

1. Tell Me About You?

• If you are fresher:

I am Disha, I have completed my Computer Engineering in 2010. I have completed my Testing Course from XYZ institute. I am aware of Testing Methodology, STLC & SDLC.

My Short Term Goal is to become a Sr. Tester down the line 2 years and long term goal is to become a Test Manager.

My Strength is – I am a good listener, workaholic & easily gel with others.

Talking about my weakness — Sometimes, I get so excited and caught up in my work that I forget that my family life should be my number one priority."

• If you are having 1 to 3 Years of exp.:

I am Disha, completed BE-Instrumentation in 2008, having around 2+ years of experience in Software Testing and Automation. Currently working as a Software Test Engineer in XYZ Company. My Responsibilities includes Test Case Creation and Execution by understanding Requirements and Functionality, Logging and fixing a Defect, Sending Build Wise Status Report to my Lead, participation in the client call, and involvement in writing down Test Plan etc. My Strength is – I can work under Pressure, Result Oriented, workaholic & easily gel with others. Talking about my weakness includes – I lose my efficiency if I work at a stretch for more than 24 hours.

2. Tell me your Role and Responsibilities?

I am currently working here as a Software Test Engineer. My Responsibilities includes Test Case Creation and Execution by understanding Requirements and Functionality, Logging and fixing a Defect, Sending Build Wise Status Report to my Lead, participation in the client call, and involvement in writing down Test Plan etc.

- Prepare Test Cases and Test Data as per the Test Basics
- Peer reviews the Test cases and Test data
- Execute the test cases and record the execution status in the Test Management tool,
- Log all detected defects in the identified defect tracking tool,
- Provides status to the Assignment Manager/ Test Analyst, as and when required.
- Attending the Team Meetings



- Involved in Test Planning
- Ensuring that Deliveries of the application are in time and above expectations.
- 3. Why you think that you are fit for testing? / Why have you chosen this Testing Field? Why testing, tell me in only in one sentence? Or what should be the qualities of a tester?
 - I know well how to break the thing than to make it &
 - My attitude towards testing is thoroughly destructive but my work is constructive
 - I am having lot of patience
 - I am always thinking from the end user perspective.
 Because of all these reason I think that I am fit for testing.

4. What is Software Testing?

Software testing is nothing but running the application/system under both normal and abnormal condition and comparing the result against Requirement/functionality. At the same time taking the corrective action on the result which we don't expect.

- 5. What should be the mindset of a tester?
 - He should think from the end customer point of view.
 - His attitude towards testing should be thoroughly destructive but his work should be constructive then and then he will able to find out more and more bugs in the application.
 - He should be go getter and having ability to prove his opinion in spite of all odds.
 - Having Lot of patience.

6. At what stage of the SDLC does testing begin in your opinion? When should testing start in your project? Why?

In SDLC testing begin from the Requirement Gathering stage. But here in this stage we are testing the ideas not a code. We are testing following things during Requirement gathering stage

- Is this the right requirement?
- Are they complete?
- Are they compatible?
- Are they achievable?



Are they testable? Etc.

7. What is Quality?

Quality is nothing but degree of excellence with reference to customer satisfactions.

8. QA VS QC?

QA	QC			
QA is nothing but Quality Assurance, which	QC is nothing but Quality Control, which			
gives assurance towards quality	does not ensure quality, it only exposes			
	lack of quality			
QA is Process Oriented	QC is Product Specific			
QA is prevention of defects	QC is detection of Defects			
QA belongs to Verification	QC belongs to Validation			

9. Explain SDLC in Detail?

Software Development Life Cycle is a process of developing an Application or a Product.

SDLC divides into different phases and each phase has a definite Start and End along with the deliverables. Different Phases in SDLC are

- Project initiations
- Requirement Analysis & Gathering
- System Design
- System Development
- System Testing
- UAT
- System Implementation
- System Maintenance

10. Tell me different SDLC models?

Different SDLC models are

- Water Fall Model
- Spiral Model
- Code & Fix Model
- Big Bang Model
- Scrum Model
- Prototype Model
- V Model



11. Which SDLC Models you are using? Explain in details. Or Which development module is used in your organization?

We are using Agile Methodology for developing software and the Models we used are **SCRUM**.

In Scrum, projects are divided into small group of requirements, called as sprints, which are typically one week, two weeks, or three weeks in duration.

In Scrum we have a **SCRUM Master** who acts a Bridge between **Product owner** and **Development Team.** Based on the size of sprints DEV & Test Team will provide the estimations to our SCRUM Master in terms of hours. Then SCRM Master will publish the release Schedule by Date. We have a daily SCRUM Meeting where we discussed about the Progress of Sprint from Dev, Test and Analysis point of view on daily basis. If anything is blocking to us we are discussing that also in the SCRUM meeting.

12. What is the Advantage of Scrum Model /Agile methodology?

- Very Productive
- Business gets something new after every 2 or 3 weeks.
- New Ideas go into TO DO List.
- Due to small sprints Tester & Developer can focus well on the given functionality.

13. What is Regression Testing?

Regression Testing is nothing but to test the known set of test cases to ensure that nothing has been affected either due to bug fix or any new enhancement. Basically Regression Testing is used to find out the side effect of existing functionality on other functionality.

14. Tell me the difference between Regression testing and retesting?

Regression Testing is nothing but to test the known set of test cases to ensure that nothing has been affected either due to bug fix or addition of any new enhancement. Basically Regression Testing is used to find out the side effect of existing functionality on other functionality.

8

Retesting is nothing but testing the same thing with different set of data.

For example: Testing the Login Functionality with different set of user i.e. user with administrative role, user with DB admin role, user with Account Manager Role etc. So here we are testing the login functionality again and again with different set of data.



15. How to identify the regression test cases? Why need of regression testing?

If Functionality B is depending on Functionality A and with the change in Functionality A if the Functionality B is getting affected then all the test cases related to functionality B will be our regression test cases. And If Functionality A & B are interdependent then all the test cases related functionality A & B will be our regression test cases.

By using regression testing we will ensure that nothing has been affected either due to bug fix or addition of any new enhancement.

16. Regression: what is it? How will u run all regression suit if u have less time?

Regression Testing is nothing but to test the known set of test cases to ensure that nothing has been affected either due to bug fix or addition of any new enhancement. Basically Regression Testing is used to find out the side effect of existing functionality on other functionality.

Even though we have less time available we need to execute all the Regression Suite by sitting late nights or coming over weekend to ensure that all the functionalities are working fine. We cannot take a risk of excluding some test cases from execution.

17. You received 3 builds B1, B2 and B3, on which build you will do regression Testing?

If Builds B1, B2 & B3 are having two or more functionality and are interdependent with each other then we need to perform Regression Testing on all the three builds. Because Regression Testing is nothing but to test the known set of test cases to ensure that nothing has been affected either due to bug fix or addition of any new enhancement.

Regression Testing is basically used to find out the side effect of one functionality on other functionality. If Build B1 is only having one functionality then no need to perform regression testing on that. If on Build B2 we are getting more than 2 functionalities which are dependent with each other then we need to perform regression testing on B2 & B3.

18. What is Validation and Verification?

Are you doing a thing right? Is Verification & have you done thing right? Is validation. Verification is a QA Activity and Validation is the QC activity.

19. Tell me the difference between Scenario and Use Case and Test Case? Or difference between Scenario and Test Case?



Scenario is nothing but how the End User will use the given functionality in real time environment.

While **UseCase** is nothing but the interaction of the end user with that application. For Example: **ATM Machine**, here the functionality of the ATM machine is to give the money to the end user.

- a. Consider a **Scenario** where user wants to give 70 bucks to the Taxi Owner during mid night and he don't have money in his wallet. He goes to ATM Machine and trying to withdraw the money from ATM but ATM can dispense only Rs. 500 and Rs. 1000 notes. In that case even if the functionality wise ATM machine is working fine but it will not satisfy the end user requirement as it will not solve his purpose due to unavailability of smaller note.
- b. Consider another scenario where user wants to carry Rs. 1 Lac from one station to another. He goes to ATM center to withdraw the amount and here he gets all the 100 Rs notes. In this case even though functionality wise ATM Machine is working fine but it will not satisfy the end user requirement as he is looking for a Rs. 500 or Rs. 1000 notes so that he can easily carry small number of notes.

UseCase here in the give example is User will insert his Debt/Credit Card in the ATM Machine, then he will enter the PIN number, then he will select the type of Account & then he will enter the amount and select yes/no Transactions Slips and finally press enter to perform the complete operation.

Test Cases in the above example is to verify the behavior of ATM Machine

- For valid or Invalid Debit/Credit Card?
- For the Expiry Date > or < or = today's date for the given Debit/Credit Card?
- For Correct/Incorrect PIN, Minimum and Maximum PIN etc.
- For the Amount > Available balance in his Account
- For the Amount < or = Available balance in his account
- For the amount <= 0 etc

20. Which 3 important scenario you will test as manager on calculator before it is going to production?



Scenario is nothing but how the End User will use the given functionality in real time environment. So when end user will take this Calculator for UAT he will test following scenario

- Whether all the Letters are visible and after pressing specific letter whether the value is getting displayed on the display window. E.g. after pressing "2" button, 2 should display on calculator window.
- Performing Addition/Multiplication/Subtraction & Division on 2
 Maximum numbers
- Whether all the invalid operation is properly handled or not. E.g. divide by zero.

21. Tell me the Latest Scenario that you have executed?

In our CRM Application, we have a Account Profile Report which will show the Revenue generated for that Account based on the Date, Products & Subsidiary.

The Scenario I executed to Test the AP Report was

- Get the Revenue for the Last Fiscal Year and Current Fiscal Year and finding out he YoY revenue %.
- Get the Revenue for the Last Year Fiscal Quarter Q1 and this year Fiscal Quarter Q1 to find out Variance between Revenue.
- Get the Revenue for single Product across all subsidiaries.
- Get the Revenue for all Products across all subsidiaries.
- Get the Revenue for the all products across all subsidiaries.
- Get the Revenue for specific Products for the specific subsidiaries.

22. Write scenario on Login window? Or How will you test the login functionality of the application or tell me your approach of testing the login functionality of the application?

Scenario on Login Window would be

- User tries to perform login by entering Valid Username & Invalid Password
- User tries to perform login by entering Invalid Username and Valid Password
- User tries to perform login by entering Invalid Username and invalid Password
- User tries to perform login by without entering any Username and Password.
- User tries to perform login by entering Special Characters for Username and password.
- User tries to perform login by entering maximum characters that specified for the username and password fields.
 - Whatever you want to achieve in life, Help others to achieve that!!!



23. Tell me the different Scenarios on Chair/Mobile/Mixer etc.

Scenario is nothing but how the end user will use that functionality in real time environment.

So On Chair (Assume that it's a Normal Plastic Chair) the scenario would be

- Effect of Environmental condition on this chair as this chair may be used in any environmental condition.
- Reaction of Raw Material of chair on the human body.
- User can also use it for sitting purpose outside home so here we need consider the rough & toughness of this chair.
- User can use it for standing purpose in order to remove the things from the loft so here we need to consider the impact of pressure at a given area on this chair.
- Small kids may play with this chair so here we need to consider the scenario that its corner may harm the kids.

So on Mixer the scenario would be

- User may use this Mixer where the available voltage is given specified minimum voltage. So here we need to test the scenario that where this mixture will work fine or not for the given desired low voltage. The same thing is applicable for High Voltage.
- User may use this mixture for a longer period of time on the given voltage range. So effect of induced heat on the material of the mixture.
- User may use this mixture for crushing the very hard material which is not mentioned in the specification. So here we need to test the scenario that what should be the effect of this on the mixture and end user.
- User may use this mixture with wet hand, so here we need to test the scenario that whether it is properly shock proof or not.
- What is user is going to crush the material in the given pot without holding the pot by hand, so here we need to test the scenario whether proper locking system are provided or not. Etc

So on Mobile the scenario would be



- After inserting the SIM whether it is capturing the signal or not.
- What if user is on a call while charging the mobile?
- After dialing the number it should call the same person.
- Based on the selected profile it is behaving or not?
- After plugging the charger pin where it is properly getting charged or not.
- While continuous talking on mobile where it is getting heated or not?
 Etc.

24. if C= a+b /a-b? What is scenario for this equation?

Scenario is nothing but how the end user will use the given functionality on run time environment. So scenario for the given equation would be

- Similar Negative value for both a and b, to test the scenario of divide by zero.
- Similar Negative and Positive Value for a & b, to test the scenario of infinity.
- Any value for a and 0 value for b, to test the scenario of getting result 1
- 0 value for a and any value for b, to test the scenario of getting result-1
- Any two different value for a & b where the value of a>b to test the
 positive output.
- Any two different value for a & b where the value of a<b to the negative output.

25. How you create the test cases? (using requirement or design or both documents, or by interacting with the developers)

We are writing down our test cases by using Functional Specification Documents and by using scenarios which are already mentioned in the FSD.

26. What is Test Case?

Test Case is nothing but a sequence of keywords or steps used to test the particular feature of an application.

27. How will you ensure that your test cases are complete? Which tool you use to write test cases or use simple excel file?



We are writing down our test cases in excel sheet. And with the help of Requirement Traceability matrix we will ensure that whether all the Requirements have properly covered or not. And we will perform Peer Test Case Review and Formal Test Case Review to find out the missed test cases which we will add after this review.

28. How many test cases have you developed or executed?

On an average for the functionality assigned to me for the given project I have written more than 1000 + test cases. On an average I am executing around 25 to 30 test cases per day.

29. Tell me yours Test Case Template?

My Test Case Template is (Explain each and every column on the Paper or tell verbally)



30. Write Down the Test Cases on Pen/Chair/Mobile/Mixer etc.

Test Cases On Pen:

Functionality:

- 31. RAM 1GB/Free space is 3GB/ write down test cases for this scenario?
- 32. Tell me 2 related positive and negative test cases of 1 scenario of any application?
- 33. Write Down Test Cases on Chess Board?
- 34. How to design test cases? Or tell me different Test Case Design Technique? Or Tell me Boundary value Analysis? Or tell me about State Transition Testing? Or tell me about Equivalence Partitioning? Or what are testing Techniques?

We are designing the Test Cases using black box type Test Case Design Technique like

- State Transition Testing
- Boundary Value Analysis
- Equivalence Class Partitioning
- By using Scenario's
- By using Use Case's
- Pair Wise Testing



35. Tell me about State Transition Testing?

Testing the change in state e.g. from on to off, open to close etc. of the application is called as State Transition Testing

36. Tell me about BVA (Boundary Value Analysis)?

BVA is a Test Case Design Technique where test cases are selected at the edges of the equivalence class.

For example if one InputBox accept a number from 1 to 1000 then in that case our test cases would be

- 1) Test cases with test data exactly as the input boundaries of input domain i.e. values 1 and 1000 in our case.
- 2) Test data with values just below the extreme edges of input domains i.e. values 0 and 999.
- **3)** Test data with values just above the extreme edges of input domain i.e. values 2 and 1001.
- 4) Test data with values !@#\$#\$# and sdf24234.

37. Tell me about Equivalence Class Partitioning?

Equivalence Class partitioning is a Black Box Test Case Design Technique where input data is divided into different equivalence data classes. This method is typically used to reduce the total number test cases to a finite set of testable test cases, still covering maximum requirements.

For example if one InputBox accept a number from 1 to 1000 then Equivalence Class Partitioning in this case is

- 1. Class For Accepting Valid input: number from 1 to 1000
- 2. Class For Accepting Valid Invalid Input: number <1 or >1000
- 3. Class For Accepting ewqlnvalid Invalid input: entering special characters, alphanumeric value i.e. @#@#@#, blank value etc.
- 4. Difference between functional specification and requirement specification. Do we need both in orders to write the test cases?

38. Difference between functional specification and requirement specification. Do we need both in orders to write the test cases?

Requirement Specification or Business Requirement Document (SRS or BRD) contains all the requirement from the business while FSD is a document which contains list of functionality for the given Requirement. BRD is commonly used by Business People while FSD is used by engineering team.



We are using FSD in order to write down the test cases.

39. IF a>=10 && B<=5 Then some line of code Write down the test case for this?

Here we can use Test Case Design Technique to write down the test cases

- 1. Test the given line of code when the value of a=10 and B=5 i.e. at the boundary
- 2. Test the given line of code when the value of a>10 and b<5 i.e within the boundary
- 3. Test the given line of code when the value of a=9 and b=6 i.e. just outside the boundary
- 4. Test the given line of code when the value of a=^&% and b=@\$@# i.e. checking for invalid invalid input

40. Where do you put your test data for test cases?

We are maintaining our Test Cases in an excel sheet, where we have one column called as Prerequisite and Input Data for the specific test case. In this column we are putting our test data.

QE		Venu Priva	nka,Dhanash	ri										
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Main Proj														
Test Plan:		1100 1110												
Cases:		135												
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06390	N N	N N					Execution Steps:	1. 'Unified Workforce Interface' link	Priyanka					
06990	Y		User	ViewUser	Verify that "View User" child window is opened	URL: http://apr.co.in	1. Launch the Application 2. Login with	User should see "View User" window	Avantika	Medium	P			

41. When do you start writing Test Cases?

We start writing down the test cases when we get a FSD i.e. Functional Specification Document.

42. How many Test Cases per day you are going write down in your company?

On an average I am going to write down around 30 to 35 test cases per day.

43. When you install any software how you make sure that software installed correctly? Tell any 5 test cases.

- First while installation I will check the message at the end which will tell me whether application is successfully installed or not.
- Then I will go to Installation folder and try to run the Application exe
- Then I will check the icon on desktop or program list.
- Then I will check the detail of installed application in add/remove program.
- Then In the registry I will able to see the entries of this software.



44. Tell me the test cases of door and how to perform integration testing of door? Functionality:

- Verify that height & width of the door as per the given specification
- Verify the material used for the door as per the given specification
- Verify the effect of environmental condition on the door
- Verify whether lock attached to door is functioning properly or not
- Verify that fittings of the door is fitted at the desired location

Integration:

- Verify whether user is able to assemble or dismantle the door from the wall
- Verify whether user is able to assemble or dismantle the lock of the door
- Verify whether user is able to assemble or dismantle the Grip of the door.

Performance:

- Verify whether door is able to sustain the given specified maximum pressure.
- Verify whether door is able to sustain the given specified maximum pressure for a longer period of time.
- Verify the behavior of door after applying a pressure beyond its specified maximum limit.

Usability:

- Verify the look and feel of the door.
- Verify the furniture polish of the door
- Verify the design of the door

45. What are your considerations while writing down test cases?

- First I will completely understand the functionality
- Then I will start writing down the test cases
- While writing down the test cases I will use Black Box Test Case Design Techniques i.e. BVA, Equivalence Partitioning, State Transition Testing along with understanding the Scenarios and use case.

46. Have you written any test cases without any document like RUD or design document? Do you require updating the initial test case in project life cycle any time?

No, I haven't written any test cases without any documents. But if you know the functionality well then we can write down the test cases.



Yes, most of the time we are getting the CR's (Change Request) for the given functionality from the business, in that case we are pulling our previous test cases related to that functionality and update it appropriately.

47. Take this mobile/Pen/Telephone/CD and tell me what kind of testing you are going to perform in order to test that?

Note: Here I am just putting the points to discussed on , if interview ask you to write down the test cases then asked him in advance whether I have to follow the complete Test Case Format or I just need to discussed the points.

For Mobile:

From Functionality Point of View I will test

- After inserting the SIM whether it is capturing the signal or not.
- What if user is on a call while charging the mobile?
- After dialing the number it should call the same person.
- Based on the selected profile it is behaving or not?
- After plugging the charger pin where it is properly getting charged or not
- While continuous talking on mobile where it is getting heated or not?
 Etc.
- Whether it is on/off properly or not.
- All the keys present on the mobile keypad should be very smooth and easily getting pressed or not.
- Verify whether mobile is recognizing the different SIM Card's which belongs to Several Mobile service Provider.
- Verify the behavior of the mobile after inserting CDMA SIM Card, it should not get hanged.
- While sending the single SMS/Bulk SMS what if someone calls then in that case both the activity should be completed without failure.

From Integration Point of View I will test

- Whether user is able to assemble or dismantle the mobile
- Whether user is able to add/remove the batteries and SIM Card



From Performance Point of View I will test

- What if mobile is getting overcharged for a longer period of time?
- While charging is in place what if the user is on talk for a longer period of time.
- Whether user is able to speak properly if the signal strength is very weak.
- Checking the behavior if user throws the mobile from a given specified height

From Usability Point of View I will Test

- Look and Feel of the mobile
- Numbers printed on the keyboard is clear and visible or not.
- Logo of the manufacturer
- Color of the mobile.

48. What is Test Plan? Or Tell me the main bullet points used in Test Plan? Or what is covered in Test Plan? Or Explain Test Plan?

Test Plan is nothing but Road Map for testing & Test Plan is used for planning the Testing Activity.

Following points we are taking into the consideration while writing down the test plan.

- Objective
- Introduction
- Assumption and Test Approach
- Entry Criteria
- Exit Criteria
- Resumption Criteria
- Suspension Criteria
- Risk and Mitigation
- Resource and Responsibilities
- Test Environment Set up
- Training Requirements



- Test Schedules
- Deliverables

49. Master test plan VS Child test plan? Or what is Unit Test Plan? Or Difference between MTP & DTP (Detailed Test Plan)

Basically Master Test Plan (MTP) is for the entire Big Project and Child Test Plan (CTP) or Module Test Plan is for the specific modules of that Project. Child or Module Test Plan is different for different levels of testing as well. I.e. for Unit Testing we have separate CTP/MTP, for System Testing we have separate CTP/MTP.

- 50. If there are 50 modules in the test plan what will you do? Will you write 50 test plans? Depends. We have a master test plan for entire big project. And for each module we have Module Test Plan. If the entire module we are testing in a similar way then we can write a single module test plan which represents all the 50 Module Test Plan.
- **51.** What is test cases and test plan? Difference between test case and test plan? Test Case is a sequence of keywords or steps used to test the specific feature of an application. While, Test Plan is nothing but Road Map for testing & Test Plan is used for the Planning of Testing Activity.
- **52.** Suppose you are the PM and you have to design test plan, how you will design test Plan? Basically test plan is nothing but road map for testing & Test Plan is used for the planning for Testing Activity. I will consider below points while designing a Test Plan
 - Objective
 - Introduction
 - Assumption and Test Approach
 - Entry Criteria
 - Exit Criteria
 - Resumption Criteria
 - Suspension Criteria
 - Risk and Mitigation
 - Resource and Responsibilities
 - Test Environment Set up
 - Training Requirements



- Test Schedules
- Deliverables

53. Who is preparing Test Plan?

Test Lead is responsible for preparing the Test Plan. But In my company I am helping my lead to generate a Test Plan.

54. What is Entry Criteria? Or what are Entry Criteria for Testing Phase? Or what should be the Entry criteria for system testing?

Entry Criteria will tell you, when to start testing?

We can start testing only when

- 1. All the Resources are in Place.
- 2. All the Hardware and Software in Place.
- 3. All the Test Cases are in place.
- 4. Drop/Build is ready for testing.

55. What is Exit Criteria? Or when to stop testing? Give at least 5 reasons?

Exit Criteria will tell you, When to Stop Testing?

We can Stop Testing only when

- 1. No S1 or P1 Defects are in open state.
- 2. Open P2 Defects must have mitigation plan and work-around
- 3. All CRs = Closed or Deferred
- 4. System, Integration and Regression Testing = Complete
- 5. SIT Environment must be Stable (infrequent unplanned outages)

56. Can project will be delivered with few open defects in it? What do you think about it?

Yes. Provided no S1 or P1 defects should be in open state. As we already mentioned this in the exit criteria in our test plan.

57. What is Suspension Criteria?

Suspension Criteria will tell you, when to suspend your testing activities.

We can suspend **partial or full testing activities on a given build** if any of the following occurs:

- Files are missing from the new build.
- Scripts aren't run on designated test servers
- There is a fault with a feature that prevents its testing.



- Item does not contain the specified change(s).
- A severe problem has occurred that does not allow testing to continue.
- Development has not corrected the problem(s) that previously suspended testing.
- A new version of the software is available to test
- No access to test servers
- No permissions to DB or other related

58. What is Resumption Criteria?

Resumption Criteria will tell you, when to resume your testing activities.

We can resume testing only when the problem encountered resulting in suspension is corrected.

59. Explain your Bug Life Cycle? Or Explain Bug life cycle in detail? How many phases in bug life cycle? Or Tell me the Different Status/Resolution of bugs?

The process of finding a bug to fix that bug is called as Bug Life Cycle.

When Tester finds a bug, he log that defect in DTT that time the Status of the Bug is in **Proposed State** & the Reason is **new** and assigned it to **Triage Team**.

In Triage we discussed about the logged issue and assigned those issues to the respective developer. That time the status of the bug is **Active** and Reason is **accepted**.

When developer fix those issue, he assigned it to respective tester, that time the status of the bug is **resolved** and reason is **fixed**.

Tester then verified that issue and if the issue is not reproducible then he changed the status of the bug to **close** and reason for this bug is **resolution Verified**.

But if the issue is still reproducible then tester will change the status of the bug to Rejected, assigned it to a respective developer and now the reason for this bug is **resolution denied**. So this process continues till we close this defect.

Some other status of the bugs is

- By Design
- Deferred
- Re-Open
- Duplicate
- Postponed
- Won't Fix etc.



60. What is Bug Report?

Bug Report will give you the information about

How many bugs we logged? How many of them are in Proposed State? How many of them are in Active State? How many of them are closed? How many of them are Re-opened? How many of them are rejected? Bugs by Severity? Bugs by priority?

61. What is Severity and Priority for a Defect? Or Priority vs. Severity?

Severity of the defect will tell you the seriousness of that bug.

Priority of the defect will tell you how soon we need to fix that serious bug.

62. Tell me a Bug having High Priority and Low Severity and a Bug having Low Priority and High Severity and a Bug with High Priority and High Severity? Or Give the example of high severity and low priority defect in any your project? Not general answer required.

High Priority Low Severity

In our application we have Account Profile Report which was giving us Revenue related information for the given Subsidiary, Date and Products filter. But when I was selecting All subsidiaries then it was not showing data for US Subsidiary. So this was a bug having High Priority and Low Severity.

Justification: Priority of the bug was high because it was a data loss for US Subsidiary and 90% of the users were from US subsidiary.

Severity of the bug was low because we were able to test the report for the rest of the subsidiary.

High Priority High Severity

In our application while creating an Account with special characters in the name it was crashing the application. So this was a bug having High Priority and High Severity.

Justification: Priority of the Bug was high because it was application crash and user was losing the data which he entered while creating the account.

Severity of the Bug was high because it was application crash.

Low Priority High Severity

In our application while creating more than 100 Contacts for the given account it was crashing the application. So this was a bug having Low Priority and High Severity.

Justification: Priority of the bug was Low as the chances of creating contacts more than 100 for the given account by business was very less.

Severity of the bug was high as it was application crash.



Low Priority Low Severity

There was spelling mistake in our help file of the application. So this was a bug having low priority and low severity.

Justification: Priority of the bug was low as the chances of accessing that help file was less.

Severity of the bug was low as it was not affecting any functionality.

Medium Priority Medium Severity

In our application we have Account Profile Report which was giving us Revenue related information for the given Subsidiary, Date and Products filter. But for the selected date it was showing wrong revenue. So it was a bug having Medium Priority and Medium Severity.

Justification: Priority and severity of the bug was Medium because it was affecting the main functionality.

63. Who Assign the Severity to the defect and who assigns the Priority to that Defect?

Normally Tester Assign the Severity to the defect and Project Owner assigns the Priority to that defect. But In our company we only assign the Priority.

64. You have logged a defect but it is not reproducible to the developer, please specify the reason.

The Reason may be...

- the reproducible steps are not clear
- the role of the developer on that application may be different than the tester e.g. developer may have guest user role and tester may test it with system administrator
- some of the services may be down while testing which causes the error on test environment
- Environmental issue e.g. the environment on which user is testing may be differing than where developer is trying to reproduce the defects.
- Some other software in the test environment may create a problem to our testing application which may not be the case with developer machine
- Some of the sql jobs may failed in the test environment which causes a problem to test environment but that may not be the case with the dev environment.
- 65. What if developer does not agree with the defect what you will do? Or if there is a dispute between QA & Developer regarding defect how will you justify this is a defect?



Whenever we log a defect first it gets assigned to a Triage. In Triage Meeting we all including Dev,Test & Analyst comes together and discussed on the logged issues. So if developer says this is not a bug then we take the confirmation from the analyst, as he is like a business for us. If analyst says it's not an issue then we assign it to a respective tester. If Analyst says it's a bug then dev have to accept this. They don't have any choice.

66. If today we have the release and the end of testing we found one bug which crashes the application then should we Release it or not?

If the application is crashing then it's a S1P1 issue and we cannot give the test signoff unless that S1P1 bug resolved. So here we need to postpone the release.

67. What is the Format of Bug Report?

Bug Report is a report which we send daily to our managers.

O Bug Report:

Total Bugs Logged	Proposed Bugs	Active Bugs	Re-Opened Bugs	Resolved Bugs	Closed Bugs
43	10	1	1	2	29

68. What is an issue/Defect/Bug? Or what is mean by Defect or Bug?

Error: If the Expected Output is not matching with the Actual Output then it's an Error.

Bug: If the error is found during testing phase then we called it as a Bug.

Defect: If the error is found by customer after release of the application then we called it as a defect. **Issue**: If we are expected something from the application and if we are not getting that then we called it as an issue.

E.g. when user runs a report he is expecting to see some data, but he is not able to get any data. He then called it as an Issue as the user is not sure that whether this is a defect or not?

69. What is the difference between Metric and Matrix? Or How to measure the Quality? Or what are matrices? What are the different types of matrices? Or Which type of Metrics a project can hold and you are aware of that?

Metrics is a Measurement, which is used to measure the Software Quality, Product Quality, Process Quality etc.

How we can measure the Software Quality/Product Quality?

- Customer Satisfaction
- Number of Issues logged by the customer

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eJagruti Pune

- Fix Backlog
- MTTF and MTBF i.e. mean Time to Failure and Mean Time between Failures.

How we can measure the Process Quality Metrics?

- Review Process
- TQI i.e. Total Quality Index
- WLB i.e. Work Life Balance of the Employee working on that project.
- Knowledge Level of each and every individual.
 Different types of metrics commonly used in our projects are
 - Schedule Variance = ((Actual Duration Planned Duration)/Planned Duration)*100
 - Effort Variance = ((Actual Effort Planned Effort)/planned effort) *100
 - Defects logged vs projects
 - Tc's written by each tester
 - Number of defects against priority
 - Number of defects against severity etc.

By using **Matrix** we will present the data in a form of Rows and Column. e.g.

Total Bugs Logged	Proposed Bugs	Active Bugs	Re-Opened Bugs	Resolved Bugs	Closed Bugs
43	0	4	0	10	29

70. What is defect matrix?

Defect Matrix is used to find out the number of defects we logged/Fixed

- As per severity
- As per priority
- As per Tester



- As per Functionality
- As per Requirement etc.

71. If developer rejects the bug then what should you do? Give the 5 reason of defect rejection?

If you found bug and developer said that this bug is not reproducible at his place then what you will do?

If Developer rejects a bug and if it's really a bug I will attached the references of FSD and error snapshot which will give him correct understanding of that bug.

If he still doesn't agree on that I will arrange a live meeting with him and reproduced this issue in front of him.

If still he don't agree on that and saying this is the problem with your environment then I will escalate it to my Manager.

Developer can rejects Issues

- 1. If it is an Environmental issue.
- 2. If the functionality is out of scope.
- 3. If the logged defect is as per design spec.
- 4. If the logged defect is unable to reproduce
- 5. If the logged defect is not able to fix due to technical limitation
- 6. If the logged defect is postponed till next release

72. Write a bug report on following scenario

There are 3 buttons. First one is for fan; second one is for bulb, 3rd for socket.

When first button is pressed fan start, but when 2 and 3 button is pressed nothing happened. Bug Report is given below:

Title: Functionality of the 2 & 3 button is not correct

Severity: High
Priority: High
State: Proposed
Reason: New
Found in Build #: 1
Fixed in Build:

Bug Id: XXX



Tested By: Disha dave Assigned To: Dev123

Logged On: 12/12/12 Thursday

Description:

- 1. Launch the Application
- 2. You will see 3 buttons on the Home page
- 3. Click on button 2
- 4. Check whether bulb is on or off.
- 5. Now Insert tester inside the socket
- 6. Click on button 3
- Check whether LED of the Tester is On or Off
 Expected Result: After clicking on button 2, bulb should start and after clicking on button 3, it should glow the Tester LED.

Actual Result: Here after clicking on button 2 & 3 bulb is not getting On and Led is not glowing on.

73. What are the different types of Bugs we normally see in any of the Project?

Bugs related to functionality

Bugs related to missing requirement

Bugs in the FSD/BRD

Usability related bugs

Bugs related to performance e.g. Application is very slow

Bugs occurred at the boundary value

Bugs in the developed code etc.

74. What are the contents in defect reporting? or What are different field in your bug defect life cycle?

Contents in defect tracking tools are

- Title of the Bug
- Severity
- Priority
- Found & Fixed in Build
- Description of the Bug
- Attachment



- State
- Reason
- Created By
- Creation Date etc.
- Application Name

75. If you found bug then how you will conclude that this is bug?

When I found a bug first I will try to reproduce it on my machine 2 or 3 times. Then I will cross verify the same issue on different machines having same drop. At the same time I will confirm it by cross verifying the Functional Specification Document.

76. If you found any bug then what is your next step?

Once I found a bug then I will first ensure that whether it's a really bug or not? And at the same time I will ensure that has any one already logged it or not? Then I will log that issue in DTT.

77. Which Defect Tracking Tool you are using?

We are using Bug Tracker 2.9.8

78. How you decide severity and priority?

- **S1** is assigned if the bug will cause a system crash or data loss.
- **S2** is assigned if the bug will cause major functionality or other severe problems.
- **S3** is assigned if the bug will cause minor functionality problems.
- **S4** is assigned if the bug is the cause of unclear wording or error messages in low visibility fields.
- ✓ Priority 1 Crash, Data Loss, Unrecoverable Error, or Ship Stopping issue.
- ✓ Priority 2 Critical issue. May or may not be critical for release, but is a severe problem.
- ✓ Priority 3 Minor issue, affects less than 5% of users, edge/corner case. A workaround may exist.
 - 79. If you have login window, In that 1st user enter correct login name and password (Which is 6 characters each) but still he got some error message And 2nd user enters correct password and login name (25 characters each) in login name and password and got the same error message. Tell me severity and priority of this bug. 1 is min and 5 are max.

Severity of this bug is S2 and Priority is P1. As user is not able to test any of the functionality due to login failure this issue is of having Priority P1. And as the major functionality is failure but it's not an application crash the severity of the bug is S2.



80. Tell me the latest bug which you found recently? Or Client appreciations for any bugs? Interesting bugs you logged

In our application on Home Page we are showing the number of vendors deleted. But when I verified at the back end it was actually not deleted but was marked for deletion. So I logged this issue having S3 and Priority P2.

81. Can duplicate bug reassign?

Ideally we should not reassign the duplicate bug. But if you reassign it nothing will happen, only dev will see 2 similar bugs in his bucket and reject one of them.

82. How to calculate defect density?

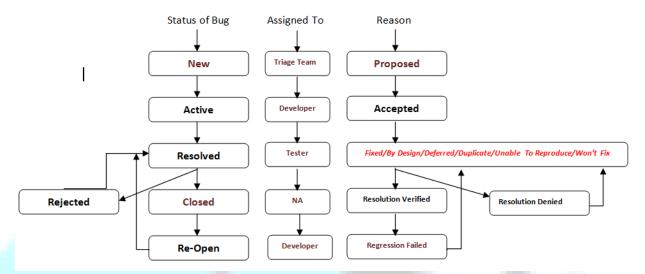
Here in our project we are calculating defect density by finding number of defects we logged for a given functionality or requirement. From dev point of view we may find out number of defects we logged for 1000 lines of code or number of defects we logged for a given component or module.

83. If there is no company Logo on web page what will be the Severity and Priority for this? Severity of this bug is S3 and Priority of the Bug is P1. As it is not affecting the functionality the severity of the bug is S3 but Company Logo is a like a Brand symbol for that company so the Priority of the bug is P1.

84. Draw and explain Bug Life Cycle?







85. What is risk? Which type of risk in requirement phase? What are the types of risk?

Risk is nothing but an uncertain event or condition that if it occurs, has a positive or negative effect on project objectives.

Risk Due to Complexity of the Process

Mitigation

The project should be broken down into major modules. So that the complexity can be overcome.

Requirement Specification should be clear and unambiguous.

Risk due to unavailability of resource person having command on the technology to be used?

Mitigation:

This Risk can only be covered by searching the right person having the command on the technology to be used.

Risk due to lack of skills / competency of the resource person on the technology to be used?

Mitigation:

Skills and competency of the person should be high. Or Proper KT (Knowledge Transfer) or training plan should be in place.

Risk due to Team Conflicts.

Mitigation:



- 1. Different HRM techniques should be practiced to develop harmony among the team members.
- 2. Project team may be formulated in such a way that it should avoid the Team Conflicts.

Risk due to change in requirements (Minor or Major)? Mitigation:

- We have to follow a proper Process to gather the requirement from the customer.
- 2. Feasibility of the Changed requirement should be measure.
- 3. Impact Analysis should be measure
- 4. Agile methodology should follow.
- Risk due to lack of client/ user/ Customer knowledge? Mitigation:
 - 1. If the client is having lack of knowledge in the system then we have build a proper support team which helps customer to solve their issues.
 - 2. Client should be informed properly about the technology and the system.
- Risk expected due to flexibility or non flexibility of schedule?
 Mitigation:

To make Schedule in such a way that there should be flexible gaps in each phase so that if some phase is detract from the schedule then this gap may not let the other phase affect.

Risk expected due to low level financial justification?

Mitigation:

Benefit Cost Analysis or some other Cost and benefit analysis technique should be used to calculate the benefits from the project.

Risk expected due to ignorance of non-functional requirements?
Mitigation:

All the functional as well as non functional requirements should be captured carefully.

- Risks due to complex design of software?
 - Mitigation:
 - 1. Complex Algorithms should be broken down into small chunks.
 - 2. Flow Charts of the algorithms should be defined and mapped carefully.
- Risk due to un-use of reusable components?

Mitigation:

Selection of reusable Components should be made carefully.

Risks due to less expertise on reusable components? Mitigation:

While selecting the reusable component, it should be noted carefully that it is compatible with the other modules used in project and it might not created other ambiguities during development.

Risk due to less command on programming language and tools to be used?



Mitigation:

- 1. Should choose the language on which the expertise is more.
- 2. Should take proper help from some senior persons.
- Risks due to missing comments?

Mitigation:

Proper comments should be added during function, classes and other major modules.

Risk due to testing?

Mitigation:

- 1. Software should be tested according to the complexity and nature of project.
- 2. This testing level should be defined at the Requirement specification time.
- Risk due to Infrastructure/Hardware/ Software used? Mitigation:

By understanding proper customer needs we have to select the proper Hardware and Software?

86. Tell me the difference between Risk Mitigation and Risk-Contingency?

Risk: *Risk* is nothing but *possibility of uncertainty*. Which may put *something/someone* in danger?

Risk Contingency: Possibility that something may happen related to risk.

Risk Mitigation: How you are overcoming the risk?

For example: If the employee allocated to particular project left the company then it's a risk to that Project. So this is risk contingency.

But we have already kept some of the buffer resource which may replace that employee, this is risk mitigation.

87. What is Risk Analysis?

Risk Analysis is a process of Identification of risk under different conditions, finding out cause-&effect relationship between probable happenings. How we can reduce that risk along with
privative measures.

88. What is Usability Testing?

Usability testing is nothing but to test how user friendly the software is?

In usability testing we have targeted end user or customer the techniques commonly used for usability testing is

- User Interviews
- Survey
- Video recording of user session etc.

89. What is GUI Testing?



GUI Testing is nothing but testing the product or application that uses Graphical User Interface, to ensure that it meets the customer requirement.

90. What is Security Testing?

Security Testing is nothing but to test how well the system protects against unauthorized internal and external access, willful damage etc. In security testing we are finding out the vulnerabilities of the application.

91. What is Stress Testing?

Stress Testing is nothing but to test the software beyond its limit.

Stress Testing are of two types

- By Keeping the H/W resources constant and increasing the load of the user.
- By keeping the load of the user constant and gradually decreasing the H/W resources.

E.g. to test the software using Low Ram, Low Hard Disk, Low CPU etc.

92. What is Load Testing?

Load Testing is nothing but to test the software at its limit. Load testing is mainly performed to find out how much maximum user application can handle without losing the performance.

93. What is Soak Testing or Endurance Testing?

To Test the Software at its limit for a longer period of time e.g. for more than 2 days.

The main purpose of Endurance Testing to check the behavior of application if it is under heavy load for a longer period of time.

94. What is the difference between Load and Stress Testing?

In Load testing we are testing the software at its maximum limit. The basic purpose of Load testing to find out how many maximum user applications can handle without losing the performance.

But in Stress Testing we are testing the software beyond its limit to check the behavior of application when it crosses the maximum limit of user.

95. What is ad-hoc testing?

Ad-hoc means we know our final target but don't know how to reach to that target. So Ad-hoc testing is nothing but to test the application with the intention of finding the bugs. This type of testing is carried out without any test cases or test plan.

96. What is Random Testing?



Random Testing is nothing but testing the Application Randomly without following any specific Application Flow.

97. Tell me the difference between functional and system testing?

In Functional Testing we are testing the functionality of the application while in system testing we are testing the functional as well as non functional aspects i.e. Security, Performance, Installation, Up gradation, etc of the application along with functionality.

98. What is mean by Ad-hoc testing and exploratory testing? Or what is the difference between Ad-hoc testing and Smoke testing?

Exploratory testing is nothing but testing the application without having requirements. So here in Exploratory testing first we explore the application and then test.

Ad-hoc means we know our final target but don't know how to reach to that target. So Ad-hoc testing is nothing but to test the application with the intention of finding the bugs. This type of testing is carried out without any test cases or test plan.

Smoke Testing is nothing but testing the main-main functionality of the application to ensure that nothing has been affected and we can go for further exhaustive testing.

99. What is Requirement Understanding Document (RUD)?

When analyst gathers the requirement from the customer, he prepares a document where he puts all the requirements told by the customer, we called this document as Requirement Understanding document. By going through this document customer gets the confidence whether analyst properly understood his requirement or not?

- 100. You received 3 builds B1, B2 and B3, on which build you will do regression Testing?

 I will perform regression testing on Build B2 and B3 after finishing testing & logging all the defects on Build B1.
- 101.Explain the testing cycle you will follow if you have 100 test cases in the first cycle... 25 failed and 75 passed. How many test cases you will pick for the second cycle?

I will pick all the 100 Test Cases in second cycle, to ensure that there should not be any side effect of fixing the bugs on other functionality.

102. Regression: what is it? How will u run all regression suit if u have less time?

Regression testing is nothing to test the known set of test cases to ensure that nothing has been affected either due to bug fix or addition of any new enhancement. Even if we have less time we need to execute complete regression suite. So we can achieve this by staying late nights, coming over weekends etc.



103. What is Smoke Testing?

Smoke Testing is nothing but testing the main-main functionality of the application to ensure that nothing has been affected and we can go for further exhaustive testing.

104. What is Exploratory Testing?

Exploratory testing is nothing but testing the application without having requirements. So here in Exploratory testing first we explore the application and then test.

Generally in a Big Bang Model or Code & Fix model this testing is commonly used as they don't have any software specification.

Here we treat the software as the specification itself.

105. How will you test the application without having any requirements?

We will perform *exploratory testing*. Means we will first explore that application and then test. We can explore that application by taking the help of superiors who is having knowledge about that application, or by going to help files of that application or by understanding the domain for which this product belongs etc.

106. Have you got any chance to work on Ad-hoc testing?

Yes. In fact for every drop we are performing Ad-hoc testing to find out the bugs which we cannot find out by executing Test Cases.

107. Did you get any bug which was not in the requirement or in ad-hoc testing (which was not in the test case)? Or did you get any bug in Ad-hoc testing? Explain.

Yes. In our application on the home page first we were showing all the accounts but later on it was creating a performance issue when number of accounts was more than 100. Then I logged a bug saying that paging functionality and search functionality should be provided to navigate to and to find out the specific account. Earlier it was not mentioned in the Requirement documents.

Or

In our application on the home page we are showing the list of vendor's deleted information. But in fact those are not the vendors deleted but only marked for deletion. Because if the vendor information is deleted from the DB then it will not present in the DB.

108. Explain memory leak with example?

Memory leak is nothing but unintentional consumptions of memory. Most of the Application when we closed gets invisible from the desktop running in the backend.



Or

Unintentional memory consumption by a computer program where the program fails to release Memory when no longer needed.

109. You have only 4 line of requirements how you will test it?

I will try to split that requirement into functionality first. Then I will try to create user scenarios and write down test cases on that and will test it.

110. What is the difference between scripting and programming languages?

Scripting language converts your code step by step from high level language into machine level language run time and executes them. It means it will interpret your code run time. But Programming language first converts your complete high level language i.e. code into machine level language (i.e. created an exe) and then execute. It means it will compile your code first and then execute.

111. What is the significance of Scripting Language?

No need to compile your code. It will interpret our code runtime and execute.

112. What is Web Testing? What is the Thing we need to consider for Testing Web Based Applications?

Web Testing is nothing but testing the Web Based Application.

We need to consider

- Functionality
- Usability
- Performance
- Security
- Server Side Interface
- Client Side Compatibility while performing web based application.
 In Functionality

113. What is integration testing? Main purpose of integration testing? Have you written integration Test cases?

Integration Testing is nothing but testing the interface between different components or modules. Merging of all the components/modules will create our application. If we find one of the issue while testing it is very difficult to find out whether exactly the problem is? As all the modules are working and we have already tested them during unit testing. Only



Integration testing will help you in this case because we are testing the interface between two different modules.

In my last project we had an integration of Sales Data store in different Data Base Server with our CRM Applications. In this project we were first pulling the required information from our Sales DB server to Staging DB Server and From Staging DB Server to our CRM Server. So I wrote the Integration Test cases first to test whether required data is properly coming from Sales DB to staging DB and then from Staging DB to CRM DB.

114. What is difference between Integration and Incremental Integration testing?

Integration Testing is nothing but testing the interface between different components or modules.

After performing integration testing of all the modules if any new functionality is added into that application then we can integrate it with our application and perform the integration testing called as incremental integration testing.

In system testing we are testing the functional as well as non functional aspects i.e.

Security, Performance, Installation, Up gradation, etc of the application.

While in System Integration Testing we perform the integration of existing system with another system. E.g. Integration of two or more systems with each other.

116. What is purpose of stub and driver?

While performing Integration Testing we need stub and driver. Basically stub is a called function and driver is a calling function. Integration testing can be performed by two approaches

- 1. Top Down Approach
- 2. Bottom up approach

In Top down Approach we are replacing all the lower modules by a dummy function which accepts the output from the first module.

In Bottom up Approach we are replacing all the upper modules by a dummy function which passed the required input to the lower modules.

- 117. What is Traceability matrix? What are Forward Traceability and Reverse Traceability?

 Traceability Matrix is used to mapped your
 - Requirement with Test Cases or
 - Functionality with Test Cases or



- Requirement with Defects or
- Functionality with Defects or

Forward Traceability matrix helps you to provide information about how many test cases you have written for a given requirement/functionality. Or how many bugs we have logged for a given requirement/functionality.

Reverse Traceability matrix helps you to provide information about; this given test case belongs to which requirement/functionality. Or this logged bug belongs to which requirement/functionality.

118. What is traceability Matrix? And when and who is preparing it?

Traceability Matrix is used to mapped your

- Requirement with Test Cases or
- Functionality with Test Cases or
- Requirement with Defects or
- Functionality with Defects or

When we start writing down test cases for a given functionality or requirement, test lead prepares this requirement traceability matrix.

119. You find a bug and the developer says "It's not possible" what do u do?

I'll discuss with him under what conditions (working environment) the bug was produced. I'll provide him with more details and the snapshot of the bug. If still he will not convinced I will escalate that issue to my Manager or Lead.

120. What will be your approach - if manager ask you to finish 100 test cases in a single day with only one resource available?

First I will try to find out which functionality those 100 Test cases is going to over. Then I will first test the different scenario related to that functionality. Which gives me the confidence whether functionality is working as expected or not? Then I will try to execute all the High Priority test cases first then Medium Priority test cases etc. I will sit late night to finish all those test cases.

121. How you convince your manager for the low productivity of the resource?

I will recollect all the mail which I sent to that resource for not completing the work assigned to him within the given time line. I will recollect all the client mails about the non performance of that resource. I will showcase the list of error he did in his work. I will bring it in light the number of bugs found by the customer during UAT for the functionality tested by him.



122. What are Time tracking tools?

To track the daily efforts of team members we are using time tracking tools. Where in all the employee is filling their day to day task along with hours. Which help us to find out the effort variance? We are using our own in house developed Time Tracking tools.

- 123. How do you track the daily efforts of your team and your own?
 - We have a time tracking tool where in all the employee is filling their day to day task along with hours. Which help us to find out the effort variance?
- 124. What about client Interaction? How frequently you are doing it?

Yes, we have a client meeting on every Friday, where in we discussed about the performed activities this week and planned activity for the coming week.

- 125. Tell me who is responsible for Unit Testing either developer or tester?
 - For any testing related activity Tester is responsible. So ideally speaking Tester is responsible for unit testing. But practically speaking most of the testers are not aware of development languages so developer is performing unit testing.
- 126. What are the challenges that you faced in your project? Or What are the difficulties You faced in your project.
 - A. The biggest challenge we faced in our current project is to satisfy the customer, as his expectation is too high from all of us. E.g. Customer is expecting to execute more than 50 test cases per day per person. Which is quite difficult as our functionality is very complex.
 - B. The other challenges we faced is that requirements are changing every often and then without any prior notice or discussion.
 - C. We are lagging behind the schedule, so every one of us has to stretch hard. So here effort estimation is not correct.
 - D. We don't have any defined process. This creates a lot of problem. E.g. Deployment doc is not clear and we are not in sync with the dev people. So in case of any issue while deploying the drops we have to struggle a lot.
 - E. As a new Team Member for this project, I am facing problem to understand the process, getting domain knowledge, understanding the functionality which is dependent on other functionality. As we don't have proper Training plan in place.
- 127. What is compatibility testing? How you will perform this testing? What is forward compatibility and reverse compatibility?

Compatibility testing is nothing but to check that whether software interacts/shares the information correctly with other software. In short we are checking whether our software is compatible with other software.



For Example:

- Testing whether IE6.0 is compatible with Win Vista or Win 7 OS.
- Testing whether SQL Server 2000 is compatible with Win Server 2008
- Testing whether Visual Studio 2010 is compatible with WinXP.
- Cutting a text from your web page and pasting it on your word document. Etc.

In Backward Compatibility whatever the changes you made in the new version of the application should work with all the previous version of that application.

In Forward Compatibility whatever the changes you made in the Previous Version should work fine with all newer version of that application.

For example: Scripts created in QTP Version 6.5 or 8.0 are running on QTP Version 10.0 this is forward compatibility. But Scripts developed on QTP 10.0 cannot be run on QTP 6.5 or 8.0; means backward compatibility is not supported.

128. I have to test an application with 1000 users without any automation tool and time limit is also less. Is this possible? How?

It totally depends on the functionality we are going to test. For example if I want to create a Account with 1000 different user, then through UI it is very difficult but I can test this either through back end by running a sql query or at the API level where we are directly passing the required parameter to that function. Here we can take help of scripting language or excel sheet to generate 1000 different users.

129. Tell me how you will perform stress testing of bike?

Stress Testing is nothing but testing the application beyond its limit. So in order to test the bike for Stress Testing

- Try to run it at the speed of 10 KM/HR in 4th gear
- Try to run it at its highest speed when bike is in 1st gear
- Try to run it on a very steep road.
- Try to run it on a very rocky road where in we can test the shock ups and tyres of the bike.
- Try to run a bike at highest speed when tyre pressure is very low
- Try to run when there is no engine oil present etc.
- Try to run a bike on 1st gear from a very sloppy area here we can check the performance of the gear.



130. What are the considerations while writing down the test cases?

Before writing down the test cases one should fully understood the functionality, he should be aware that what are we going to test e.g. are we going to test security, functionality, or usability etc. He should be aware of the different test scenario, he should be aware of different test case writing techniques, he should refer the FSD.

131. Tell me the Difference between client server and windows based application? Or Tell me the difference between Desktop and Web Based Application?

Table 3.0. Difference between client-server and Web technology

Wired Client–Server Technology	Web-Based Technology
Number of clients is predictable or known (normally less than 100 clients)	Number of clients is difficult to predict (millions of clients)
Client and server are the entities to be tested	Client, server, and network are the entities to be tested
Both server and client locations are fixed and known to the user	Server location is certain; client locations are uncertain
Designed and implemented on intranet environment	Designed and implemented for Internet environment
Server-to-server interaction is prohibited	Server-to-server interaction is normal
Low multimedia type of data transaction	Rich multimedia type of data transaction

132. Tell me the Difference between 2 tier and n tier architecture?

133. What is Sanity Testing?

Once a new build is obtained with minor revisions, instead of doing a through regression, sanity is performed so as to ensure that build has indeed rectified the issues and no further issue has been introduced by the fixes. It's generally a subset of regression testing and a group of test cases are executed that are related with the changes made to the app.

134. Tell me the difference between Smoke & Sanity Testing? Smoke Test:

To Test the main main functionality of the application to ensure that nothing has been affected and we can go for further exhaustive testing.

Smoke testing can be done for testing the stability of any interim build.



Smoke testing can be executed for platform qualification tests.

Sanity testing:

Once a new build is obtained with minor revisions, instead of doing a through regression, sanity is performed so as to ensure that build has indeed rectified the issues and no further issue has been introduced by the fixes. It's generally a subset of regression testing and a group of test cases are executed that are related with the changes made to the app.

135. What is mean by cookies? How to work cookies? Which protocol used for cookies?

Cookie is small information stored in text file on user's hard drive by web server. This information is later used by web browser to retrieve information from that machine. Generally cookie contains personalized user data or information that is used to communicate between different web pages.

HTTP Protocol is used for cookies.

136. What is an orthogonal array?

Orthogonal array testing is a testing technique where we test the application for a given set of input variable which do not interact with each other.

137. What is Pair wise Testing?

In Pair Wise Testing we are writing down list of test cases for a given set of input variables which do not interact with each other.

For a simple example of pair wise testing, consider the system in Figure 2. System S has three input variables X, Y, and Z. Assume that set D, a set of test data values, has been selected for each of the input variables such that $D(X) = \{1, 2\}$; $D(Y) = \{0, R\}$; and $D(Z) = \{5, 6\}$.



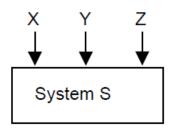


Figure 2. System S with 3 input variables

The total number of possible test cases is $2\times2\times2=8$ test cases. The pair wise test set has a size of only 4 test cases and is shown in Table 1.

Table 1: Pairwise test cases for System S

Test ID	Input X	Input Y	Input Z
TC_1	1	Q	5
TC_2	1	R	6
TC ₃	2	Q	6
TC ₄	2	R	5

In this example, the pair wise test set of size 4 is a 50% reduction from the full combinatorial test set of size 8.

138. If you have performed retesting on one defect and if that defect is still exist, what will be the status of that defect after retesting?

Status: Rejected Reason: Resolution Denied.

- 139. What type of testing we called for testing with multiple data?

 Data Driven Testing.
- 140. If there are nine balls and you want to find one heavy ball out off nine, then how many attempt you need to find heavy ball?
 2
- 141. What is White Box and Black Box testing?

White Box and Black Box Testing are the two testing Methodologies.

In White Box Testing we are testing application based on the knowledge of internal logic of application code.



In Black Box Testing we are testing the application based on the requirement and functionality. It is not based on any knowledge of internal design or code.

142. How do you decide what to test in the Project?

First we have a client meeting where we try to understand what he wants from us. If possible we suggest from our end if he misses something. And then we documented all this things and in test strategy we decide what kind of testing we need to perform by considering customer requirement.

143. What is Test Strategy?

Test Strategy is nothing but the approach we are going to use to test the entire software and in each phase. It means what kind of testing we are going to perform during each phase of software development life cycle.

In Test Strategy first we will discussed about which Testing Methodology we are going to use either Black Box or White Box or both. If we are going to use Black Box Technique Methodology then what are the different type of testing we need to perform e.g. Functional, Security, Usability, Performance etc. If we are going to use White Box Technique then what are the things we are going to cover in that e.g. Statement Coverage, Loop Coverage, and Branch Coverage etc.

If we planned to use both then for which Requirement we should go for Black Box and for which requirement we should go for White Box. If white Box technique we are using then which tool should we use? Are we planning to do Automation? If yes then which Automation Tool are we going to use?

On Which Test Environment (including H/W and S/W details) we are going to perform black box testing? What are the Test Data we are using to test the software? What should be the Roles & Responsibilities? What about the Project Schedule?

144. Explain in detail your Testing Process / STLC? Or what is your company Process?

First we are getting BRD from the customer, we try to understand the Requirement and in case of problem getting the clarification from the analyst. Then we are getting FSD, now here we are going to review that FSD and finding the gaps if any in between BRD and FSD. Then we start writing down the test cases for the assigned functionalities and our Test Lead starts writing down the Test Plan. Then we perform the Peer Review and Formal Review of test cases performed by our Test Lead. Based on the review comments we are updating our test cases in Test Case Management Tool. Then we perform the Requirement Traceability Matrix by mapping the Test Cases with the Functionality and Requirement. Then based on the Drop



Schedule we are getting a Drop for testing, we then start executing the test cases on that drop and logging the defects in DTT. After executing all the test cases we perform ad-hoc and random testing to find out an issue which we cannot get by executing the test cases. Then in the next drop we are verifying the defects and perform regression testing again along with logging the new defects.

After getting Code Complete Drop we perform final round of testing and declares the Test Complete from our end. Here we are ensuring that no S1 P1 defects should be in Active or Proposed State. After that we put that code bits into the preproduction environment for UAT and provide the support to the end user. Once we get the UAT sign off from the business we are putting it into production environment and perform the final round of smoke test to ensure that all the functionalities whether working fine or not?

145. What is difference between in inspection, walkthrough, Peer Review and Formal Review?

Peer Review: In peer review the code written by one developer or the test cases written by one tester will be reviewed by another developer/tester. It is also called as buddy review. The main purpose of this review is to find out where all the coding standards/Test Cases writing standards follows or not. To find out early defect peer review is important.

Walkthrough: Is a informal type of review where the code written by the developer or Test Cases written by the tester is getting reviewed by a group of 5 to 6 peoples. The owner of the code or Test Cases will present his code/Test Cases and explain them line by line.

The Main purpose of walkthrough is to find out the design related issue and any missing things.

Inspection/Formal Review: Is a most formal type of review. A group of 3 to 8 including a moderator, reader, and a recorder to take notes. The main purpose is to find problems and see what's missing, not to fix anything. Participant should be prepares for such type of meetings by reading the document sent by the presenter.

146. Who is not present in formal review? a.)Facilitator

- b.)Auditor
- c.)Author
- c.jAutiloi

d.)Recorder



147. What should be the Goal of Software Tester?

The Goal of a Software Tester should be to find the bug, find them as early as possible and make sure they get fixed. At the same time ensuring that software application meets the entire requirement given in the BRD.

148.

149. Different between Functional and Non Functional Testing?

In Functional Testing we are testing the functionality of the application.

E.g. Regression Testing, System Testing, Smoke Testing, Sanity Testing etc are all belongs to Functional Testing.

In Non Functional Testing we are testing the application against non functional requirements.

- Baseline testing
- Compatibility testing
- Compliance testing
- Documentation testing
- Endurance testing
- Load testing
- Localization testing and Internationalization testing
- Performance testing
- Resilience testing
- Security testing
- Scalability testing
- Stress testing
- Usability testing
- Volume testing

150. Tell me the difference between incremental Testing vs Big Bang Testing?

Normally software is developed in multiple pieces called as Module. In Incremental Testing we are testing the software pieces by pieces once all the individual modules are working fine a few of them tested together. Testing combination of pieces of product is called integration testing. And in Big Bang Testing we are testing the application as a whole in one shot.



If two modules are working fine independently and after integrating if some error occurs then certainly the problem is in the interface between them. Another benefit of incremental testing is that programmer focuses on each module individually, which probably yields better test coverage.

151. What are the things you are going to consider in Security Testing? Or tell me your approach for security testing? Or How will you check the security of Web Based Application?

I will test following things as a part of Security Testing

- 1. Password cracking
- 2. URL manipulation through HTTP GET methods
- 3. SQL Injections
- 4. Cross Site Scripting (XSS)
- 5. Web Site Cookie Testing
- 6. Session of the Application
- 7. Spoofing
- 152. What is the difference between client-server testing and web based testing and what are things that we need to test in such applications?

In Desktop Application the Remote Machine is acting as a Server and the User machine are acting as a client. While in Web Based Application, Browser acts as client and the machine where application installed acts as a Application Server and the machine where DB installed acts as a DB Server.

CLIENT / SERVER TESTING

This type of testing usually done for 2 tier applications (usually developed for LAN) Here we will be having front-end and backend.

The application launched on front-end will be having forms and reports which will be monitoring and manipulating data

E.g: applications developed in VB, VC++, Core Java, C, C++, D2K, PowerBuilder etc., The backend for these applications would be MS Access, SQL Server, Oracle, Sybase, Mysql, Quadbase

The tests performed on these types of applications would be

- User interface testing
- Manual support testing
- Functionality testing
- Compatibility testing & configuration testing
- Intersystem testing



WEB TESTING

This is done for 3 tier applications (developed for Internet / intranet / xtranet) Here we will be having Browser, web server and DB server.

The applications accessible in browser would be developed in HTML, DHTML, XML, JavaScript etc. (We can monitor through these applications)

Applications for the web server would be developed in Java, ASP, JSP, VBScript, JavaScript, Perl, Cold Fusion, PHP etc. (All the manipulations are done on the web server with the help of these programs developed)

The DBserver would be having oracle, sql server, sybase, mysql etc. (All data is stored in the database available on the DB server)

The tests performed on these types of applications would be

- User interface testing
- Functionality testing
- Security testing
- Browser compatibility testing
- Load / stress testing
- Interoperability testing/intersystem testing
- Storage and data volume testing

153. What is the difference between Static and Dynamic Testing?

Static testing is a form of software testing where the software isn't actually used.	In dynamic testing the software must actually be compiled and run.
Static testing gives you comprehensive diagnostics for Your code. for example, warns you about: • syntax errors • code that will be hard to maintain • code that will be hard to test • code that does not conform to your coding standards • non-portable usage	It finds bugs only in parts of the code that are actually executed.



ANSI violations	
Static testing is about	Dynamic testing is about
prevention of defects	detection of defects.
Static Testing is a	Dynamic Testing is a
Verification Process.	Validation Process.

154. What is BVT/BAT?

Build Verification test is a set of tests run on every new build to verify that build is **testable** before it is released to test team for **further exhaustive testing**. These test cases are core functionality test cases that ensure application is stable and can be tested thoroughly. Typically BVT process is automated. If BVT fails that build is again get assigned to developer for fix.

BVT is also called smoke testing or build acceptance testing (BAT)

New Build is checked mainly for two things:

- Build validation
- Build acceptance

155. What is SRS,FS,BRS?

SRS: Software Requirement Specification

FS: Functional Specific

BRS: Business Requirement Specification

156. What is Unit Testing? Or is unit testing a type of white box testing? Why?

In SDLC we divide the particular application in number of pieces or module. Testing the individual Pieces of the Application or Program is called Module Testing, Unit Testing or Element Testing. Unit testing is nothing but White Box Testing because it required detailed knowledge of the program code along with its logic and design.

157. What are different types of testing?

Functional Testing, Smoke Testing, Sanity Testing, Regression Testing, Retesting, System Testing, Integration Testing, Localization Testing, Performance Testing, Security Testing, Usability Testing, Up gradation testing, compatibility testing etc.

158. If I have web application which doesn't contain any functionality or any Images, links, validation field then what type of testing you will perform?

Here I will Test First

- Client Side Compatibility i.e. Compatibility Testing
- Server Side Interface i.e. using different App/Web Server
- Security



- Performance
- Usability

159. How will you perform field validations?

I will use Equivalence Class Partitioning and Boundary value analysis in order to perform field validations.

160. What is MS Excel macro?

If you perform a task repeatedly in Microsoft Excel, you can automate the task with a macro. A macro is a series of commands and functions that are stored in a Microsoft Visual Basic module and can be run whenever you need to perform the task

- 161. What kind of challenges you faced when monitoring the team members?
 - Attitude problems
 - Conflicts within the team members
 - Carrier aspirations are different than what kind of work they are doing now
 - No out of the box thinking
 - Frequent Follow up
- 162. When the defect is easier to fix?

If we found it in the Requirement Phase itself.

163. Do you know what our company does?

Yes. Depends on the company provide the details.

164. What is function decomposition?

Functional Decomposition is a process of splitting a function into different² parts in such a way that original function can be reconstructed from these parts.

The main advantage of functional decomposition is that we can get better insight into specific parts of that function. Those parts we can test thoroughly and easily.

165. What is VSTS?

It's Microsoft Tool, Visual Studio Team Foundation Server.

166. Where by VS having by clause

WHERE is used to apply filter conditions on the table columns

WHERE condition will get evaluated prior to the HAVING condition.

WHERE clause applies to individual rows

HAVING is used to apply the filters typically after the aggregations are done.

A HAVING clause is like a WHERE clause, but applies only to groups as a whole

167. Group by VS Order by?



Group by Divides a table into groups. It is used to group the rows Specifies the groups into which output rows are to be placed and, Order by specifies sort order for the result set eiter asc or desc

168. What is your future goal?

Short Term Goal:

For exp: 1 to 4 yrs: To become a Lead down the line 2 years.

For exp: 4+: To become a Manager down the line 2 years.

Long Term Goal: To become an entrepreneur down the line 10 yrs.

169. Rate yourself for a scale of 1 to 10 in WhiteBox Testing?

Tell 1/2/3+ if you have very less knowledge. 4/5/6+ if you have average knowledge. 7+ if you are expert in that.

170. If you have the table of 10 rows you want to get only 5 row how to do it

- a) Using sql server: Select Top 5 from from table
- b) Oracle Select * from table where rownum <=5

171. What is one to one, one to many and many to many Relationships in DB? Give example?

One to One Relationship: In 1 to 1 relationship, one primary record is associated with 1 related record.

For example: 1 Person has only 1 Pan Number. Or 1 student is associated with only 1 division.

One to Many Relationships: In 1 to many relationships, one primary record is associated with multiple related records.

For example: 1 Person has many Bank Accounts or 1 student is associated with multiple subjects. Or 1 Purchase order is associated with many line items.

Many to Many Relationships: In Many to Many Relationships, multiple records are associated with multiple related records.

For Example: Multiple Sales People are associated with multiple Accounts.

172. When should we go for Load Testing and when should we go for Volume Testing? If we want to test the application with certain amount of data then we should go for volume testing.



For example: How much maximum number of records SQL Server is able to process when number of user is hitting the sql query?

If you want to understand the behavior of the application under a specific expected load without losing the performance, then we should go for load testing.

For Example: How many users are able to perform certain set of operation without affecting the response of time of the application?

173. What is G11N Testing?

Globalization – G11N (Internationalization (i18N) + Localization (L10N))

174. What is I18n (where 18 stands for the number of letters between the first *i* and last *n* in *Internationalization*)**Testing?**

Internationalization is a process of designing and developing the software in such a way that it can be easily adapted to various languages and regions without modifying the code. The designed software is completely independent of any culture specific information.

I18N Testing is nothing but testing the internationalized software.

Externalizing of strings, graphics, icons, texts etc.

Selecting code page and defining code page conversions

Modifying all the text manipulation functions to be aware of the code page.

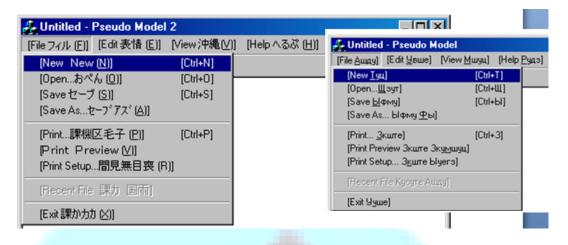
Changing the logic of all the formatting functions (Date, Time, Currency, Numeric, etc)
Changing the Collation /sorting functions

175. What is L10n Testing? Without any knowledge of that language how will you test it? Localization is nothing but to customize the global software for a specific environment.

Localization Testing is nothing but to test the customized application at its specific locale.

Basically we are performing the functionality testing on the localized application with the help of pseudo build. And we have linguistic expert to test the spelling mistake, their custom in the localized language.





176. You are working on a critical release, and we are going to release that product tomorrow and but you have your own personal problem in that case how will you handle such type of scenario?

Though I am critical release for that project, I have to have completed my task in any circumstances. What I will do, I will try to finish my personnel problem during first half and will come office a little late and stay till I finish my work else I will assign that ask to my family member and will come to the office and try to finish my task ASAP, as job is on top priority for me.

177. Can we do Load testing manually?
No.

178. Which data is saved in Cookies?

Normally following data are stored in cookies.

Site: Rediff.com Cookie name: RMID Name: RMID (Name of the cookie)

Content: 1d11c8ec44bf49e0... (Encrypted content)

Domain: .rediff.com

Path: / (Any path after the domain name)

Send For: Any type of connection

Expires: Thursday, December 31, 2020 11:59:59 PM

179. What is the use of Cookies?

To store the user information in his own machine. Which can be used later.



180. Where Cookies are saved?

When any web page application writes cookie it get saved in a text file on user hard disk drive. The path where the cookies get stored depends on the browser. Different browsers store cookie in different paths. E.g. Internet explorer store cookies on path "C:\Documents and Settings\Default User\Cookies"

Here the "Default User" can be replaced by the current user you logged in as. Like "Administrator", or user name like "Vijay" etc.

The cookie path can be easily found by navigating through the browser options. In Mozilla Firefox browser you can even see the cookies in browser options itself. Open the Mozila browser, click on Tools->Options->Privacy and then "Show cookies" button.

181. How cookies are deleted from system?

Go to that location where cookies are stored and delete manually. Or go to Tools>Internet Options>Browser History and delete all the cookies.

182. What is product vs project?

<u>Product</u>: Developing an application based on global market needs and requirements and no specific client.

Project: Developing a product based on the Client needs or requirements.

Project is something that converts an idea or design or a plan in to some concrete entity.

<u>E.g.</u> Construction of a new highway is a project; construction of a software is a project.

183. What is Alpha and Beta Testing?

Alpha and Beta Testing are the part of User Acceptance Testing.

alpha testing is carried out at developer side. The people who are having domain knowledge are working like an end customer for use to find out the issue during UAT. beta testing are carried out at customers end where actual customers are

performing the testing of the application.

184. What will be your action if there are 4 people in your team and are not good with each together still you want the people to work together to get your work done? Or How will you handle team conflicts?

- First I will try to understand their problem
- If the problem is personal then in the office they should not bring it.
- If the problem is related to career aspiration then I will give them assurance that
 I will work on that
- If the problem between them is related to attitude then I will delegate the work appropriately so that there should not be any conflicts.
- I will schedule a regular 1 on 1 with them to monitor the changes
- If needed I will arrange a skip level manager meetings.



185. When you get code (built) what is your 1st attitude? Tell me only in one sentence? To break it, in order to find more and more issues.

186. HTML VS XML?

HTML is a Hypertext Markup Language. It is a data presentation language. XML is an Extended Markup Language. It is a data describe language. I worked with HTML Version 4.0 and XML version 2.0

187. Explain Waterfall model?

Pros

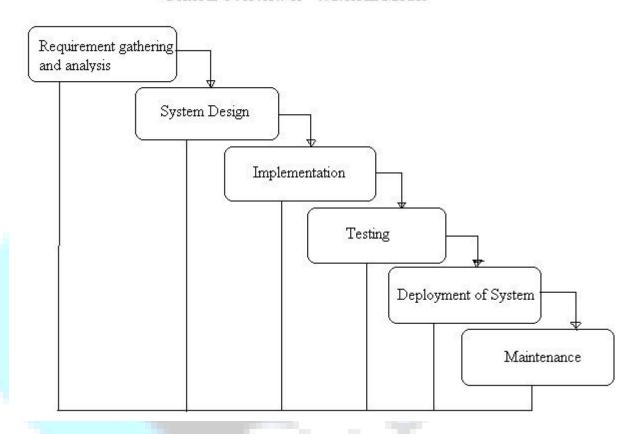
- It is the simplest software process model in terms of complexity and ease of implementation.
- This model is extremely easy to understand and therefore, is implemented at various project management levels and in a number of fields (not just software development).
- It employs a systematic, orthodox method of project development and delivery.
- It allows you to set expectations for deliverables after each phase.

Cons

- Being a strictly sequential model, jumping back and forth between two or more phases is not possible. The next phase can be reached only after the previous one has been completed.
- Due to this, bugs and errors in the code cannot be discovered until and unless the testing phase is reached. This can lead to a lot of wastage of time and other precious resources.
- This process model is not suitable for projects wherein the project requirements are dynamic or constantly changing.



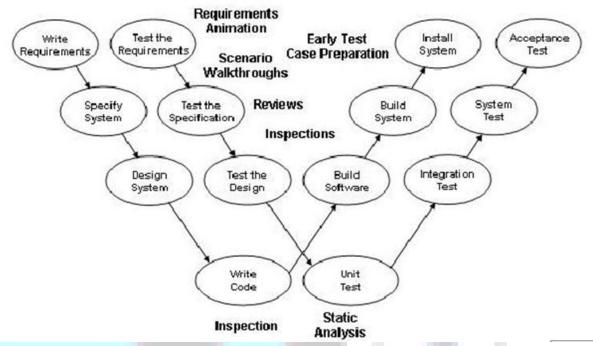
General Overview of "Waterfall Model"



188. What is V-V model what are pros and cons of it? Why we called it as a V-V Model? Or what are different phases in Waterfall and V- Model? What is Difference between Waterfall and V- Model?

V-V Model is verification and validation model. From Requirement Gathering phase to coding phase for each phase we are doing verification and from coding phase onwards we are performing validation for rest of the phases hence we called it as a V-V Model.





Phases are remaining same in both V-V Model and Waterfall model. Only the difference is V-V Model bend upwards from coding stage.

189. What is mean by cyclomatic complexity? Why need of cyclomatic complexity?

Cyclomatic Complexity is used to find out, how complex is your program? It is a measure which gives you a number based on the complexity of the application. If the value of M>10 then it is very difficult to test that applications as the complexity is much more. If M<=5 then the application is testable.

$$M = Number of closed loops + 1$$

or
 $M = E - N + 2P$

Where

M = cyclomatic complexity



```
E = the number of edges of the graph
```

N = the number of nodes of the graph

P = the number of connected components

```
if (c1)
{
   f1();
}
Else
{
   f2();
}
if (c2)
  f3();
Else
   f4();
E=4
N=2
M=4-2+1=3
Number of Closed Loops=2
M=2+1=3
```

190. What is mean by statement coverage, path coverage?

This is white box testing technique; in Statement Coverage we are covering all the statement of the code to ensure that we have covered all the statement of the code.

While in Path coverage we are covering all the different paths which are present in the code.

191. What is mean by CMM I and what are different level.

```
CMM - Capability Maturity Model
```



CMMI - Capability Maturity Model Integration, Level 1-5.

The Capability Maturity Model (CMM) is a methodology used to develop and refine an organization's software development process. The model describes a five-level evolutionary path of increasingly organized and systematically more mature processes.

At the *initial* level, processes are disorganized, even chaotic. Success is likely to depend on individual efforts, and is not considered to be repeatable, because processes would not be sufficiently defined and documented to allow them to be replicated.

At the *repeatable* level, basic project management techniques are established, and successes could be repeated, because the requisite processes would have been made established, defined, and documented.

At the *defined* level, an organization has developed its own standard software process through greater attention to documentation, standardization, and integration.

At the *managed* level, an organization monitors and controls its own processes through data collection and analysis.

At the *optimizing* level, processes are constantly being improved through monitoring feedback from current processes and introducing innovative processes to better serve the organization's particular needs.

192. Which estimation technique you are using? Why?

In order to deal with end user we are using **FPA** i.e. Function Point Analysis technique, this technique is used at very early stage of the project and it can work with very little data and give fairly accurate estimates and easy to verify.

Purpose: As customer needs a single estimate for the total amount of time and effort required for completing this particular project.

Function Point: Size of the Application.

In order to deal with Top Management we are using **COCOMO i.e. Constructive Cost Model** by boyem. These are well documented techniques.

Purpose: TOP Management will not give us all the resource and money at day one. Based on the requirement they will give us.

A Bigger project we are then breaking into the smaller component and



In order to estimate for each smaller component like what should be the efforts/resource we required for each component we used **Network Technique like pertain PERT/CPM.**

193. What is Database Testing?

Data base testing is also called as back end testing. We conduct this testing based on data validation and data integrity. Data validation means that whether front end values are correctly storing into back tables content or not. Data integrity means that whether impact of front end operations is working on back end tables content or not.

194. What are the pre project activities you follow?

- Understanding the requirement
- Defining the scope & Schedule of work
- Identifying the cost required to execute the project.
- Resource availability etc.

195. What are the post project activities you follow?

- What went wrong & what went well
- New learning from this project
- Root Cause analysis of the problem we faced
- Customer feedback etc.

196. What is recursive function? Give one example?

A function that calls itself is called as recursive function. In a barber shop whenever we sit we have one mirror in front of us and one mirror at our backside. And you can see yourself in mirror for infinite time.

197. Tell me the Different types of joins?

Joins

1. There are 4 types of joins

- a. Equi Join (also known as Simple Join and Inner Join)
- b. Nonequi Join
- c. Outer Join
- d. Self Join

2. Equi Join

- a. Whenever two or more tables are joined with the help of an Equality "=" operator we say it is an euqi join.
- b. The columns in both the tables involved in the join must have equal values. Whatever you want to achieve in life, Help others to achieve that!!!



- c. Prefix the column name with the table name (For. Ex. Dept id table is common in Emp and Dept table, hence dept id should be written as Emp.deptid=Dept.deptid). If this is not done an error is shown.
- d. This type of join usually involves Primary Key and Foreign key relationships
- 3. Non-Equi Join (A join condition that involves other than an equality "=" condition is called a non equi join. Example:-
 - a. SELECT e.last_name, e.salary, j.grade_level FROM employees e, job_grades j WHERE e.salary BETWEEN j.lowest_sal AND j.highest_sal;
 - b. In the above example salary is in the "employee" table and highest_sal and lowest_sal columns in are "salgrade" table.
 - c. These two tables are joined with the help of a "BETWEEN" operator. Hence a non-equi join.

4. Outer Join:

- a. To fetch rows that do not satisfy a join condition we need to use an outer join.
- b. Two cases when you should use a outer join:
 - i. The columns joined have NULL values
 - ii. The tables being joined have both matched and unmatched data



c. Example:

EMPLOYEES		
LAST NAME	DEPARTMENT ID	SALARY
Getz	10	3300
Davis	20	1500
King	20	2200
Davis	30	5000
Kochhar		5300

DEPARTMENTS

DEPARTMENT_ID	DEPARTMENT_NAME
10	Sales
20	Marketing
30	Accounts
40	Administration

- d. If we join these tables by an equi -join the details of "kochhar" will not be returned.
- e. To fetch the last row (i.e. details of "kochhar") we need to use outer join in the following way
- f. Select last_name, emp.department_id, salary,department_name
 From Emp, dept
 Where emp.department_id(+)= dept.department_id
- g. The (+) operator should be placed on the placed on the "side" of the join that is deficient in information.
- h. Cannot use the IN and OR operator in Outer Join.
- i. The (+) sign can appear on only one side of expression.
- 5. Self Join (joining a table itself is called as Self Join)
 - a. This type of join is needed in queries such as finding the manager of an employee
- 198. What is Gray Box Testing? Give me the example of Gray Box Testing?

Grey box testing is the combination of black box and white box testing.



For example: Consider an Integration Project where we are loading the data from multiple XML files to different tables in DB Server. In order to test this feature the user should have knowledge about XML, SQL Queries and GUI testing. So here it covers both the white box and black box aspects of testing.

199. Different types of reporting, Daily, Weekly, Monthly. What is the content of that? Following are the contents we are putting in reports.

Overall Status:

Overall Test Status:	<
Resource:	\$
Quality:	\$
Schedule:	\ \

- ^ (up arrow) we have improved our status from yesterday
- V (down arrow) decreased in status with respect to yesterday
- <> (horizontal arrow) no change in status WRT yesterday

Performed Activities. Bug Details. Bug Trend. Test Case Execution Status.

Test Mile Stones.

- 200. Tell me the security testing of login functionality in web based Application?
 - Check for valid and invalid login
 - limits defined for the number of tries
 - Can it be bypassed by typing URL to a page inside directly in the browser?
 - verify encryption is done correctly if SSL is used (if applicable)
 - No access to edit scripts on the server without authorization
- 201. Difference between SDLC & STLC?

SDLC is nothing but process of developing an application or product. And STLC is nothing but process of testing an application or product.

For each phase of SDLC we have an appropriate Testing phase in STLC.

During Requirement Gathering phase we perform the static testing by reviewing the BRD. Then during Functional Specification Design phase we perform the static testing by reviewing the functionality of the application and at the same time we are finding the gaps between BRD and FSD along with scenario walkthrough. Then during system design phase we review the HLD and LLD documents and start writing down the Test Plan and test cases. During Coding phase we perform code review and at the same time we perform unit testing. Then during Build Software phase we perform integration testing.



During Build Software phase of SDLC we perform system testing of the application in STLC. Then during User Acceptance Phase we perform UAT and during system implementation phase we perform final smoke test in production.

202. What is configuration testing?

Configuration testing is nothing but to test whether our software/hardware is configurable with other software/hardware.

e.g. To check whether Processor (intel,asus etc.) is easily configurable with different Hard Disks (like Seagate) or to check whether OS is configurable with different combinations of processors, Hard Drives, CD ROM etc.

203. What is Capacity Planning? (Performance Testing)

Capacity planning is used to determine the production capacity needed by the organization to meet changing demands for its product.





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