

## Title: QA Best Practices Guide

### 1. Summary:

Quality Assurance (QA) ensures that software meets expected standards of reliability, usability, and performance. This guide outlines the best practices for QA in modern software development.

### 2. Key Principles:

- Early and continuous testing
- Automated testing integration
- Clear defect reporting
- Traceability of requirements

### 3. Testing Types:

- Unit Testing: Verifies individual functions or components.
- Integration Testing: Ensures that components work together.
- System Testing: Tests the complete application.
- Acceptance Testing: Confirms the system meets business requirements.

### 4. Defect Reporting Format:

- Summary
- Steps to Reproduce
- Expected Result
- Actual Result
- Environment

### 5. Tools:

- Selenium for UI testing
- JUnit for unit testing in Java
- Postman for API testing

### 6. Conclusion:

QA is a critical part of the software development lifecycle. Consistent and clear practices improve quality, reduce bugs, and increase customer satisfaction.