

Introduction

- What is Testing?
 - Why testing matters?
 - Example: Banking transaction failure.

QA vs QC

- QA = process
 - QC = product
 - Example: code review vs functional test

SDLC Overview

- Requirement → Design → Development → Testing → Deployment → Maintenance

Manual vs Automation

- Manual: exploratory
 - Automation: regression
 - Tools: Selenium, JUnit

Functional Testing

- Validates features
 - Example: login functionality

Non-functional Testing

- Performance
 - Usability
 - Security

Testing Levels

- Unit → Integration → System → Acceptance

Bug Lifecycle

- New → Assigned → Fixed → Verified → Closed

Defect Management

- Log → Prioritize → Fix → Retest → Close

Risks of Poor Testing

- Failures
 - Financial loss
 - Vulnerabilities