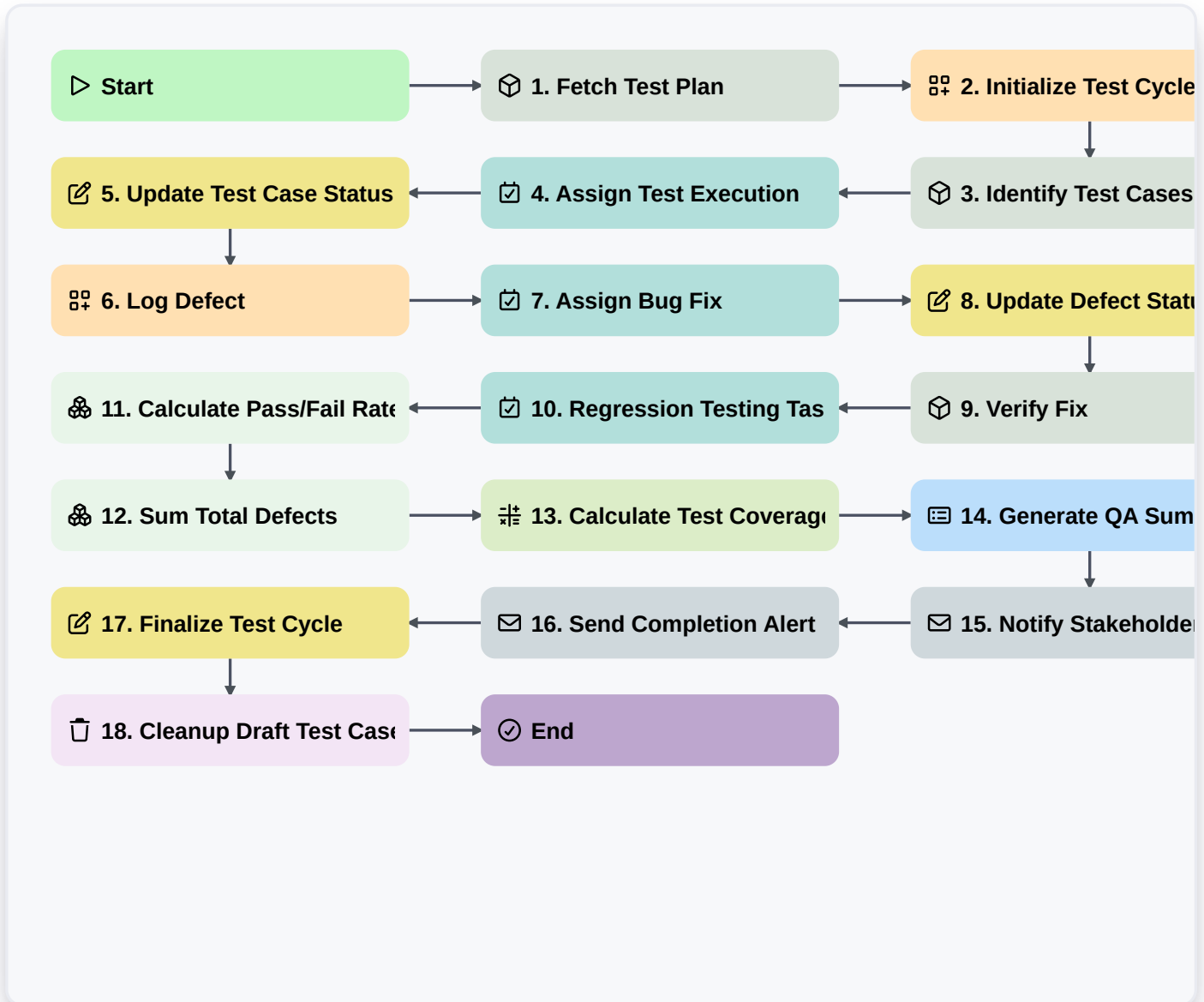


Quality Assurance Testing Lifecycle Process



▷ Start

Start of the Workflow/Process.

📦 1. Fetch Test Plan

Retrieve the approved Test Plan entry from the Test Management data model.

🔧 2. Initialize Test Cycle

Create a new Test Cycle entry to track the current testing execution period.

📦 3. Identify Test Cases

Retrieve all Test Case entries associated with the specific Test Plan.

📋 4. Assign Test Execution

Create a task for the QA Engineer to begin executing the identified test cases.

📋 5. Update Test Case Status

Update the status of individual Test Case entries to 'In Progress' or 'Passed/Failed'.

🔧 6. Log Defect

Create a new Defect/Bug entry when a test case fails.



7. Assign Bug Fix

Create a task for the Developer to investigate and resolve the logged defect.

8. Update Defect Status

Update the Defect entry status to 'Resolved' once the fix is implemented.

9. Verify Fix

Retrieve the linked Defect entry to trigger re-testing.

10. Regression Testing Task

Create a task for QA to perform regression testing after the bug fix is deployed.

11. Calculate Pass/Fail Rate

Aggregate Test Case entries to calculate the percentage of passed vs. failed tests.

12. Sum Total Defects

Aggregate Defect entries to count the total number of open vs. closed bugs.

13. Calculate Test Coverage Score

Execute a formula comparing executed test cases against total planned test cases.

14. Generate QA Summary Report

Create a summary report containing the aggregated pass/fail metrics and defect counts.

15. Notify Stakeholders of Failure

Send an email to the Project Manager and Product Owner if the failure rate exceeds a threshold.

16. Send Completion Alert

Send an email to the Release Manager when the Test Cycle is marked as 'Completed'.

17. Finalize Test Cycle

Update the Test Cycle entry status to 'Closed' or 'Finished'.

18. Cleanup Draft Test Cases

Delete any temporary or draft Test Case entries that were not part of the official execution.

End

End of the Workflow/Process.