*YOUR LOGO*

# E-Commerce

# System Test Plan

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# 1. INTRODUCTION

The customer wants a perfect website, which passed the full cycle of manual testing. Given the specificity of the site it is very important to have the same quality and the site.

The Test Plan has been created to facilitate communication among the team members. The document describes approaches and methodologies that will apply to the system testing of the "http://automationpractice.com/index.php".

It includes the objectives, test responsibilities, entry and exit criteria, scope, schedule major milestones, entry and exit criteria, and approach. This document has clearly identified what the test deliverables will be, and what is deemed in and out of scope.

## 1.1 OVERVIEW

**"Your Logo"** page allows various customers (Individual customers, Local customers, and International Customers) to log in and access the application for shopping usage, and also it provides a wide range of clothing for customer satisfaction.

# 2. SCOPE

The document mainly targets Functional Testing, GUI testing, Performance Testing, and validating data in report output as per Requirements Specifications provided by the Client.

## 2.1 Functions to be tested.

- **Functional**
- **GUI**
- **Performance**

## 2.2 Functions not to be tested.

1. No other Functions except those mentioned above in section 2.1

# 3 QUALITY OBJECTIVES

## 3.1 Primary Objectives

A primary objective of testing is to: assure that the system meets the full requirements, including quality requirements (functional and non-functional requirements) and fits metrics for each quality requirement and satisfies the use case scenarios and maintains the quality of the product. At the end of the project development cycle, the user should find that the project has met or exceeded all of their expectations as detailed in the requirements.

Any changes, additions, or deletions to the requirements document, Functional Specification, or Design Specification will be documented and tested at the highest levelof quality allowed within the remaining time of the project and within the ability of the test team.

### 3.2 Secondary Objectives

The secondary objectives of testing are to: identify and expose all issues and associated risks, communicate all known issues to the project team, and ensure that all issues are addressed in an appropriate manner before release. As an objective, this requires careful and methodical testing of the application to first ensure all areas of the system are scrutinized and, consequently, all issues (bugs) found are dealt with in proper action.

# 4 TEST APPROACH

The approach, that is used, is Analytical, therefore, in accordance with the requirements-based strategy, where an analysis of the requirements specification forms the basis for planning, estimating, and designing tests. Test cases will be created during exploratory testing. Alltest types are determined in Test Strategy.

The team also must use experience-based testing and error guessing to utilize testers' skills andintuition, along with their experience with similar applications or technologies.

### 4.1 Test Automation

Automated unit tests are part of the development process, and UI smoke tests from CHL01 must be also automated during which performance data must be captured.

## 5 ROLES AND RESPONSIBILITIES

| Role | Staff Member | Responsibilities |
|---|---|---|
| Project Manager | | 1. Acts as primary contact for development and QAteam.<br>2. Responsible for Project schedule and the overall success of the project. |
| QA Lead | | 1. Participation in the project plan creation/update process.<br>2. Planning and organization of test process for the release.<br>3. Coordinate with QA analysts/engineers on any issues/problems encountered during testing.<br>4. Report progress on work assignments to the PM |
| QA | | 1. Understand requirements<br>2. Writing and executing Test cases<br>3. Preparing RTM<br>4. Reviewing Test cases, RTM<br>5. Defect reporting and tracking<br>6. Retesting and regression testing<br>7. Bug Review meeting<br>8. Preparation of Test Data<br>9. Coordinate with QA Lead for any issues or problems encountered during test preparation/execution/defecthandling. |

# 6. ENTRY AND EXIT CRITERIA

## 6.1 Entry Criteria

• All test hardware platforms must have been successfully installed, configured, and functioning properly.

• All the necessary documentation, design, and requirements information should be available that will allow testers to operate the system and judge the correct behavior.

• All the standard software tools including the testing tools must have been successfully installed and functioning properly.

• Proper test data is available.

• The test environment such as lab, hardware, software, and system administration support should be ready.

• QA resources have completely understood the requirements

• QA resources have sound knowledge of functionality

• Reviewed test scenarios, test cases, and RTM

## 6.2 Exit Criteria

- A certain level of requirements coverage has been achieved.
- No high priority or severe bugs are left outstanding.
- All high-risk areas have been fully tested, with only minor residual risks left outstanding.
- Cost – when the budget has been spent.
- The schedule has been achieved

# 7 SUSPENSION CRITERIA AND RESUMPTION REQUIREMENTS

## 7.1 Suspension criteria

- The build contains many serious defects which seriously limit testing progress.
- Significant change in requirements suggested by the client
- Software/Hardware problems
- Assigned resources are not available when needed by the test team.

## 7.2 Resumption criteria

Resumption will only occur when the problem(s) that caused the caused the suspension have been resolved

# 8 TEST STRATEGY

## 8.1 QA role in the test process

**Understanding Requirements:**

• Requirement specifications will be sent by the client.

• Understanding of requirements will be done by QA.

**Preparing Test Cases:**

QA will be preparing test cases based on the exploratory testing. This will cover all scenarios for requirements.

**Reviewing test cases and matrix:**

- Peer review will be conducted for test cases and test matrix by QA Lead
- Any comments or suggestions on test cases and test coverage will be provided from the reviewer to the respective author of the Test Case and Test Matrix.
- Suggestions or improvements will be re-worked by the author and will be sent for approval.
- Re-worked improvements will be reviewed and approved by a reviewer.

**Creating Test Data:**

Test data will be created by respective QA on the client's developments/test site based on scenarios and Test cases.

**Executing Test Cases:**

- Test cases will be executed by respective QA on the client's development/test site based on designed scenarios, test cases, and Test data.
- Test result (Actual Result, Pass/Fail) will be updated in the test case document as well as in the Defect Logging and Reporting Tool.

QA will be logging the defect/bugs in the bug reporting tool, found during the execution of test cases. After this, QA will inform the respective developer about the defects/bugs.

**Re-testing and Regression Testing:**

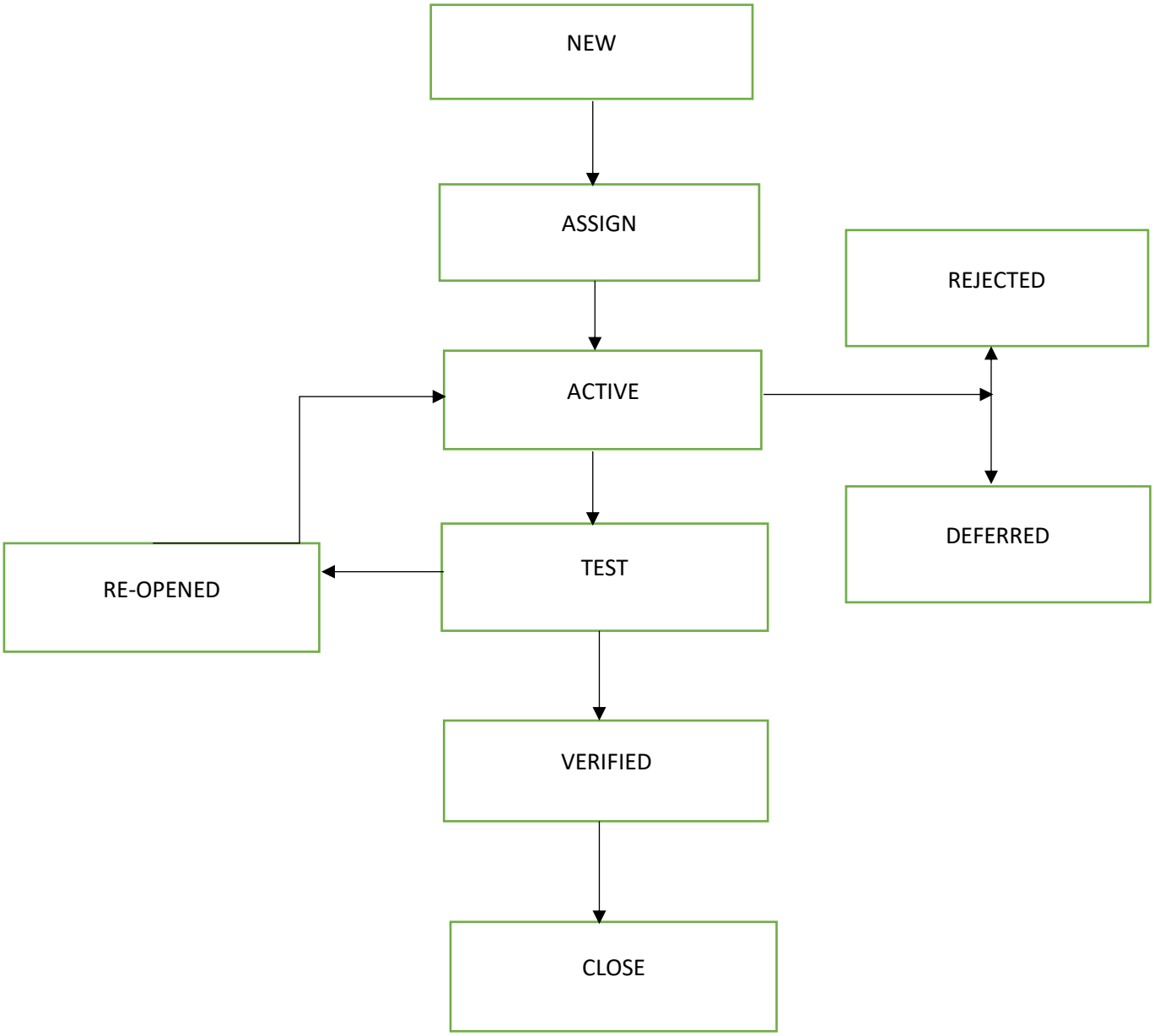
Retesting for fixed bugs will be done by the respective QA once it is resolved by the respective developer and bug/defect status will be updated accordingly. In certain cases, regression testing will be done if required.

**Deployment/Delivery:**

- Once all bugs/defect reported after complete testing is fixed and no other bugs are found, the report will be deployed to the client’s test site by PM.
- Once a round of testing will be done by QA on the client’s test site if required Report will be delivered along with sample output by email to the respective lead and Report group.
- QA will be submitting the filled hard copy of the delivery slip to the respective developer.
- Once the lead gets the hard copy of the delivery slip filled by QA and the developer, he will send the report delivery email to the client.

## 8.2 Bug life cycle:

All the issues found while testing will be logged into an Excel sheet as well as a bug reporting tool.



## 8.3 Testing types

**Black box testing:**

It is sometimes called behavioral testing or Partition testing. This kind of testing focuses on the functional requirements of the software. It enables one to derive sets of input conditions that will fully exercise all functional requirements for a program.

**GUI Testing:**

GUI testing will include testing the UI part of the report. It covers the user's Report format, looks and feel, error messages, spelling mistakes, and GUI guideline violations.

**Functional Testing:**

Functional testing is carried out in order to find out the unexpected behavior in the report. The characteristic of functional testing is to provide correctness, reliability, testability, and accuracy of the report output/data.

**System Testing:**

System testing of software is testing conducted on a complete, integrated system to evaluate the system's compliance with its specified requirements.

**Performance Testing:**

- Check the optimal time the page is loaded
- Check the operation of the system under load User acceptance testing:

**User acceptance testing:**

The purpose of user acceptance testing is to confirm that system is developed according to the specified user requirements and is ready for operational use. Acceptance testing is carried out at two levels - Alpha and Beta Testing. User acceptance testing (UAT) will be done at the Client.

**Alpha testing:**

The alpha test is conducted at the developer's site by the client.

## 8.4 Assumptions and Dependencies

### Assumptions

- The main drivers for System Testing are the functionalities contained within the functional specification documents. These will define the scope of the testing and it is assumed that once functionality from these has been tested then full coverage has been achieved.
- The staging Server will be accessible.
- Contact details of the person(s) concerned with resolving environmental issues will be provided.
- Formal and Intensive Unit and Integration testing will be done by the Dev Team.
- Defects will be dealt with in a timely fashion by all teams involved.
- New builds will be deployed in the QA environment as per the build schedule.
- All identified High-level test scenarios can be simulated in the test environment.

### Dependencies

- Knowledge transfer on functionality as well as technology to the offshore testing team
- Availability of testing environment to validate test scripts.
- Availability of connection to applications from offshore.
- Availability of connection to Databases from offshore.
- Availability of Database schema description to understand the Database Structure.
- Availability of All necessary software and Operating systems
- Test data as specified by the QA team injected into the stage environment.
- All necessary User IDs & Passwords provided to the QA team

## 8.5 Bug Severity and Priority Definition

Bug Severity and Priority fields are both very important for categorizing bugs and prioritizing if and when the bugs will be fixed. The bug Severity and Priority levels will be defined as outlined in the following tables below. Testing will assign a severity level to all bugs. The Test Lead will be responsible to see that a correct severity level is assigned to each bug.

The QA Lead, Development Lead, and Project Manager will participate in bug review meetings to assign priority to all currently active bugs. This meeting will be known as "Bug Triage Meetings". The QA Lead is responsible for setting up these meetings on a routine basis to address the current set of new and existing but unresolved bugs.

### 8.5.1 Severity List

| Severity ID | Severity | Severity Description |
|---|---|---|
| 1 | Critical | The module/product crashes or the bug causes non- recoverable conditions. System crashes, database or file corruption, potential data loss, and the program hangs requiring reboot are all examples of a Severity 1 bug. |
| 2 | High | Major system components are unusable due to failure or incorrect functionality. Severity. 2 bugs cause serious problems such as a lack of functionality, or insufficient or unclear error messages that can have a major impact on the user, prevents other areas of the app from being tested, etc. Sev.2 bugs can have a workaround, but the workaround is inconvenient or difficult. |
| 3 | Medium | Incorrect functionality of component or process. There is a simple workaround for the bug if it is Severity. 3. |
| 4 | Minor | Documentation errors or signed-off severity 3 bugs. |

### 8.5.2 Priority List

| Priority | Priority Level | Priority Description |
|---|---|---|
| 1 | Must Fix | This bug must be fixed immediately; the product cannot ship with this bug. |
| 2 | Should Fix | These are important problems that should be fixed as soon as possible. It would be an embarrassment to the company if this bug shipped. |
| 3 | Fix When Have Time | The problem should be fixed within the time available.<br>If the bug does not delay the shipping date, then fix it. |
| 4 | Low Priority | It is not important (at this time) that these bugs be addressed.<br>Fix these bugs after all other bugs have been fixed.<br>Enhancements/ Good to have features incorporated-<br>just are out of the current scope. |

## 9 BUILD SCHEDULE

New builds will only be deployed in the stage environment as per the build schedule. Only emergency builds can be deployed on other dates. Each build should have a version number. An email to the QA coordinator has to be sent after the successful installation of the build. Sanity test by IT team should be conducted after build installation.

| S.No | Activity | No of Resources | Start Date | End Date | No of Days |
|---|---|---|---|---|---|
| 1 | Build # 001 | 1 | | | |
| 2 | Build # 002 | 1 | | | |

# 10 TEST ENVIRONMENT

The following list of software will be required in the System Test Environment

| | |
|---|---|
| **QA URLs** | |
| **Web Browser** | Google Chrome Version 104.0.5112.102 |
| **Test Management Tool** | Depends on the organization<br>Domain: E-commerce, Project: “YOUR LOGO” shopping site |
| **Operating System** | Microsoft Windows 10 Pro |
| **Hardware** | Intel(R) Core(TM) i5-3230M CPU @ 2.60GHz 2.60 GHz |

# APPROVALS

| | **Project Manager** | **QA Lead** |
|---|---|---|
| **Name** | | |
| **Signature** | | |

## TERMS/ACRONYMS

The below terms are used as examples, please add/remove any terms relevant to the document.

| Term/acronym | Definition |
|---|---|
| API | Application Program Interface |
| GUI | Graphical user interface |
| PM | Project manager |
| UAT | User acceptance testing |
| QA | Quality Assurance |
| RTM | Requirements Traceability Matrix |