

STLC EXPLAINED

(SOFTWARE TESTING LIFE CYCLE)

WHAT TO EXPECT



- 1 SDLC & STLC
- 2 Phases of STLC
- 3 Requirement Analysis
- 4 Test Planning & Test Cases
- 5 Test Environment & Test Execution
- 6 Testing Sign-off & Test Cycle Closure

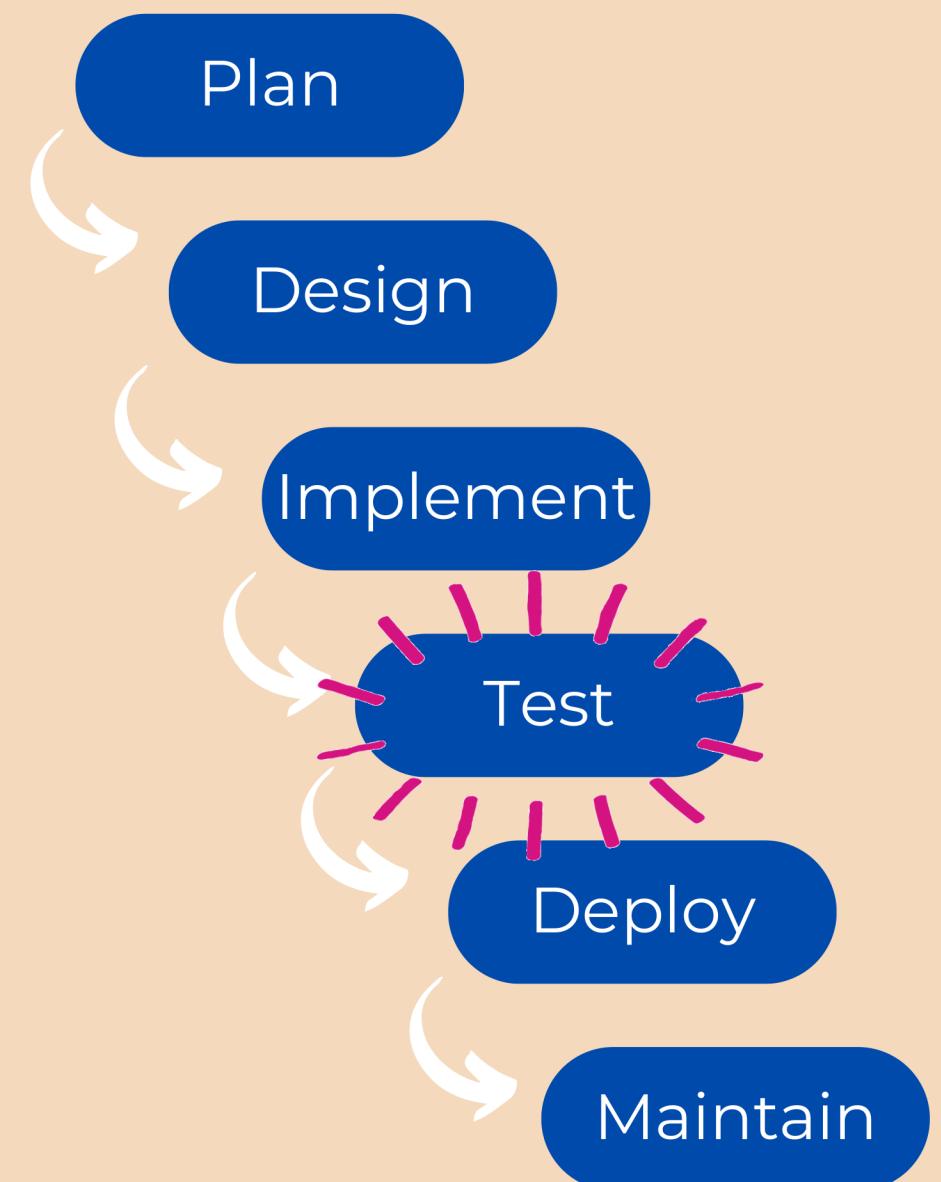
While ***SDLC*** defines all the phases of

Software Development Process, ***STLC*** is a

integral process of ***SDLC*** which defines

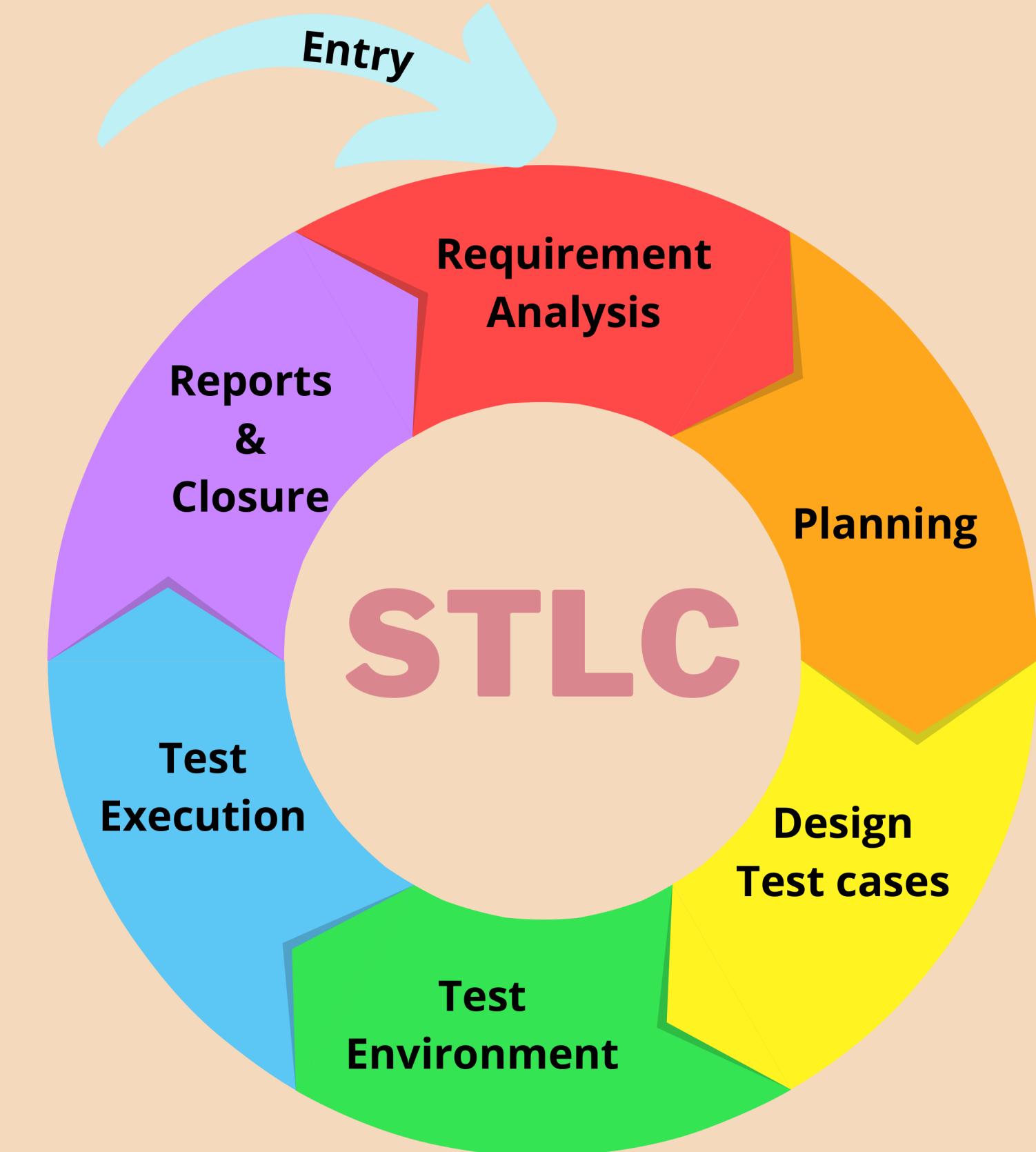
various phases to address & improve the

Quality of Software



Why STLC ?

- Provides Guidelines to the Testing Process to make it more sophisticated, consistent & effective
- STLC focus is mainly on the Testing Life Cycle.
- Intent is to deliver Bug / Defect free software
- Brings a structure to the project & project plan
- Ensure highest quality standards always



Entry & Exit Criteria of each phase in STLC

STLC Phase	Entry Criteria	Exit Criteria
Requirement Analysis	Requirements & Acceptance Criteria	Requirements Signoff
Test Planning	Requirements Doc	Test Strategy & Plan
Test Design	Test Strategy & Plan	Reviewed Test Cases & Test Data
Test Environment	Test Environment available	Smoke Tests Verified
Test Execution	Test Env, Test Cases & Test Plan	Test Executed & Defects Reported
Reports & Closure	Testing Completed	Test Closure Report & Metrics

Requirement Analysis



ENTRY

- Documented requirements
- Acceptance criteria
- Software Architecture

EXIT

- Requirements Traceability Matrix (RTM)
- Automation Feasibility Report

Requirements collected in the SDLC process are evaluated to identify testable scenarios

Testing teams consult with Architects, Domain Experts to clarify requirements.

Requirements can either be functional or non-functional

Automated Testing coverage is also evaluated

Test Planning



ENTRY

- Requirements Traceability Matrix (RTM)
- Automation Feasibility Report

Test Strategy is clearly documented

Required Tools Identified

Roles & responsibilities outlined

Risk, Cost & Estimated Timelines are clearly identified & documented

EXIT

- Approved Test Plan
- Timelines
- Risk & Cost Analysis

Test Design



ENTRY

- **Approved Test Plan**
- **Timelines**
- **Risk & Cost Analysis**

EXIT

- **Testcases**
- **Automation Scripts**

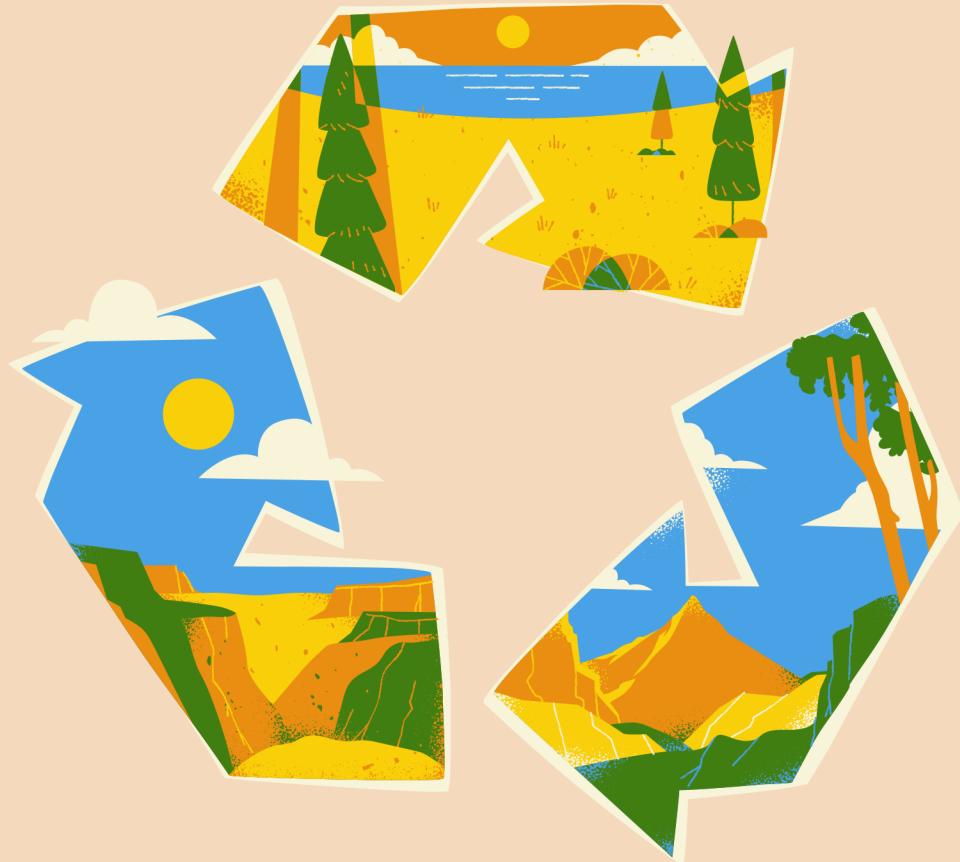
Testcases Created / Documented

Test Coverage ensured towards requirements

Test Inputs, Expected Results & assumptions are clearly defined

Automation Testing scripts are created

Test Environment



ENTRY

- **Testcases**
- **Automation Scripts**

EXIT

- **Approved Testcases**
- **Fully functional test environment**

Test environments are configured & deployed

Products & Tools setup in the environment

Smoke Tests are performed

Test Servers & Mocks setup

Test Execution



ENTRY

- Approved Testcases
- Fully functional test environment

EXIT

- Tests are performed & results documented
- Defects are reported

Testcases are executed

Test results are compared against the actual data

Defects logged & reported to development teams

Automation Scripts are executed

Reports & Closure



ENTRY

- Tests are performed & results documented
- Defects are reported

EXIT

- Approved Test closure report

Last phase of STLC

Test Reports summarizing the tests, coverage & defects

Full Report including objectives met, actual time, actual cost, tests coverage, Automation & defects reported

Serves as input to next cycle / phase

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See you in Next Video

