

Subject : Software testing

Course code : CO16410

Roll No :- SO18CO08

Name :- Prayush Bhimrao ~~X~~ Khirayade

Q1 a) Security Testing

It is type of software testing that uncovers vulnerability of the system to determine that the data or resource of the system are protected from possible intruders.

b) Accessibility Testing

Accessibility testing is defined as type of SW testing performed to ensure that the application being tested is usable by people with disabilities like hearing, color blindness, old age, & disadvantage group.

c) Test Planning Topic

- Resource requirement
- Tester Assignment
- Test Schedule
- Test case.

d) Automatic testing tool

- TestPat
- Xray
- PFactTest
- Test monitor
- Test Rail
- Automatic Testing Tools like Selenide
- Squish
- Ranorex etc.

e) Selenium web driver features.

- 1) Selenium is an open source & protocol web testing framework.
- 2) It supports parallel test execution which is reduce time.
- 3) It supports various operating system.
- 4) It is integrated with the framework.

f) What is goal of test planning?

It is defined as detailed document that describes the test strategy, objective, schedule, optimization & delivery & resource required for testing.

Q) What is System Testing?

System Testing is a level of testing that validates to complete & fully integrated software product.

The purpose of a system test is to evaluate to end-to-end system specification.

27

### Q) Limitations of using Manual Testing.

#### Manual Testing

Manually Testing for computer software without using any automatic tool.

- It testing require more time or resource.

Covering all area of the application require many test, creating each particle Test case & executing test can take more time. if it is test Automation, Test case can execute fast quickly.

- Less Accuracy:

Human User (Tester) may make Test mistake, so we cannot expect more accuracy in manual Testing, if it is Test Automation Testing, if you provide the correct logic then test tool can provide correct output.

- Comparing large amount of data is impractical.

Comparing two Database that have thousands of records is impractical but is very less in Test Automation.

- Manual Test case scope is very less!

In manual Testing Test case scope is very limited why because Tester / user can concentrate on one or two verification points only, if it is Test Automation, Test case (Tool and SW) can concentration on multiple verification point at a time.

## DIFFL

c)

Smoke T.

Sanity T.

1) Smoke T. means to verify that implementation done in a build are working fine.

2) This is to test & run on the initial build.

3) Done on every build.

4) Smoke testing is usually undocumented or scripty.

5) Smoke testing is a subset of Regression testing.

1) sanity T. mean to verify newly added functionalities; bug etc are working fine.

2) Done when the build is relatively stable.

3) Done on stable (will post expression).

4) sanity testing usually not documented & is unsupervised.

5) sanity testing is subset of Acceptance testing.

Q.3

Q)

### TESTING TOOL

Tools from a SW testing context can be defined as a product that support one or more test activities right from planning, requirements, creating build, test execution, defect logging and test analysis.

#### Advantage

- ① precision & perfection are high and the risk test can be performed each time it runs. chance for human error is minimal.
- ② The possibility of repeated test and the behaviour of a SW when same action is repeated quite a few times can be tested.
- ③ Automatic testing is comprehensive. any a test suite can be built to cover all the feature of the application.
- ④ Test can be re-used for different version of same application when the user interface is different.
- ⑤ The quality of SW will be good, because of running it more number of time in the shorter period.
- ⑥ Reduce the time for testing & helps in completing the project on time.

#### Disadvantage

- ① well-trained expert are needed to write test scripts.
- ② Test script debugging is of a serious concern. Even a small error in the script may create serious issue.
- ③ Test data file are difficult to maintain.

④ In some cases, the test automation will be more expensive rather than manual testing due to higher licence fee for the tools.

Q)

### Bug's life cycle

Bug life cycle is the specific set of states that a bug goes through in its entire life.

- Bug life cycle states :-

The number of states that a defect goes through varies from project to project. Below diagram.

• New :- When a new bug is reported and prioritized for the first time. It is assigned as status as New.

• Assigned :- Once the bug is reported by the ~~tester~~ tester, the lead of the tester approves the bug and assigned the bug to the developer team.

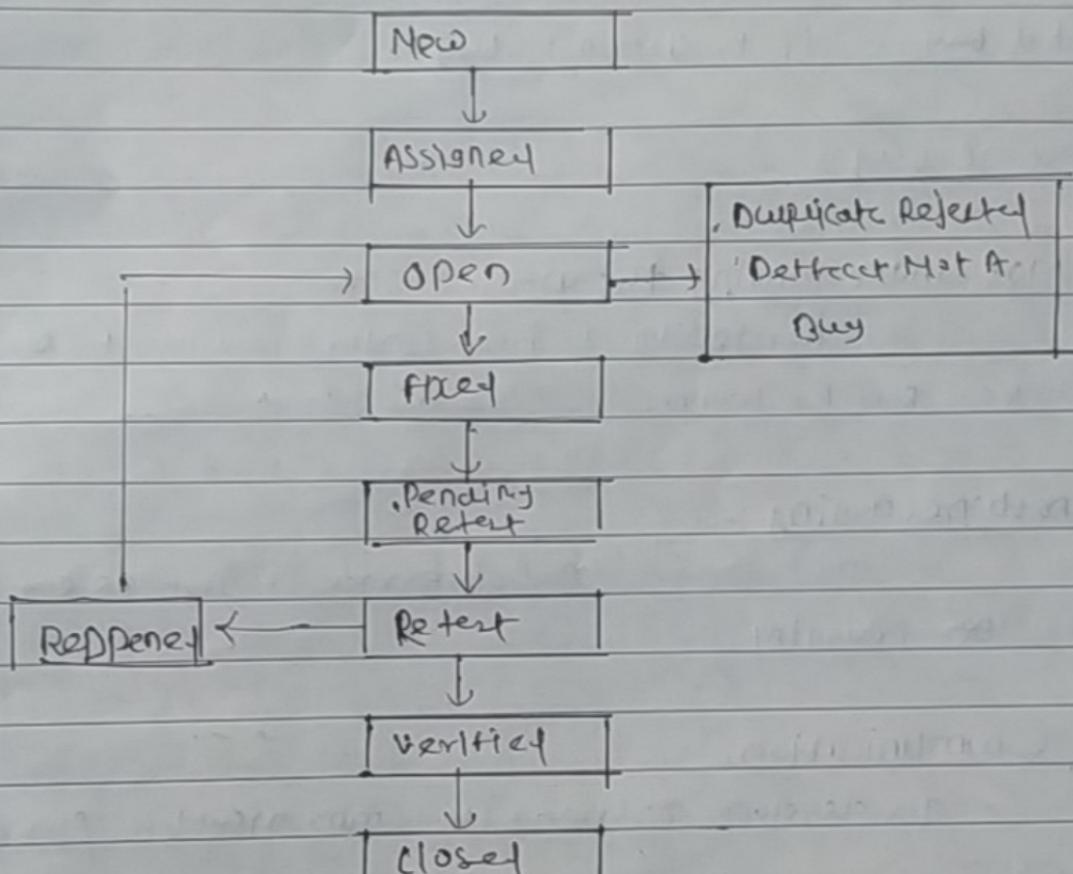
• Open :- The developer starts analyzing and work on the defect fix.

• fixed :- When a developer makes a necessary code change to verify the change, he or she can make bug status as "fixed".

• Pending restart :- Once the defect is fixed by developer give a particular code for testing the code to the tester. Since the bug testing remains pending from the tester end, the

Status assigned is "pending retest".

- Retest :- Tester does the testing of the code at this stage to check whether the defect is fixed by the developer.



bug life cycle.

- verified :- The tester retests the bug after it got fixed by the developer.

- Reopen :- If the bug persists even after the developer has fixed it, the tester changes the status to "Reopened".

- Duplicate :- If the defect is reported twice or the defect corresponding to the same concept or bug, its status is changed to "duplicate".

- Rejected - if the developer feels the defect is not a genuine defect then it changes the defect to rejected.
- Deferred: if the prime not priority & it is expected to get fix.
- Not a bug: if the does not bugs.
- Some bugs

#### ① Not understanding the user:-

The developer has understanding to user it very easy to learn.

#### ② Bad Debugging:-

The project is not error it just be easy to bad debugging.

#### ③ Communication

The developer to user it communication problem occur.

#### ④ Time

Time is take few months during the developing stage.