**# 11. Quality Practices in Day-to-Day Ceremonies**

- **\*\*Daily Stand-ups:\*\*** Share testing progress, blockers, and discuss quality concerns with the team.

- **\*\*Backlog Refinement:\*\*** Ensure requirements are clear, testable, and acceptance criteria are defined.

- **\*\*Sprint Planning:\*\*** Estimate testing effort, identify test scenarios, and plan for automation or manual testing.

- **\*\*Code Reviews:\*\*** Participate in peer reviews to catch defects early and ensure coding standards.

- **\*\*Test Case Reviews:\*\*** Review and update test cases with the team for completeness and coverage.

- **\*\*Retrospectives:\*\*** Reflect on testing effectiveness, discuss what went well, and identify areas for improvement.

- **\*\*Continuous Integration:\*\*** Ensure automated tests run on every build and failures are addressed promptly.

- **\*\*Defect Triage Meetings:\*\*** Prioritize and assign defects, ensuring timely resolution and retesting.

**## 1. \*\*Defect Density\*\***

- **\*\*Formula:\*\*** Defect Density = Number of Defects / Size of Software (e.g., KLOC - thousands of lines of code)

- **\*\*Purpose:\*\*** Measures the number of defects per unit size of code.

**### 2. \*\*Test Coverage\*\***

- **\*\*Types:\*\*** Code coverage, requirement coverage, branch coverage, etc.

- **\*\*Purpose:\*\*** Percentage of code or requirements covered by tests.

**### 3. \*\*Defect Leakage\*\***

- **\*\*Formula:\*\*** Defect Leakage = (Defects found after release) / (Total defects found before + after release)

- **\*\*Purpose:\*\*** Measures defects missed during testing.

**### 4. \*\*Defect Removal Efficiency (DRE)\*\***

- **\*\*Formula:\*\*** DRE = (Defects removed during development) / (Total defects found)

- **\*\*Purpose:\*\*** Indicates effectiveness of defect removal.

**### 5. \*\*Test Case Pass Rate\*\***

- **\*\*Formula:\*\*** (Number of test cases passed / Total test cases executed) × 100%

- **\*\*Purpose:\*\*** Shows the percentage of successful test cases.

**### 6. \*\*Mean Time to Detect (MTTD) / Mean Time to Repair (MTTR)\*\***

- **\*\*MTTD:\*\*** Average time to detect a defect.

- **\*\*MTTR:\*\*** Average time to fix a defect.

**### 7. \*\*Requirements Stability Index\*\***

- **\*\*Formula:\*\*** RSI = 1 - (Number of changes to requirements / Total number of requirements)

- **\*\*Purpose:\*\*** Measures how stable the requirements are during the project.