# Automating Checking - Phase 3 - Test Automation Challenge and Workshops

## Quality Metrics

- they are all subjective
- they are all with their flaws

From manual course:

### Test cycle Closure

Activities:

- evaluation cycle completion criteria based on time, test coverage, cost, software, critical business objectives and quality
- prepare test metrics based on the above parameters
- document the learning out of the project
- prepare test summary report
- qualitative and quantitative reporting of the quality of the work product to the customer
- test result analysis to find out the defect distribution by type and severity

Deliverables

- test closure report
- test metrics

# Test Metrics

| SNO | Required Data |
|---|---|
| 1 | No. Of Requirements |
| 2 | Avg. No. of Test Cases written Per Requirement |
| 3 | Total No.of Test Cases written for all Requirement |
| 4 | Total No. Of test cases Executed |
| 5 | No.of Test Cases Passed |
| 6 | No.of Test Cases Failed |
| 7 | No.of Test cases Blocked |
| 8 | No. Of Test Cases Un Executed |
| 9 | Total No. Of Defects Identified |
| 10 | Critical Defects Count |
| 11 | Higher Defects Count |
| 12 | Medium Defects Count |
| 13 | Low Defects Count |
| 14 | Customer Defects |
| 15 | No.of defects found in UAT |

# Test Metrics

- **% of Test cases Executed:**
  No.of Test cases executed / Total No. of Test cases written )  * 100

- **% of test cases NOT executed:**
  (No.of Test cases NOT executed/Total No. of Test cases written) * 100

- **% Test cases passed**
  (No.of Test cases Passed /Total Test cases executed) * 100

- **% Test cases failed**
  (No.of Test cases failed / Total Test cases executed) * 100

- **%Test cases blocked**
  (No.of test cases blocked / Total Test cases executed ) * 100

# Test Metrics

- **Defect Density:  Number of defects identified per requirement/s**

  No.of defects found / Size(No. of requirements)

- **Defect Removal Efficiency (DRE):**

  (A / A+B ) * 100

  (Fixed Defects / (Fixed Defects + Missed defects) ) * 100

    - A- Defects identified during testing/ Fixed Defects
    - B- Defects identified by the customer/Missed defects

- **Defect Leakage:**

  (No.of defects found in UAT / No. of defects found in Testing) * 100

- **Defect Rejection Ratio:**

  (No. of defect rejected /Total No. of defects raised) * 100

- **Defect Age:** Fixed date-Reported date

- **Customer satisfaction** = No.of complaints per Period of time

# QA/Testing Activities

- Understanding the requirements and functional specifications of the application.
- Identifying required Test Scenario's.
- Designing  Test Cases to validate application.
- Setting up Test Environment(Test Bed)
- Execute Test Cases to valid application
- Log Test results ( How many test cases pass/fail ).
- Defect reporting and tracking.
- Retest fixed defects of previous build
- Perform various types of testing's in application.
- Reports to Test Lead about the status of assigned tasks
- Participated in regular team meetings.
- Creating automation scripts.
- Provides recommendation on whether or not the application / system is ready for production.