

## Day 2 – Detailed QA Learning Report

**Date:** 2026-01-08

**Tester:** Nabaraj Thapa

**Project:** School Management System (SMS)

**Session Type:** Manual QA Fundamentals (SDLC, STLC, Inventory & Defect Management)

### Objectives of the Session

The main objective of Day 2 was to build a strong foundation in quality assurance concepts, understand real-world software development and testing workflows, and relate them to practical testing scenarios in a School Management System.

### Software Development Life Cycle (SDLC)

Learned the concept of SDLC and its importance in software development. Understood different SDLC phases such as planning, requirement analysis, design, development, testing, deployment, and maintenance. Emphasized why QA involvement from early phases helps identify requirement gaps and reduces production defects.

### Software Testing Life Cycle (STLC)

Studied STLC phases including requirement analysis, test planning, test case design, test environment setup, test execution, and test cycle closure. Learned that defect reporting and tracking are continuous activities mainly performed during test execution and retesting phases.

### SDLC Delivery Models

Learned various SDLC delivery models such as Waterfall, V-Model, Incremental, Iterative, Agile, Spiral, and DevOps. Understood how QA roles, testing frequency, documentation level, and risk handling differ across models. Special focus was given to Agile and DevOps as they are widely used in modern projects.

### Inventory Management in SMS

Understood the complete inventory workflow in a School Management System including demand creation, demand approval, stock entry, product issue, warehouse management, warehouse incharge assignment, product transfer, and reporting. Learned the importance of product setup, categories, units, and unit conversions.

### Basic Accounting Concepts

Learned basic accounting concepts such as assets, liabilities, equity, revenue, and expenses. Understood how inventory transactions directly impact accounting data and why QA must validate financial accuracy, stock valuation, and report consistency in ERP and SMS systems.

### Defect Life Cycle

Studied the complete defect life cycle starting from new, assigned, open, fixed, retest, verified, and closed. Also learned additional defect statuses such as rejected, duplicate, deferred, reopened, and cannot reproduce with real-world examples.

### Bug Reporting and Severity vs Priority

Learned how to write a clear, professional, and reproducible bug report using Jira-style format. Understood the difference between defect severity (impact on application) and priority (urgency to fix). Practiced writing real bug

reports such as missing mandatory field validation in registration forms.

## **Session Outcome**

By the end of Day 2, developed a strong conceptual understanding of QA fundamentals, business workflows, and defect management practices. Gained confidence in analyzing requirements, understanding system logic, and communicating defects effectively with development teams.

## **Next Steps**

Planned to practice writing detailed test cases, learn Agile Scrum ceremonies, start SQL basics for QA, and continue practicing real-world bug reporting and defect analysis scenarios.