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1. **Scope**

The scope of project is to buy several types of furnitures in daily use or households. In this we can compare two products cost, quality etc. Here we can track our product by mentioning phone number and track id. Also we can Subscribe to this website using out Email Id. The requirements are user able to compare the products and order accordingly and the user able to track the order using track id. There are many different categories of furnitures available in this project.

1. **Test Approch**

The scope of project is to buy several types of furnitures .In this we can compare two products cost ,quality etc.Here we can track our product by mentioning phone number and track id .The requirements are user able to compare the products and order accordingly and the user able to track the order using track id.

**Overview:**

Some objectives of testing this project could be

* 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

**Roles and Responsibilities:**

Detail description of the Roles and responsibilities of different team members like

* **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**
* A Software Tester is responsible for designing testing scenarios for usability testing.
* He is responsible for conducting the testing, thereafter analyze the results and then submit his observations to the development team.
* He may have to interact with the clients to better understand the product requirements or in case the design requires any kind of modifications.

# Test Methodology

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.

**Test Levels:**

**Test Levels define the Types of Testing to be executed on the Application Under Test (AUT**). The Testing Levels primarily depends on the scope of the project, time and budget constraints.

**Levels of Testing are:**

* **Unit Testing :** checks if software components are fulfilling functionalities or not.
* **Integration Testing :** checks the data flow from one module to other modules.
* **System Testing :** evaluates both functional and non-functional needs for the testing.
* **Acceptance Testing:** checks the requirements of a specification or contract are met as per its delivery

**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

**Test Deliverables:**

Here are the sample deliverables

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

1. **Test Environment**

Following **software** are required in addition to client-specific software

1. 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

1. **Testing Tools**

**List of Tools:**

* 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

1. **Release Control**

To ensure proper and 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

1. **Risk Analysis**

Risk is the probability of occurrence of an undesirable event.

Risk Analysis in Software Engineering is the process of analyzing the risks associated with your Testing Project.

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 3-Step process

* Identify the Risks
* Analyze Impact of each Identified Risk
* Take counter measures for the identified & Analyzed risk

**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.

**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

**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.

1. **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