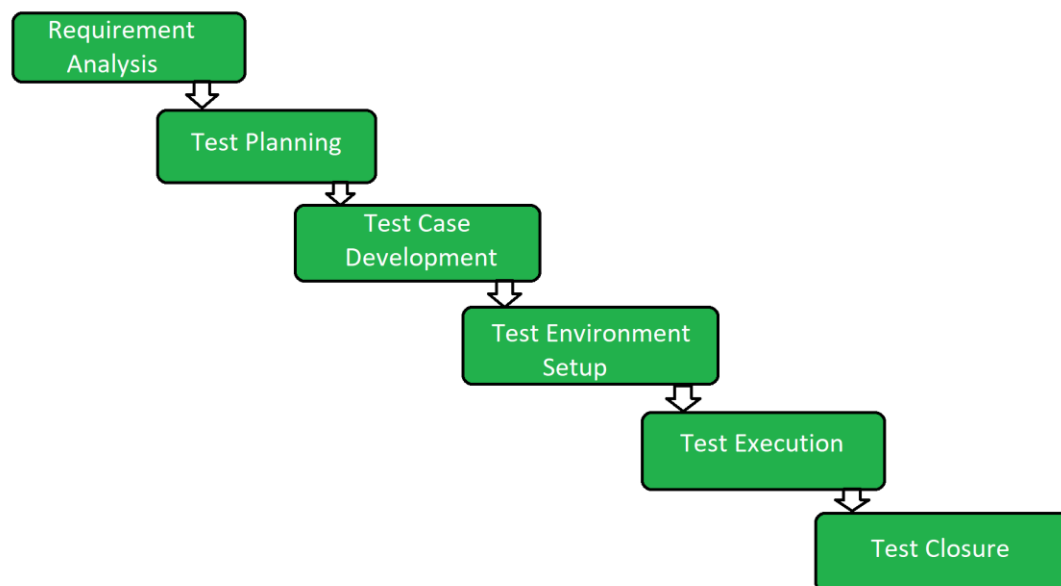# Software Testing Life Cycle – STLC

Testing is not only limited just to find bugs but has a wider scope and is required right from the beginning of the project when the requirements are not even finalized.

Since testing is also standardized. Just like development of software has a lifecycle, Testing too has a lifecycle

Requirement Analysis

The QA team will interact with various stakeholders (Client, Business Analyst, Technical Leads, System Architects etc.) to understand the requirements in detail.

Test Planning

Test Planning is most important phase of Software testing life cycle where all testing strategy is defined.

How to prepare Test Plan & Strategy?

Test Case Development:

This is the phase of STLC where testing team write down the detailed test cases. Along with test cases testing team also prepare the test data if any required for testing. Once the test cases are ready then these test cases are reviewed by peer members or QA lead.

Also, the Requirement Traceability Matrix (RTM) is prepared. The Requirement Traceability Matrix is an industry-accepted format for tracking requirements where each test case is mapped with the requirement. Using this RTM, we can track backward & forward traceability.

Test Environment Setup

Test environment decides the software and hardware conditions under which a work product is tested. Test environment set-up is one of the critical aspects of testing process

Test Execution

During this phase, the testers will carry out the testing based on the test plans and the test cases prepared. Bugs will be reported back to the development team for correction and retesting will be performed.

Test Closure Activities

Test closure activities are done mostly after the product is delivered

Test closure activities mainly comprise of four types:

Ensure Test Completion

Final check

Handover Test Artifacts

Handover test evidence to the development team.

Project Retrospectives

Archive Test Work Products

Save test evidence for future reference

What is Test Plan?

Test plan is a document which contains the plan related to all testing activities which needs to be done to deliver a quality product.

This document is prepared after analyzing Business requirements of the Project

It is usually prepared by the Test Lead or Senior QA in Agile team

The focus of the document is to describe

what to test, (In Scope for testing)
what cannot be tested,
 Tools used for Testing, Environments/Infrastructure required to Test
Staffing and Training Needs
Testing Duration
Risks and contingencies plan

Business Requirements:

Req 1: Submit the Form
Req 2: Navigate to the tabs present on home page
Req 3: select the products and add to cart
Req 4: Added items in cart should display in Checkout page
Req 5: Select the country to deliver before Purchase
Req 6: Complete purchase by providing payment details and generate receipt