & Unresolved state within Bugzilla/Bug Tracker.
* The level of successfully executed test requirements.

The combination of both criteria will be used to recognize the Test Item can be declared Test Complete. However as this is a minimum level of quality that is believed achievable it’s recommended that where project timescales allow further testing and development should be conducted to raise the overall quality level.

**Table of Issue Severity**

|  |  |  |
| --- | --- | --- |
| Severity | Definition | Maximum Allowable |
| S1 | Crash/Legal – System crash, data loss, no workaround, legal, Ship Killer | 0 |
| S2 | Major – Operational error, wrong result | 1 |
| S3 | Minor – Minor problems | 6 |
| S4 | Incidental – Cosmetic problems | 9 |
| S5 | N/A – Not Applicable; used for feature requests and Development Tasks | Reference Only |

The total MAXIMUM number of issues recorded in Bugzilla / Bug Tracker that can remain in an Open & Unresolved state for the Test Item and be acceptable for release.

**Table of Test Scenario Priority**

|  |  |  |
| --- | --- | --- |
| Test Scenario | Definition | Minimum Pass Rate |
| P1 – Critical | Essential to the Product | 100% |
| P2 – Important | Necessary to the Product | 70% |
| P3 – Desirable | Preferred, but not essential to the Product | 10% |

The MINIMUM set of Test Scenarios that must pass before the Test Item can be considered for release.

Unforeseen issues arising during the Test Phase may impact the agreed ‘Pass/Fail’ Criteria for the Test Item. Issues can be managed through review with the Test Team and the project authorities.

# Suspension Criteria & Resumption Requirements

Testing of Test Items will be suspended if:

**1a) Suspension criteria:**

A Severity 1 issue is logged and requires fixing before further testing can take place (a Blocking Issue)

**1b) Resumption requirement:**

The issue will need to be fixed before the Test Item is returned to the Test Team for testing.

**2a) Suspension criteria:**

Significant differences exist between observed behaviour of the Test Item and that shown in Test Scenario, Test Case or as expected from the previous version of the technology.

**2b) Resumption requirement:**

Development, the Test Team and PM must come to a conclusion on resolving the issue and agreeing a definition of the expected behaviour.

**3a) Suspension criteria:**

A Test Item sent for testing fails more than 20% of Developer Unit Tests.

**3b) Resumption requirement:**

The Test Item must be fixed or Unit Tests refactored if out of date and then demonstrated to pass with <20% failure rate.

# Test Deliverables

The following document will be produced during the testing phase:

* **Test Plan**
* **Test Schedule**
* **Test Breakdown**
* **Test Cases**
* **Periodic progress and metric update reports**
* **Bug Reporting**
* **Test Summary Reports**

# Testing Tasks

The Testing Tasks that the Test Team will deliver cover the following scope:

* **Fully In Scope:** Functional Testing
* **Partially in Scope:** Cross Browser Compatibility
* **Out of Scope:** Performance testing, Automated Regression, all forms of Non-Functional, Accessibility Compliance Testing, Security Testing, User Documentation Review.

# Environmental and Infrastructure Needs

The following detail the environmental and infrastructure needs required for the testing of lastminute.com Test Items and execution of Regression Testing.

**Hardware.**

* Integration Environment:
* Intel Core i5

**Software**

* Visual Studio
* Selenium
* Microsoft Excel
* Microsoft Word

**Infrastructure**

* Network connections are available on all Test Systems as required.

# Responsibility Matrix

The table below outlines the main responsibilities in brief for test activities:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Activity** | **Product Manager** | **Development**  **Manager** | **Test Manager** | **Test Engineer** |
| Provision of Technical Documents | X | X |  |  |
| Test Planning and Estimation |  |  | X | X |
| Review and Sign off Test Plan | X | X | X |  |
| Testing Documentation |  |  | X | X |
| Test Preparation and Execution |  |  |  | X |
| Test Environment Set-up |  |  |  | X |
| Change Control of Test Environments |  |  | X | X |
| Provision of Unit Tested Test Items |  | X |  |  |
| Bug fixes and return to the Test Team for re-test |  | X |  |  |
| Product Change Control | X | X | X |  |
| Ongoing Test Reporting |  |  | X | X |
| Test Summary Reporting |  |  | X |  |

# Staffing and Training Needs

**Staffing.**

Staffing levels for the test activities will be:

* 1 x Test Manager for the duration of test planning at 50% effort against plan.
* The required number of Test Engineers for the duration of test execution at 100% effort against plan.

**Training.**

For each project the training needs will be assessed and defined in the Test Plan.

# Schedules and Resource Plans

|  |  |  |  |
| --- | --- | --- | --- |
| QA Activities | QA Deliverable | Start date | End date |
| Analysis of the Document | Understanding Document | 25/07/2022 | 25/07/2022 |
| Test Planning | Test plan document | 25/072022 | 25/17/2022 |
| Test scenario | Test scenario document | 25/07/2022 | 25/07/2022 |
| Test Case preparation | Test cases ,Test Data | 26/07/2022 | 26/07/2022 |
| Test environment setup | NA | 27/07/2022 | 27/07/2022 |
| Test Case Execution and defect tracking | Complete the execution and defect log maintained in Quality center | 27/07/2022 | 27/07/2022 |
| End -to-End Test Scenario Identification & End -to-End test case preparation | End-to-End test scenario &End -to-End test cases | 28/07/2022 | 28/07/2022 |
| System testing Sign-off | Exit report | 28/07/2022 | 28/07/2022 |
|  |  |  |  |

# Risks and Contingencies

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Risk** | **Mitigation Strategy** | **Impact** |
| 1 | Delays in delivering completed Test Items from Development would impact test timescales and final Release quality | Product Management and Development to advise of any delays and adjust Release Scope of Resources to allow the test activities to be performed. | High |
| 2 | Delays in the turn around time for fixing critical bugs, which would require re-testing, could have an impact on the project dates. | Strong management of bug resolution would be required from Development to ensure bugs are fixed and available for re-testing in the scheduled time. | High |
| 3 | The Test Team, Development or PM teams require domain guidance from one or the other and they are not available. This would delay project activities. | The Test Team, Development and PM teams to ensure they are available at critical points or contactable during the project activities. | Medium |
| 4 | Features of Test Items will not be testable. | The Test Team will record untested features and request the PM to assess business risk in support of the release of untested features. | Low |
| 5 | Unexpected dependencies between Test Items and service components are encountered that require revision of Test Scenarios and related Test Cases. | Information about dependencies is updated and communicated promptly to allow timely revision of Test Scenarios and Test Cases | Low |

# Approvals

The following people are required to approve the Test Strategy

|  |  |
| --- | --- |
| **Approval By** | **Approval** |
| Test Manager |  |
| The Test Department Manager |  |
| Product Owner |  |
| Development Manager |  |
| Project Manager |  |