

TESTING INTERVIEW QUESTIONS

1.SDLC

- >Requirement gathering
- > design
- > development
- > testing
- > deployment
- > release
- > maintenance

Testing Process:

Testing process is finding out the defects in a software program.

The tester make sure whether all the features of the application working correctly.

STLC

- >we gather requirements
- > we do test plans
- > we prepare test cases
- > we execute the test cases
- > we identify errors
- > we prepare bug report
- > we retest the fixed defects
- > we prepare final test report.

VERIFICATION

Evaluates the intermediary products to check whether it meets the specific requirements of the particular phase.

VALIDATION

Evaluates the final product to check whether it meets the business needs.

2.TEST PLAN

It is a document describing the testing scope and activities.

It is the document most of time prepared by the test manager.

It is the basis of formal testing of any software product. or who is responsible for the overall delivery.

It is a continuous process and combined effort.

3.TEST CASE

It is the set of procedures which we execute in the application to find the defects.
This prepared by the tester with various possibilities to find the defects.
We use excel sheet to write test cases in case of manual testing.

4.SOFTWARE TESTING NEEDED

Software testing is a process of executing a application with the intent of finding the software bugs.

Software testing is really required to point out the defects and errors that were made during the development phase and it is important to ensure the quality of the product.

To satisfy the customer,
to meet customer expectations,
to compete in the market,
to hold the existing customers,
to make new customers,
to reduce the maintenance cost.

5.BLACK BOX TESTING

It is done by the tester. It is used to test the functional aspects of the application. Black box testing also called the functional tester. The tester tests the application without looking at the internal code structure. ex. In login module, we just focus on inputs and outputs of the module without bothering the internal code of the module.

functional testing > unit,smoke,integration,system,regression, user acceptance testing

non-functional testing > compatibility, documation, installation, maintainability, performance, recovery, security, usability, stress,volume testing

6.UNIT TESTING

It focuses mainly on the field level and functional level validation.

Unit testing is a software development process in which the smallest testable part of the an application

FUNCTIONAL TESTING

Functional testing is performed to verify that a piece of software is providing the same output as required by the business.

NON- FUNCTIONAL TESTING

Non-functional testing is concerned with the non-functional requirements and is designed specifically to evaluate the readiness of a system

EX .performance, usability, load factor

7.SMOKE TESTING

It is the testing performed after the software is built and it is used to test the most important/critical functionalities of an application and checks whether it is working or not.

8.SANITY TESTING

It is the testing performed after receiving the software built with minor changes in the code or functionality when the bugs have been fixed and no further issues are introduced due to the changes.

9.INTEGRATION TESTING

It is used to test the integration or communication among the modules.

Big bang approach > Checks the flow of the link.

Top down approach > The high-level functions will be tested first. ex : login,home

Bottom up approach > The low level functions will be tested first. ex: feedback, contact us.

10.RETESTING

Retesting is performed to confirm the test cases that failed in the final execution are passing after the defects are fixed.

11. REGRESSION TESTING

Regression testing is verifying if the bugs are fixed and newly added features have not created any impact on the previous working version of the software.

12.USER ACCEPTANCE TESTING

user acceptance testing is the final phase of the software testing process, during this process actual software users test the software to make sure it can handle required task in real world scenarios.

Alpha testing > it is tested by the client with the project team.

beta testing > done by the different customers before the release.

13.SYSTEM TESTING

System testing is testing the complete and fully integrated software product. The process of testing an integrated system to verify that it meets specified requirements.

ex: The student login and staff login modules are unit tested separately. when 2 or more units are ready they are assembled and integration testing performed when the complete application is integrated system testing is performed.

Load testing > It is a type of non-functional testing. It is to understand the behaviour of the application under a specific expected load. EX: Requesting various jobs on printer in a queue simultaneously.

Volume testing > It is a type of non-functional testing. Testing a application with a certain volume of data.

Ex: Requesting an application to do a job in bulk and check how is it performing.

stress testing > stress refers to a type of testing that is so harsh. Its expected to push the application to failure.

Ex: If the application can take maximum user load of 10000 concurrent users. if we check with the user load of 110000 it may crash the application.

14.REQUIREMENT TRACEABILITY MATRIX

It maps the relationship between the requirements and test cases. It is prepared by the test leader. it checks the coverage of the requirements

fields > Req id, prepared by the person name, test scenario, total no of test cases

15. DATABASE TESTING

Nothing but a server side or back end testing. The data entered in the front end should be stored in the back end.

The data will be organized in the tables as record and it is used to support the content of the page.

It tests the data integrity, that is the connection between the front end back end. It tests where there is any missing/wrong data in the database and checks the data is stored or not.

16.BUG LIFE CYCLE

new > error reported

open > error assigned to the developer through project leader

fixed > Issues are fixed by the developer

retest > fixed bugs are retested by the tester

closed > if the bugs are fixed the tester will close the bug.

Reopen > when the bugs are occurred again

Rejected > some unwanted bug may be rejected by the project lead.

duplicate > when the same bugs are re-entered.

SEVERITY

Severity means impact of bug on application i.e. seriousness of bug in terms of the functionality.

PRIORITY

Priority means how soon it should get fixed i.e. importance of bug in terms of customers.

For example -

Suppose in banking application there is 1 module of ATM facility. In that ATM facility whenever we are depositing/withdrawing money it is not showing any confirmation message but actually at the back end it is happening properly without any mistake means only missing of message. In this case as it is happening properly so there is nothing wrong with the application but as end user is not getting any confirmation message so he/she will confuse for this. So we consider this issue as high priority but low severity.

1. High severity and high priority -> Database connectivity can't be established by multiple users.

For example, if you clicks on explorer icon or any other icon then system is crash.

2. Low severity and low priority -> Small issues like, incorrect number of decimal digits in output.

For example, in login window, spell of "OK" button is "KO".

3. Low severity and high priority -> Images not updated.

For example, suppose logo of any brand company is not proper in their product. So it affects their business.

4. High severity and low priority -> In a module of say 2 interfaces, links between them is broken or is not functioning.

For example, in login window, there is restriction of login name should be 8 character if we enter 9 or more than 9. In that case, system get crash.

17.WATERFALL MODEL

Requirement Gathering and analysis - All possible requirements of the system to be developed are captured in this phase and documented in a requirement specification document.

System Design - The requirement specifications from first phase are studied in this phase and the system design is prepared.

Implementation - With inputs from the system design, the system is first developed in small programs called units, which are integrated in the next phase.

Integration and Testing - All the units developed in the implementation phase are integrated into a system after testing of each unit.

Deployment of system - Once the functional and non-functional testing is done; the product is deployed in the customer environment or released into the

market.

Maintenance - There are may be some issues which come up in the client environment. Maintenance is done to deliver better version in the customer environment.

18. V MODEL

In V model, that test plan should be started from the beginning when requirement phase starts. when requirement phase completed acceptance testing and system testing has been planned in parallel. Similarly once design phase completes, Integration testing should be planned and finally once coding phase completes, Unit testing should be planned. During the execution, testing starts from Unit testing and carries up to Acceptance testing to make sure the application meets all the development phases and working as per expectation.

19. AGILE MODEL

In the traditional method, the initial version of software up and running to the customer takes longer time. first we will collect the requirements then it goes to the business team, then we gather functional requirements then coden then testing and deployment happens. It will be heavily documented. The documents will be around 20-25 pages. we will prepare detailed test scenarios and test cases, we check the inputs and generate the bug report.

In agile project, Everything will be very fast rapid way and it is a iterative software development. Here the teams made for developing the application are broken into small manageable groups of 5-10 people and the agile project last only 2-6 weeks. There will be no focus through examination and analysis.it fully relies on people decision making capabilities and how fast they are.

agile method of testing >

Test plan may be 1 or 2 pages. we will preparing only test scenarios, no test cases will be developed. execution will be same as in normal method. It just not testing and logging bugs. It is more of working as a part of a development team and also working closely with the client. Tester works with everyone in the team in order to improve and build quality into the product as early as possible.

Advantages : frequent changes in requirement will be easily captured in agile method.

disadvantages : on a longer run, we cannot get back and see what exactly we have done and where exactly things are getting documented.

20. SPIRAL MODEL

Spiral model is a combination of a waterfall model and iterative model. each phase in spiral model begins with a design goal and ends with the client reviewing the progress The development team in spiral model starts with a small set of requirements and goes through

each development phase for those set of requirements. the development teams adds functionality for the additional requirement in every increasing spirals until the application is ready for the production phase.