**Manual Testing Task -01**

**Q1. What are different types of Testing?**

* There are two types of testing white box testing and Black box testing.
* White box testing performs at developer end.
* Black box testing performs at tester end
* Under white box testing include Unit Testing
* And black box testing includes below types

1. Functional Testing

2. Integration Testing

3. System Testing

4. Acceptance Testing /UAT Testing

5. Performance Testing

6. Smoke Testing

7. Ad hoc Testing

8. Exploratory Testing

9. Compatibility Testing

10.Usability Testing

11. Accessibility Testing

12. Reliability Testing

13. Regression Testing

14. Alpha Testing

15. Beta Testing

16. Localization Testing

17. Globalization Testing

18. Sanity Testing

19. System Integration Testing

**Q2. What is STLC? Also, Explain all stages of STLC**

* STLC is a software testing life cycle, it is the process to test the software application
* The main goal of STLC is to identify and document the bugs in software
* This process allows for issue to be address before the software get release in market.

STLC phases

1. Requirement Analysis
2. Test Planning
3. Test Development/Test Design
4. Test Environment Setup
5. Test Execution
6. Test Closure

**Requirement Analysis:**

In this phase consultant team work on the requirement taken from client.

Make the functional design document and make sure It should be clear, consistent and testable.

**Test Planning:**

In test planning we develop the test strategy and select the testing method and techniques to be use while testing process.

Also review the test plan and assign the roles and responsibilities to the tester.

**Test Design:**

This is the main phase of STLC where we start writing test cases on basis of requirement.

After writing test cases we review and validate from project manager and if their changes are required then we updated after incorporating review comments.

Test Case outline the detailed steps to execute those tests.

Test Case is a set of Actions executed to verify a particular feature or functionality of a software application.

A Test Case contains Test Step, Test Data, Pre-condition, Expected Result, Test Case id, Test Case Description, Action, Requirement developed for a specific test scenario.

Test Case include a specific condition using which a test engineer can compare the expected and the actual result.

**Test Environment Setup:**

After writing the test case test lead set up the environment for testing.

When the Integrated Environment is ready to Validate the product/Test Case.

**Test Case Execution:**

Test case will get execute in this phase, we execute test case in the real time and try to find bugs.

This is the phase where we execute Test Cases and test the application.

This is the phase where the Test Engineer will spend most of his time.

This is the phase wherein the Test Engineer will be more productive to the organization.

This is the phase where Test Engineer will help the developer to fixed the bugs.

**Test case closure:**

Once Testing is Complete, we prepare a test execution report

It contains Number of Test Cases Written, Number of Test Cases Executed, Number of Test Cases Not Executed, No of Test Cases Passed, Number of Test Cases Failed, Pass %, and fail %.

This is the last phase of Testing from customer point pf view.

Test Lead will prepare a report and he will deliver to the customer/client at the last test cycle. i.e. end of the project.

**Q3. As a manual tester, what qualities do you possess? Provide examples to illustrate your**

**Points.**

software tester has versatile role that requires a wide range of key software testing skills, including technical, analytical and soft skills.

They should learn about SDLC, Agile testing, and techniques, and must have critical thinking along with a problem-solving attitude. A manual tester with a high level of communication skills is deeply valued in the industry.

For ex.

If I am manual tester and working on any project in MNC company and any software module assigned for testing then the skills which I have help to identify the defect and fix the bugs and to get bug free and quality software module.

**Q4. List down all the Models of SDLC**.

SDLC is a software development life cycle, below are the models

1. Waterfall Model
2. Spiral Model
3. V-Model
4. Agile model

**Q5. Explain Defect Life Cycl**e

Tester find bug

bugs

Dev. Fixed bug

Project manager analyze the bugs

Dev. work on it

Pass

Tester Retest the bug

Yes

Valid?

I

Fail

No

Due to

* Defect life cycle means how defect exist in software; defect is a deviation form software requirement.

**New State:** Defect life cycle starts from testing process, once tester find the bug then tester raise the defect

After that project manager analyse/discuss the all the bugs raised by tester in defect triage meeting, if project manager find defect is not valid then the defect moves in different state as per the below scenario.

**Duplicate State:** if raised defect already raised by another tester

**RFE:** Request for enhancement it means developer is aware about the defect and they are going to work on it in future

**Postpone State:** if developer working on critical bugs, then non priority bugs move to in postpone status

**Not Reproducible:** In testing environment tester see the bug however while testing at developer end same bug not seen or after that not occurred

**Can not be Fixed:** if any defect raised by tester and cannot be fix also not impacting to software features then that types of bugs move in that state

**Assigned state:** However, the project manager finds the raised defect is valid then assigned to developer and status change from open to assigned

**Ready for Retest:** Developer will start working on defect and try to fix it once defect get fixed then status change to ready for retest.

Then defect assign to tester for retesting and tester retest the defect if tester find defect completely resolved then defect status change to **closed** but defect is still there and also impacting on other feature so in that scenario status of defect change to **reopen**.