**Test Strategy Document**

**Project:Urban Ladder**

Table of Contents

[1. Scope 3](#_Toc534636696)

[2. Test Approach 4](#_Toc534636697)

[3. Test Environment 5](#_Toc534636698)

[4. Testing Tools 6](#_Toc534636699)

[5. Release Control 7](#_Toc534636700)

[6. Risk Analysis 8](#_Toc534636701)

[7. Review and Approvals 9](#_Toc534636702)

**1.Scope**

The Scope of this Urban ladder project is to buy many products as required and we can compare two products with their cost,quality and all the features and select which is best and suitable to us.This website is has many features like add to cart, add to wishlist which help us to purchase many products whenever we want to buy. There is a Track order features which help us to track our products with phone number and track id.There are many discounts are available for each product.This site is very user friendly to buy any products.

**2.Test Approach**

Test approach is very simple and contractable for this Urban ladder project is to buy many products as required and we can compare two products with their cost,quality and all the features and select which is best and suitable to us.This website is has many features like add to cart, add to wishlist which help us to purchase many products whenever we want to buy. There is a Track order features which help us to track our products with phone number and track id.There are many discounts are available for each product.This site is very user friendly to buy any products.In this we test each phase of this site

**2.1 Overview:**

* Some of the Objectivies of this project is as follows,
* Ensure the Application Under Test conforms to functional and non-functional requirements
* Ensure the AUT meets the quality specifications defined by the client
* Bugs/issues are identified and fixed before go live

**2.2 Roles and Responsibilities:**

The role and responsibilities of testing Urban ladder project are

* **Test Manager**

1.Defining the testing activities for subordinates – testers or test engineers.

2.All responsibilities of test planning.

3.To check if the team has all the necessary resources to execute the testing activities.

4.To check if testing is going hand in hand with the software development in all phases.

* **Test Engineers**

1.To read all the documents and understand what needs to be tested.

2.Based on the information procured in the above step decide how it is to be tested.

3.Inform the test lead about what all resources will be required for software testing.

4.Develop test cases and prioritize testing activities.

* **Software Tester Role**

1.A Software Tester is responsible for designing testing scenarios for usability testing.

2.He is responsible for conducting the testing, thereafter, analyse the results and then submit his observations to the development team.

3.He may have to interact with the clients to better understand the product requirements or in case the design requires any kind of modifications.

**2.3 Test Methodology**

The objective of applying various testing methodologies in your testing process is to make sure the application can successfully perform and deliver as expected and in various environments and across multiple platforms. Software Testing Methodology is defined as strategies and testing types used to certify that the Application Under Test meets client expectations.

Test Methodologies include functional and non-functional testing to validate the AUT. Examples of Testing Methodologies are [Unit Testing](https://www.guru99.com/unit-testing-guide.html), [Integration Testing](https://www.guru99.com/integration-testing.html), [System Testing](https://www.guru99.com/system-testing.html), [Performance Testing](https://www.guru99.com/performance-testing.html) etc. Each testing methodology has a defined test objective, test strategy, and deliverables.

**2.4 Test Levels:**

Each test levels is based on the execution of the Application Under Test(AUT).

According to my project I have the test plans to be executed is as follow,

Levels of Testing:

**Unit Testing:**

Checks if software components are fulfilling functionalities or not.

Unit testing is a very important part of the testing process because if unit testing is performed perfectly then the defects are identified early and the time to fix these errors is reduced.

**Integration Testing:**

Integration testing is the type of testing where individual units are grouped and tested. This type of testing is done to expose any kinds of defects in the interaction among the integrated units or groups.

Checks the data flow from one module to other modules.

**System Testing**

System testing verifies that the system meets its requirements and performs as expected. This completely integrated system can be a specific interface or a screen like a login window.

The system testing phase is carried out by the testing team which tests the end to end functionality of the application before the code application is ready for production.

**Acceptance Testing**

This phase ensures that the application meets all the business requirements and criteria and is ready for delivery. The application is tested by both the testers from the company and outside the organization (beta testers).

**2.5 Test Completeness:**

For instance, a few criteria to check Test Completeness would be

* 100% test coverage
* All Manual & Automated Test cases executed
* All open bugs are fixed or will be fixed in next release

**2.6 Test Delivery:**

There are some of the test deliverable documents.

* Test Plan
* Test Cases
* Requirement Traceability Matrix
* Test Strategy
* Test Scenarios

**3. Test Environment:**

Following software are required in addition to client-specific software

* Windows 10 and above

For the test environment, a key area to set up includes

* System and applications
* Test data
* Database server
* Front-end running environment
* Client operating system
* Browser
* Hardware includes Server Operating system
* Network

Following people are involved in test environment setup

* System Admins,
* Developers
* Testers

**4.Testing Tools:**

List of Tools:

* **Jira**
* **Eclipse**
* **Git Bash**
* **Jenkins**
* Test management tool
* Bug tracking tool
* Automated testing tool
* Performance testing tool
* Cross-browser testing tool
* Integration testing tool
* Unit testing tool
* Security testing tool
* GUI testing tool

**5.Release Control:**

To ensure the successful test execution, release management plans should be created thoroughly. Furthermore, by setting up the build management process, one can get information on when, where and how the new build should be made available and deployed.

**6.Risk Analysis:**

Risk analysis helps you to make very calculated and accurate decisions while performing a project as, without proper research, management of the project would not be considered to give positive results.

It helps in avoiding the potential losses that could occur in the future.

For the success of your project, Risk should be identified, and corresponding solutions should be determined before the start of the project.

It’s a 5-Step process

* Identify the Risks
* Analyse Impact of each Identified Risk
* Take counter measures for the identified & Analysed risk
* Treat Risk
* Review Risk

**Step 1 Identify Risk**

Risk can be identified and classified into 2 types in software product

**Project Risk**

Project risk can be defined as an uncertain event or activity that can impact the project’s progress. The impact has a positive or negative effect on the prospects of achieving project objectives

**Organizational Risk**

It is a risk related to your human resource or your Testing team. For example, in your project, lack of technically skilled members is a risk. Not having enough manpower to complete the project on time is another risk.

**Technical Risk**

Technical Risk is the probability of loss incurred during the execution of a technical process such as untested engineering, wrong testing procedure…etc.

**Step 2 Analyse the impact of the risk occurring**

In the previous topic, we already identified the risks which may hamper your project. Here is the list of risks identified:

* You may not have enough human resource to finish the project on the deadline
* The Testing environment may not be setup properly like real business environment.
* Your project budget may cut by half because of business situation
* This website may lack security functions

**Step 3 Take COUNTERMEASURES to mitigate the risk**

This activity is divided into 3 parts

**Risk response**

The project manager needs to choose strategies that will reduce the risk to minimal. Project managers can choose between the following four risk response strategies

**Register Risk**

All the risk must be recorded, documented and acknowledged by project managers, stakeholder and the project member. The risk register should be freely accessible to all the members of the project team

**Monitor and Control Risk**

Risks can be monitored on a continuous basis to check if any changes are made. New risk can be identified through the constant monitoring and assessing mechanisms.

**Step 4 Treat the Risk**

In this step, the team shall decide whether to continue the project or not; if so, the project is accepted, then they shall try to treat or resolve the issue by modifying any changes required in the project.

**Step 5 Review the Risk**

As the risk is uncertain at any point in time, reviewing risk is essential to evaluate risk in the project from time to time to avoid any future disturbance

**7 Review and Approval:**

* All these activities are reviewed and sign off by the business team, project management, development team, etc.
* Summary of review changes should be traced at the beginning of the document along with approved date, name, and comment