

# **COMP 2136: Software Quality Assurance**

## **Assignment 3: Group SQA Audit & Improvement Plan**

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**Given:** 18<sup>th</sup> November 2025

**Deliverables Due:** **Friday 28 November 2025**

**Value:** **25%** (Report: 15%, Presentation: 10%)

**Groups:** **4-5 students (self-assigned)**

**AI Usage:** **Not Permitted (NO)**

### **1. Objective**

This assignment requires you to apply the SQA principles discussed in in a practical scenario. As a group, you will act as an external SQA consulting team hired to audit a small, fictional software project called "EventHub."

Your team will analyze a provided "**EventHub Audit Package**" which contains internal documents, emails, test samples, and project plans etc. Based on your analysis, you will produce a professional audit report and present your key findings and recommendations to the "client".

### **2. The Scenario**

The "EventHub" project is in distress. It is in a public "beta," but it is experiencing numerous bugs, receiving customer complaints, and the development team is struggling to balance new features with critical fixes. The Project Manager is worried about losing investor confidence.

Your group has been hired to conduct an external audit of their processes, identify the root causes of their quality problems, and propose a clear, actionable plan for improvement.

### **3. Your Task**

Your group will analyze **all** artifacts in the `EventHub_Audit_Package.pdf` file. Your goal is to evaluate the project's current state and identify critical issues, organizing your findings into four key themes:

**1. Testing Strategy & Process:**

- Are requirements and acceptance criteria clear, complete, and testable?
- Is there a formal test strategy? Is it effective?
- How are different test levels (unit, integration, system, acceptance) handled?
- How are non-functional requirements (like performance) being tested?
- Are their test artifacts (like JUnit tests in Artifact 6) effective, independent, and well-written?

**2. Defect Tracking & Management:**

- How are bugs reported and managed? Is the process efficient?
- Do their bug reports follow best practices?
- How are Severity and Priority used (or not used)?
- Does their defect lifecycle make sense?

**3. Process, Culture & Roles:**

- What do the team's internal communications reveal about their attitude towards quality?
- Are roles and responsibilities for quality clearly and effectively defined?
- Is there a "quality culture," or is it a "firefighting" culture?

**4. Ethical & Professional Concerns:**

- Are there any practices or incidents that raise ethical red flags regarding data privacy, honest reporting, or professional responsibility?

Based on your analysis, you will develop a set of **prioritized, actionable recommendations** for the EventHub team.

## 4. Deliverables

This assignment has two parts: a written report and a group presentation.

**ONLY ONE MEMBER OF THE GROUP SHOULD SUBMIT FOR THE WHOLE GROUP. – NO MULTIPLE SUBMISSIONS BY THE SAME GROUP**

### Part 1: SQA Audit Report (15%)

You must submit a single, professional report (as a PDF) that includes the following sections:

1. **Introduction:**
  - A brief overview of the EventHub project and its perceived problems.
  - The scope of your audit (i.e., what you analyzed).
2. **Audit Findings (The "What"):**
  - This is the main body of your report.
  - Analyze the strengths (if any) and (mostly) weaknesses of the project, organized by the four themes listed in "Your Task."
  - You **must** refer to specific evidence from the audit package to support every claim (e.g., "The bug report for 'firefox login' (ID 102) is not reproducible...").
3. **Prioritized Recommendations (The "So What"):**
  - A list of **5-7 clear, actionable, and prioritized** recommendations.
  - For each recommendation, provide a brief "why" (what problem it solves, citing evidence) and a "how" (the first step to implement it, referencing course concepts).
  - **Example:** "1. Adopt a Formal Defect Tracking System. (Priority: Highest).
    - *Why:* The current bugs.xlsx (Artifact 2) is inconsistent, lacks Severity/Priority fields, and leads to bugs being lost or ignored (e.g., Bug 125, 139). This violates all principles of a managed defect lifecycle (Week 6).
    - *How:* Immediately migrate to a tool like Jira or GitHub Issues. Implement a standard workflow (New, Assigned, In Progress, Ready for QA, Closed) and make Severity/Priority fields mandatory."
4. **Conclusion:**
  - A brief summary of your overall assessment and the expected positive impact if your recommendations are followed.

The report should be concise, professional in tone, and well-formatted (approx. 1000-1500 words).

## Part 2: Group Presentation (10%)

Your group will record a **10-minute presentation and upload to D2L (or alternatively share create a youtube)**.

- **Content:** This should be a high-level summary for "executives." Do not read your report.
  - Briefly introduce the project and the "crisis."
  - Highlight your **top 3-5 most critical findings** (the "what").
  - Focus on your **top 3-5 most important recommendations** (the "so what").
  - Conclude with a strong statement on the business case for quality.
- **Format:**
  - All group members are expected to speak in the recording.
  - Use clear and professional slides (e.g., PowerPoint, Google Slides).
- **Submission:**
  - Submit your slide deck (as a PDF) along with your SQA Audit Report.
  - **Submit your recorded presentation** as either a video file upload to D2L or an unlisted YouTube link. The link should be included in a .txt file.