9/11/23

QA-Testing

* Testers are involved from the requirement collection phase - QA stage
* Test plan: when to star when is is to b over (deadline etc)
* Test scenarios :

1 line statement (rqmt) -> scenarios -> text case

Traceability Matri.: common document inside the project(for both developers and testers)

Requirement < -> test case

**Terminologies:**

1. QA
2. Requirement
3. Functional testing
4. Validation: make sure reqmts has been satisfied.
5. Traceability
6. Entry criteria : when a particular testing shud start(after something is dvlpd)
7. Exit criteria : when u should stop testing(within a time limit)
8. Root cause : when a defect is missed by QA team and a client faces it.(may be missing to write a scenarios)
9. Accuracy : needed degree of precision.
10. Actual result: the ouput obtained.
11. Baseline : agreed by the both parties, acts as base for further development(freezing the documents, any more changes-> come thru proper estimation and process)
12. Complexity : internal structure that is difficult to explain/ understand for client.
13. Acceptance criteria : exit criteria system must satisfy- to be accepted b user / authorized entity.
14. Error: mistake in coding.
15. Defect: error found by tester(results not matching.) To raise defect : jira tools/ excel etc.
16. Bug :defect accepted by the developer.
17. Failure : defect reaches the customer.

**STLC :**

1. Requirement analysis
2. Test planning.
3. Test design
4. Enc set up
5. Execution closure: all the testing is completed, all defects are reported, no more defects, all the reports(results etc are completed) – closure. Depends on the project.

**2)Plan :- QA team writes it.**

- schedule, environment,strategy, limitations

-effort estimation

Automation solution

Rsiks analysis

Tools, techniques and practices.

Defect management.

Testing process, type of testing, procedures,

Review BR and SR

Test objectives, scope, phases and activities.

1)**Requirement analysis**:

Entry criteria: SRS (sw rqmt specification.

What to test and how to test.-qa team

Clarification->BA, system architect, client, test manager/lead etc

Reuirement-functional/non-functional.

Exit criteria: RTM(requirement traceability matrix0 document completion, automation feasibility report, list of questions- asking for specific requirement.

**TEST CASE DESIGN:**

Test case scenario identification

Test case writing

Use cases / reqmt from client ->understand the rqmt – define the approach and number of test cases-develop detailed text procedures for scenarios.

2. send queries log for clarification->send estimates and plan for testing(shud be close- 20 daysestimated 19 days/21 days t complete).

3. identify high level scenarios for each test case ->send scenarios for review-> prepare and map traceability matrix.

4. perform review on the completed test cases-update revw findings- deliver to client for signoff.

**Requirement to test cases.**

1. Have clear stepa
2. Do not club more conditions
3. Preciswe expected op
4. Mention all pre requisites and preconditons
5. Keep test dataready( test data creation)
6. Attach ref docs( keep the document)- for auditing purpose,proof.

**Test environment set up:**

Set up the environment

Smoke tsting:

Validation of test environment build satibility tesing is performed.

**Text execution:**

1. Identify subset of text cases
2. Assignt them to the testers to test
3. Test- document ouput-**report defects**
4. Resolve blocking issue-(resource not available etc)
5. **Report status,** adjust the assignments(of testing if sm1 is on leave) reconsider plan priorities(regularly)
6. Report **test findings**

Sign\_off\_testcase->identify test data->perform functional testing->perform regression testing.(when new changes come make sure existing fun work)

1. Prepare test data and do smoke testing.
2. Record ss(test result)-lg defects-retest defect fixes.
3. Record test results(log defects if any)-retest defect fixed-review test results-deliver results to stakeholders

**Test closure**

1. coverage has been achieved
2. No show stoppers
3. Low priority defects -known-don’t affect the system(color etc)
4. Test completion proof:
   1. Summary with results
   2. Plnd vs actual efforts
   3. Sign off
5. Test completion matrix:
   1. Number of tests executed
   2. Number of tests passed
   3. Number of tests failed
   4. Number of test defects deferred