Ques.1. What do you mean by Software Testing?

Ans. Software testing is the process of evaluating a system to check if it satisfies its business requirements {brd & sr s}.

It measures the overall quality of the system in terms of attributes like correctness, completeness, usability, perfor mance, etc.

Basically, it is used for ensuring the quality of software to the stakeholders of the application.

#### Oues.2. What is SDLC?

Ans. SDLC stands for Software Development Life Cycle. It refers to all the activities performed during software dev elopment

- requirement gathering, requirement analysis, designing, coding or implementation, testing, deployment, and ma intenance.

## Ques.3. Explain the STLC – Software Testing life cycle.

Ans. The software testing life cycle refers to all the activities performed during testing of a software product. The ph ases include-

- Requirement analysis and validation In this phase, the requirements documents are analyzed and validated and the scope of testing is defined.
- Test planning In this phase test plan strategy is defined, estimation of test effort is defined along with automation strategy and tool selection is done.
- Test case Design In this phase test cases are designed, test data is prepared and automation scripts are implement ed.
- Test environment setup A test environment closely simulating the real-world environment is prepared.
- Test execution The test cases are executed, bugs are reported and retested once resolved.
- Test closure and reporting A test closure report is prepared to have the final test results summary, learning, and t est metrics.

# Ques.4. What are the different levels of testing?

Ans. Testing can be performed at different levels during the development process.

Performing testing activities at multiple levels helps in the early identification of bugs. The different levels of testin g are –

- 1. Unit Testing
- 2. Integration Testing
- 3. System Testing
- 4. Acceptance Testing

# Ques.5. What is alpha testing?

Ans. Alpha testing is a type of acceptance testing that is performed testers or the internal employees of the organizati on at the developer site.

## Ques.6. What is beta testing?

Ans. Beta testing is the testing done by end-users at the end user's site.

It allows users to provide direct input about the software to the development company.

#### Ques.7. What is the difference between blackbox and whitebox testing

Ans: Black box and white box is that the black box testing checks the functionality of the software (external view) w hereas,

the white box testing, tests the internal structure or procedural design (internal view) of the software.

#### Ques.8. What is a defect?

Ans: Defect is a deviation from expected software behavior.

#### Ques.9. What is a bug?

Ans: A bug is the result of a coding error. An Error found in the development environment before the product is shipped to the customer.

### Ques.10. Explain Bug life cycle?

New: When a new defect is logged and posted for the first time. It is assigned a status as NEW.

Assigned: Once the bug is posted by the tester, the lead of the tester approves the bug and assigns the bug to the dev eloper team

Active: The developer starts analyzing and works on the defect fix

Fixed: When a developer makes a necessary code change and verifies the change, he or she can make bug status as "Fixed."

Pending retest: Once the defect is fixed the developer gives a particular code for retesting the code to the tester.

Since the software testing remains pending from the testers end, the status assigned is "pending retest."

Retest: Tester does the retesting of the code at this stage to check whether,

the defect is fixed by the developer or not and changes the status to "Re-test."

Verified: The tester re-tests the bug after it got fixed by the developer. If there is no bug detected in the software, then the bug is fixed and the status assigned is "verified."

Reopen: If the bug persists even after the developer has fixed the bug,

the tester changes the status to "reopened". Once again the bug goes through the life cycle.

Closed: If the bug is no longer exists then tester assigns the status "Closed."

## Ques.11. What is Severity? And the types of severity?

Ans: Defect Severity in testing is a degree of impact a bug or a Defect has on the software application under test.

5 types - Critical, Major, Moderate, Minor, and Cosmetic.

## Ques.12. What is priority?

Ans: Priority is defined as the order in which a defect should be fixed. Higher the priority the sooner the defect should be resolved.

4 types - Urgent, High, Medium, Low

## Ques.13. What is the difference between QA and QC

Ans: QA is a process which deliberates on providing assurance that quality request will be achieved.

QA aim is to prevent the defect.

QC is a process which deliberates on fulfilling the quality request.

QC aim is to identify and improve the defects.

#### Ques.14. What is RTM?

Ans: A Traceability Matrix is a document that co-relates any two-baseline documents,

that require a many-to-many relationship to check the completeness of the relationship. It is used to track the requirements and to check the current project requirements are met.

### Ques.15. What is a testplan

Ans: It is a document that defines the scope, objective, and approach to test the software application. The Test Plan is a term and a deliverable.

### Ques.16. What is a test strategy

Ans: Test Strategy is a set of guidelines that explain the test design and determine how testing needs to be done.

#### Ques.17. What is a testcase

Ans: It is a step by step by procedure that is used to test an application

#### Ques.18. Levels of testing and brief

Ans: There are mainly four Levels of Testing in software testing:

- 1. Unit Testing: checks if software components are fulfilling functionalities or not.
- 2.Integration Testing: checks the data flow from one module to other modules.
- 3. System Testing: evaluates both functional and non-functional needs for the testing.

4. Acceptance Testing: checks the requirements of a specification or contract are met as per its delivery.

Ques.19. What is software testing techniques and name the types?

Ans:It is a Techniques which help us design better test cases. Since exhaustive testing is not possible;

There are 5 important software testing techniques:

- 1. Boundary Value Analysis (BVA): Boundary value analysis is based on testing at the boundaries between partition
- s. It includes maximum, minimum, inside or outside boundaries, typical values and error values.
- 2. Equivalence Class Partitioning : Equivalent Class Partitioning allows you to divide set of test condition into a partit ion which should be considered the same.
- 3.Decision Table based testing: This software testing technique is used for functions which respond to a combination of inputs or events.
- 4.State Transition :State Transition technique changes in input conditions change the state of the Application Under Test (AUT).
- 5.Error Guessing:is a software testing technique based on guessing the error which can prevail in the code.

Ques.20.Difference between retesting and regression testing?

Ans :Retesting to verify the defect fixes. But, the regression testing assures that the bug fix does not break other part s of the application.

Ques.21. Elements that need to be included in bug report?

Ans : ID

Defect description: One liner description of the bug

Steps to reproduce: They include the detailed test steps to emulate the issue.

Environment: QA/Prod environment in which the defect is found Module/section of the application in which the error has occurred

Severity/Priority

Screenshots

Responsible QA: This person is a point of contact in case you want to follow-up regarding this issue

Ques.22. What is non functional testing?

Ans: Test to check non-functional aspects such as Security, Performance, usability, reliability.

Ques.23. What is Performance testing? Tools used to do Performance testing?

Ans: Testing the responsiveness of the software depending upon the various workload is called performance testing.

Tools such as Jmeter, Blazemeter are used to perform this kind of testing

Ques.24. What is test closure

Ans: Test Closure is a document that gives a summary of all the tests

Ques.25. What is entry and exit criteria?

Ans: Entry Criteria: Entry Criteria gives the prerequisite items that must be completed before testing can begin.

Exit Criteria: Exit Criteria defines the items that must be completed before testing can be concluded

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