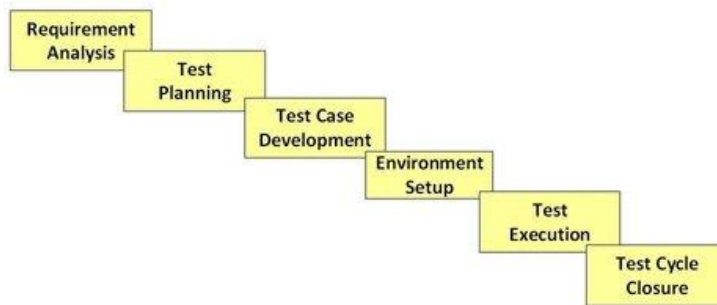


## Software Testing Life Cycle : (STLC)

Just like developers follow the Software Development Life Cycle likewise testers also follow the **Software Testing Life Cycle** which is called as **STLC**.

Software Testing Life Cycle is a testing process which is executed in a sequence

In this life cycle also, we do have some phases which is shown below-



Each of the step mentioned above has some Entry Criteria (it is a minimum set of conditions to enter any phase) as well as Exit Criteria (it is a minimum set of conditions to exit from any phase)

Let us discuss about each phase in detail:

### Requirement Analysis:

Tester analyses requirement document to examine requirements stated by the client.

After examining the requirements, the tester makes a test plan.

### Test Plan Creation:

Test plan creation is the crucial phase of STLC where all the testing strategies are defined.

Tester determines the estimated effort and cost of the entire project.

This phase takes place after the successful completion of the **Requirement Analysis Phase**.

Test activities (Test case design and test case execution) can be started after the successful completion of Test Plan Creation.

- Sr Or Lead or PM implement Test plan

- PM/Lead/sr distribute task or work to all team members

- In planning - estimations and resource planning done. Estimation like which resource will work and till when that resources need to work on one requirement is estimation

## Environment setup:

Setup of the test environment is an independent activity and can be started along with **Test Case Development**.

This is an essential part of the manual testing procedure as without environment, test execution is not possible.

The testing team is not involved in setting up the testing environment, its senior developers /networking person who create it.

## Test case Execution:

Test case Execution can be done after the successful completion of test case design and planning.

In this phase, the testing team starts execution activity for the test cases.

The testing team make the status and actual results in test case document after execution.

If any test case fails in execution then testers logged a bug against those failed test case.

**RTM (Requirement Traceability Matrix)** is also prepared/track in this phase. Requirement Traceability Matrix is industry level format, used for tracking requirements and test case. Each test case is mapped with the requirement specification.

TRACEABILITY MATRIX	
Requirement Number	Test Case Name
1	...
2	...
3	
4	...
5	...
6	
7	...

	A	B	C	D	E
1	RTM Template				
2	Requirement number	Module number	High level requirement	Low level requirement	Test case name
3		2 Loan	2.1 Personal loan	2.1.1--> personal loan for private employee 2.1.2--> personal loan for government employee 2.1.3--> personal loan for jobless people	beta-2.0-personal loan
4					
5					
6			2.2 Car loan	2.2.1--> car loan for private employee	
7					
8			2.3 Home loan		
9					
10					
11					

## Test Cycle Closure:

Test Documentation-

-Test documentation is report of testing.

-Once the testing completed then tester make document for testing i.e. report also we can say.

-Tester send this document to the team leader or sometimes to complete team.

-Team leader/sr send this document to PM and PM send to customer.

-This document includes-

Name of module.	Execution	pass	fail

### Entry and exit criteria for STLC

STLC Stage	Entry Criteria	Exit Criteria	Deliverables
Requirement Analysis	Requirements Document available (both functional and non functional-if required)(BRS and SRS) Acceptance criteria defined.	Understand SRS AND BRS	SRS AND BRS
Test Planning	Requirements Documents- SRS AND BRS) Requirement Traceability matrix-RTM Test automation plan document(If required).	Approved test plan created	Test plan document.
Test case development	Requirements Documents(SRS/BRS) RTM and test plan Automation analysis report	Reviewed and signed test Cases/scripts	Test cases/scripts

Test Environment setup	Environment set-up plan is available	Environment setup is working as per the plan and then all set up should be done	Environment ready
Test Execution	RTM, Test Plan , Test case/scripts are available Test environment is ready Test data set up is done	All tests planned are executed Defects logged	Completed RTM Test cases updated with results and status Defect logged if any test case fails
Test Cycle closure	Testing has been completed Test results are available Defect logs are available	Test Closure report signed off and shared with team	Test Closure report