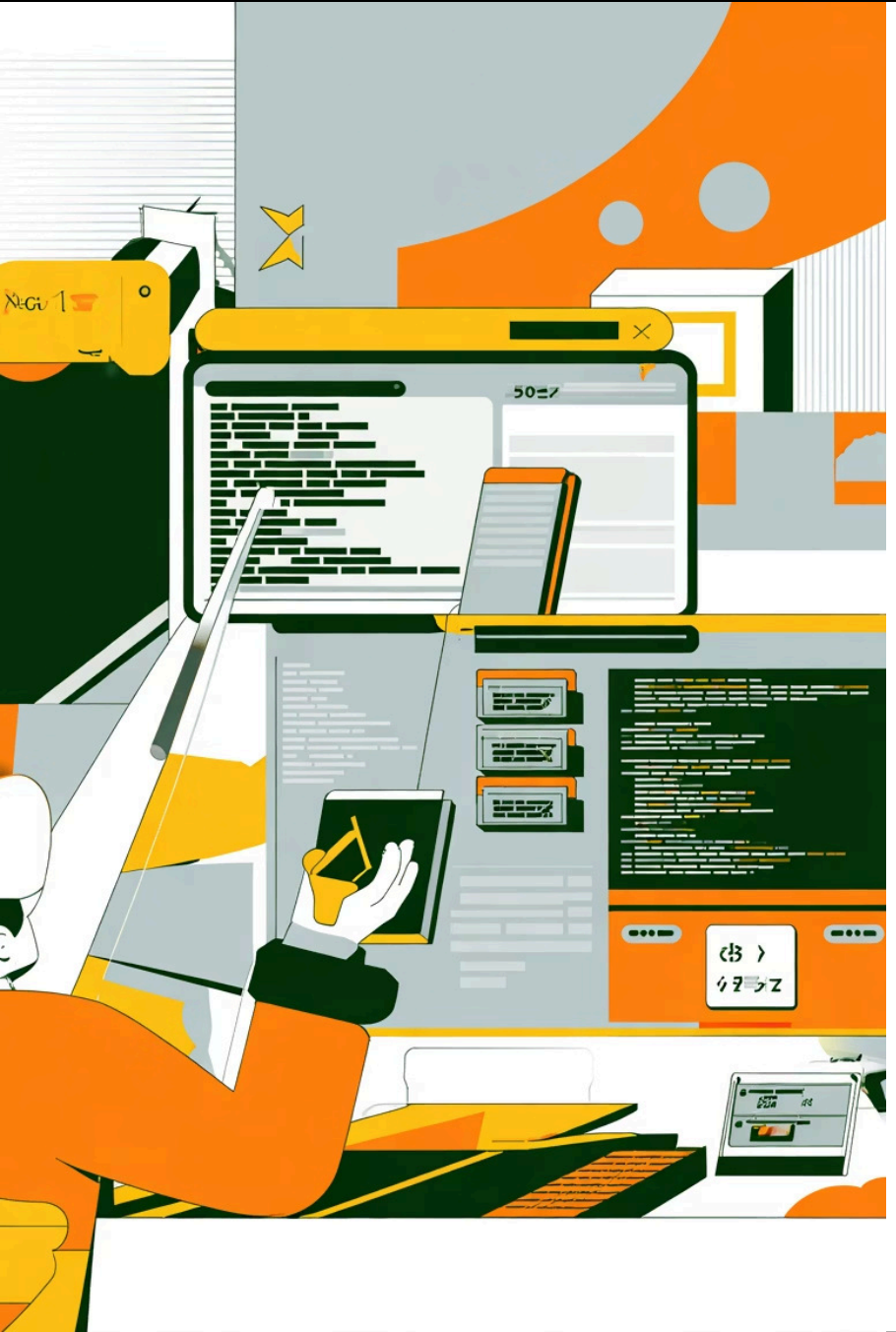


Software Testing, STLC & Bug Life Cycle

What is Software Testing?

Definition: Software testing is the process of evaluating a software application or system to ensure it works as intended, meets specified requirements, and is free of defects or bugs.

Purpose

- Find defects
- Verify functionality
- Validate performance
- Ensure quality
- Prevent failure

Software Testing Life Cycle (STLC)

01

Requirement Analysis

Understand testing scope

02

Test Planning

Define strategy, tools, and schedule

03

Test Case Design

Create and review test cases

04

Test Environment Setup

Prepare for execution

05

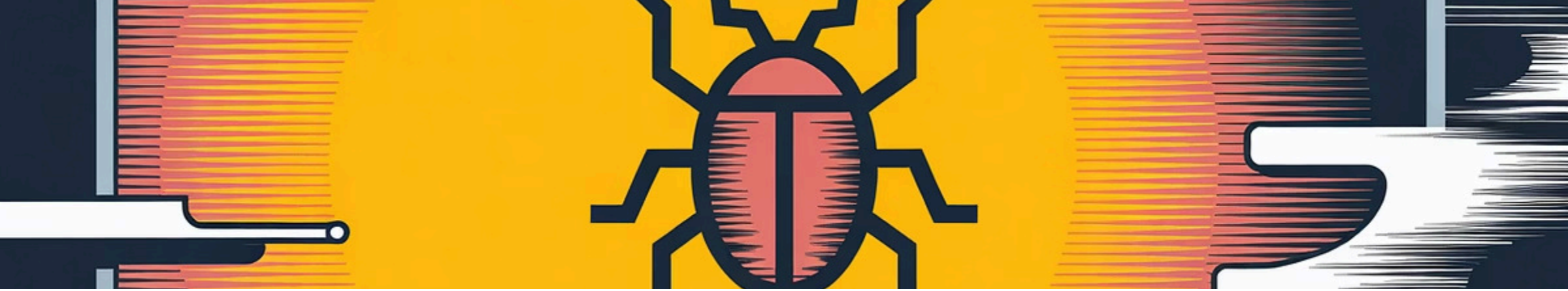
Test Execution

Run tests & report defects

06

Test Closure

Summarize, evaluate, and document results



🟥 Bug Life Cycle

What is a Bug?

Definition: A bug (defect) is an error or flaw in software behavior. It occurs when actual results differ from expected results.

Key Points:

- Discovered during development or testing
- Fixing bugs improves stability and user satisfaction
- Managed through a Bug Life Cycle

Bug Life Cycle (Part 1)

Early Stages:

1

New

Defect is reported

2

Assigned

Allocated to a developer

3

Open

Developer analyzes and begins fixing

4

Fixed

Code is corrected and updated

Bug Life Cycle (Part 2)

Later Stages:

1

Retest

Tester verifies the fix

2

Closed

Confirmed resolved

3

Reopened / Deferred / Rejected

If issue persists or postponed

Key Takeaways

- Testing ensures quality and customer satisfaction
- Bugs are inevitable but controllable
- STLC provides a structured testing framework
- Bug Life Cycle ensures defects are tracked efficiently
- Together, they guarantee a reliable final product

THANK YOU