

Software Testing – Short Overview

Software testing is the process of evaluating a software application to ensure it works as expected and meets the required quality standards. The main goal is to identify defects, ensure reliability, and deliver a high-quality product to users.

Why Software Testing is Important

- Helps find bugs and errors before release
- Ensures the software meets user requirements
- Improves product quality and reliability
- Reduces future maintenance costs
- Builds customer confidence

Types of Software Testing

- **Manual Testing:** Testing performed by a tester without automation tools
- **Automation Testing:** Testing using scripts and tools to execute test cases
- **Functional Testing:** Verifies features work according to requirements
- **Non-Functional Testing:** Checks performance, usability, and security
- **Regression Testing:** Ensures new changes do not break existing features

Software Testing Life Cycle (STLC)

- Requirement Analysis
- Test Planning
- Test Case Design
- Test Environment Setup
- Test Execution
- Test Closure

In short, software testing plays a critical role in delivering reliable, secure, and user-friendly applications.