

## Mannual 1

Q.1)What is SDLC

Q.2)Different Methodology of SD

Q.3)Agile in detail

- Architecture
- Advantages
- Disadvantages
- Types
- 5 Ceremonies

Q.4)Smoke testing

Q.5)Sanity testing

Q.6)Difference between smoke and sanity

### 2) SMOKE AND SANITY DIFFERENCE

Smoke Testing	Sanity Testing
Smoke Testing is performed to ascertain that the critical functionalities of the program is working fine	Sanity Testing is done to check the new functionality/bugs have been fixed
The objective of this testing is to verify the “stability” of the system in order to proceed with more rigorous testing	The objective of the testing is to verify the “rationality” of the system in order to proceed with more rigorous testing
This testing is performed by the developers or testers	Sanity testing in software testing is usually performed by testers
Smoke testing is usually documented or scripted	Sanity testing is usually not documented and is unscripted
Smoke testing is a subset of Acceptance testing	Sanity testing is a subset of <u>Regression Testing</u>
Smoke testing exercises the entire system from end to end	Sanity testing exercises only the particular component of the entire system
Smoke testing is like General Health Check Up	Sanity Testing is like specialized health check up

Q.7) What is a test environment?

It is a set up of s/w,h/w where we execute our test cases.

Q.8) how will you track user stories

track of every stories is taken in scrum board

Q.9) what is epic,stories,task

epic:collection of stories or huge requirements.

stories:are smaller requirement: task:action written on particular stories

Q.10) 1)difference of regression and re-testing

Regression Testing

Regression testing is known as a generic testing.

Regression testing is to ensure that changes have not affected the unchanged part of product.

Regression testing is used for passed test cases.

Defect verification is not coming under regression testing.

Regression testing can be done either in automation or manual testing.

Regression testing has lower priority than retesting testing but in some cases it can be done in parallel with retesting.

Passed test cases can be executed during regression testing.

During regression testing test cases can be automated.

Q.11) What is build and release

Build is uncompleted software it is still under the development or testing

Release-Entire software is developed and tested then the web will be released to the production or customer.

It is quality product

Q.12) what is static testing and dynamic testing

Q.13) what is deliverable

Test Deliverables are the test artifacts which are given to the stakeholders of a software project during the SDLC (Software Development Life Cycle).

A software project which follows SDLC undergoes the different phases before delivering to the customer. In this process, there will be some deliverables in every phase.

- Test strategy.
- Test plan and estimation.
- Test scenario.
- Test cases and test data.
- RTM.
- Test summary report.
- Test closure report.
- Incident report.

Q.14) what is portability testing?

Portability testing is compatibility testing

Q.15) What are the different test levels?

There are four test levels

1. Unit/component/program/module testing /white box testing
2. Integration testing
3. System testing
4. Acceptance testing

Q.14) Test case technique

- BVA
- ECP
- Error guessing
- Decision table(condition and actions)

Q.15) System integration testing

- Functional:B,I,E,B,S,C
- Non functional:recovery,compatibility,configuration,...

Q.16) UAT

These are the key differences between alpha and beta testing:

No. Alpha Testing

Beta Testing

1)	It is always done by developers at the software development site.	It is always performed by customers at their site.
2)	It is also performed by Independent testing team	It is not be performed by Independent testing team
3)	It is not open to the market and public.	It is open to the market and public.
4)	It is always performed in a virtual environment.	It is always performed in a real-time environment.
5)	It is used for software applications and projects.	It is used for software products.
6)	It follows the category of both white box testing and Black Box Testing.	It is only the kind of Black Box Testing.
7)	It is not known by any other name.	It is also known as field testing.

Q.17) What are testing terminology

1. Monkey
2. Exploratory
3. adhoc

Q.18) how will you prepare test cases?

While preparing test cases we will have to know about the requirement of project then we will have to use some tec like error guessing,bva(boundary value analysis),equivalence class partitioning

Q.19) What is traceability matrix

It is document in which we map test cases with the customer requirement  
traceability matrix will take track on whether all scenarios are done with test cases or not

Q.20) Defect life cycle

Q.21)What are the 3 reason of defect cause?

There are three types of defects: Wrong, missing, and extra

❖ Some Important Terms(22 to 31)

Q.22).Defect seeding :

When dev add defect intentionally

Q.23)defect leakage:

Check whether any defect is missed by QA

Q.24)defect cascading:

Defect cause by another missing defect

Q.25)Defect resolution:

Defect Resolution in software testing is a step by step process of fixing the defects. Defect resolution process starts with assigning defects to developers, then developers schedule the defect to be fixed as per priority, then defects are fixed and finally developers send a report of resolution to the test manager

Q.26)defect clustering

In an application if a module contains much defects which results into application crash is called as defect clustering

Q.27)latent defect:

when extstance of defect does not affect on any functionality

Q.28)fault masking:

presence of one defect can hide presence of another defect

Q.29)Defect age

Duration from defect raised upto defect resolve

Q.30)What is entry and exit criteria/what is ready and done.

Prerequisite for any phase is called entry criteria and that criteria is fulfilled or not is called exit criteria

Q.31)Duplicate defect

: If the developer finds the defect as same as any other defect or if the concept of the defect matches any other defect then the status of the defect is changed to 'Duplicate' by the developer.

Q.32) What is agile

\*)specific team is working on specific req in limited time

\*)It is iterative and incremental approach for development of sw

Q.33) 5)what is failed test cases

When actual and expected result doesn't match it is called as failed test cases

Q.34)what is test responsibility matrix?

TRM means Test Responsibility Matrix. TRM: --- It indicates mapping between test factors and development stages... Test factors like: Ease of use, reliability, portability, authorization, access control, audit trail, ease of operates, maintainable...

Q.35) stlc life cycle?

The Software Testing Life Cycle (STLC) is a sequence of specific actions performed during the testing process to ensure that the software quality objectives are met

- 1)test initiation
- 2)test plan
- 3)test case scenario
- 4)test case design
- 5)Traceability matrix
- 6)test case exicution
- 7)regresstion testing
- 8)test report
- 9)test closure report

Q.36. How will you determine when to stop testing?

Deciding when to stop testing can be quite difficult. Many modern software applications are so complex and run in such an interdependent environment, that complete testing can never be done. Some common factors in deciding when to stop testing are:

- Deadlines (release deadlines, testing deadlines, etc.)
- Test cases completed with certain percentage passed
- When the test budget is depleted
- Coverage of code or functionality or requirements reaches a specified point
- Bug rate falls below a certain level
- When Beta or alpha testing period ends

Q.37) What is test methodology?

Testing methodologies are the methods that are used to test the functional and non-functional requirements of a Product. Each method has its own defined deliverables to ensure that the expected product is delivered to the customer. What are different types of testing methodologies?

Here are the most popular and well-known testing methodologies, explained step by step.

- Agile Methodology. ...
- Waterfall Methodology. ...
- Verification and Validation Methodology (V-Model) ...
- Incremental Methodology. ...
- Spiral Methodology. ...
- XP (Extreme Programming) Methodology.

Q. 38)What Kind Of Tests Would You Automate?

Answer :

Load tests(performance testing), sanity tests, and regression tests are the sorts of tests a quality engineer would typically automate.

Q.39)On What Basis You Can Map The Success Of Automation Testing?

Answer On basis of following criteria the success of automation testing can be mapped

- Defect Detection Ratio
- Automation execution time and time savings to release the product
- Reduction in Labour & other costs

Q.40) Q.What is the review?

Review is a process in which we have to cross check the test cases written by us.

These review are of 4 type

Self review:we have to give review by yourself

Peer review:we have to take review from our team mates or colleague

Internal review:we have to take review from or po or team leader

External review:we have to take review from member from another team

Q.41) QWhat is your agile plan?

Q.42)What is Principles of Software Testing.?

- Testing shows presence of defects
- Exhaustive testing is not possible

- Early testing
- Defect clustering
- Pesticide paradox: if we have a set of test cases for Certain scenarios and we use same test cases for different built year on year...that test cases will not work as testcases are not updated ..this condition is known as pesticide paradox
- Testing is context dependent
- Absence of errors fallacy

Q.43) Why The Software has bugs ?

- Miscommunication or No Communication
- Complexity of software
- Programming errors
- Frequent changing requirement of clients
- Lack of Skilled Tester

Q.44) What is a QA sign off?

The QA ensures that the application meets the clients requirements in terms of performance, stability , runs without breaking any functionality & The application is already tested and reviewed so application is ready to deliver.

Q.45) What is Condition Sign off?

//When the application doesn't meet the exit criteria, the QA can do the Conditional Sign Off. For instance, when the application development exercises cross the cutoff time/deadline, and the tester has not finished the testing, they can do the Conditional Sign Off after speaking with their Test Manager.

Q.46) Which Test cases were written first?

Usually, black box test cases are written first and white box test cases later. To write black box test cases we need the requirement document and, design or project plan. These documents are easily available at the initial start of the project. White box test cases cannot be started in the initial phase of the project because they need more architecture clarity which is not available at the start of the project. So normally white box test cases are written after black box test cases are written

Q.47) How to Report A bug? Format of Bug report?

Q.48) What Test Plans consist of?

Test design, scope, test strategies, approach are various details that Test plan document consists of.

1. Test case identifier
2. Scope
3. Features to be tested
4. Features not to be tested
5. Test strategy & Test approach
6. Test deliverables
7. Responsibilities
8. Staffing and training
9. Risk and Contingencies

Q.49) Any kind of test which you think should not be automated?

1) Tests that are seldom executed 2) Exploratory testing 3) Usability testing Test 4) which is executed quickly when done manually 5) retest 5) adhoc

Q.50) What is mutation testing?

Mutation testing is a technique to identify if a set of test data or test case is useful by intentionally introducing various code changes (bugs) and retesting with original test data/cases to determine if the bugs are detected

Q.51) What is Exhaustive testing

It is the Process of Testing for Absolutely Everything Just to make sure that the product cannot be Destroyed or Crashed by Some Random Happenstance.

Q.52) What is a non-reproducible bug?

Software developers often attempt to reproduce their bugs. to better understand them. Non-reproducible bugs are the ones that cannot be reproduced by using the information found in their corresponding bug reports.

Q.51) What is data driven testing?

Data driven testing is an automation testing framework, which tests the different input values on the AUT. These values are read directly from the data files. The data files may include csv files, excel files, data pools and many more.

Q.52) agile terminology

Burn down chart( how much work is remaining with respect to time )  
( Graphically represented chart)

Burn up chart( how much work has been completed with respect to time )  
( graphically represented chart)

Epic( Requirement about the main module stories completed + incomplete) ( all user Ex-paytm modules  
Epic contains- US for recharge, US for gas booking, US for dish tv recharge .....), at time of defect raise we need to mention Epic number of particular project

Velocity(Delivery/deployment of user story with respect to time

Q.53)what are the roles in scrum

- Product owner
- Scrum master
- Dev team

Q.54) How will you automate the basic login in a web application?

Assuming a tester has configured the test environment and a test tool like Selenium, here are the steps I would take to automate the login functionality.

Test the login manually to understand all the input fields, checkboxes, and buttons on the login screen. Keep a note of which pages the user is redirected to in both successful and failed logins.

Prepare a test dataset that contains the username and password combinations.

The inputs consist of varying lengths and have alphanumeric character sets.

Develop test cases to test various paths the user might take in a real-world scenario. Note down the expected outputs for each test case.

In the test tool, configure each test case to be manually invoked, and use the test data prepared in step 2. Record the instances where the actual output doesn't match the expected result.

Verify and validate the success/error messages

Q.55)What is Hotfix

Q.56) Testing terminology

- >monkey gtesting
- >adhoc testing
- >exploratory testing

## API

Q.1) URL and URI

The main difference between a URI and a URL is that the former acts as a resource identify either by location name or both, while the latter acts as the location.

Q.2) What is restful architecture

RESTful Web Services are basically REST Architecture based Web Services. In REST Architecture everything is a resource. RESTful web services are light weight, highly scalable and maintainable and are very commonly used to create APIs for web-based applications.

Q.3) What is API

Application programming interface which is an intermediate between client and server which get the request process it find relevant data from server and give response to client.

EX. When you use an application on your mobile phone, the application connects to the Internet and sends data to a server. The server then retrieves that data, interprets it, performs the necessary actions and sends it back to your phone. The application then interprets that data and presents you with the information you wanted in a readable way. This is what an API is - all of this happens via API.

Q.4) What is a web service with example?

Web service is service over the web.

A web service is any piece of software that makes itself available over the internet and uses a standardized XML messaging system. XML is used to encode all communications to a web service. For example, a client invokes a web service by sending an XML message, then waits for a corresponding XML response.

TYPES:

SOAP(simple object access protocol)

REST(representational state transfer)

Q.5) What is SOAP

It includes

- WSDL file(web service description language)-this file is given by the developer .It contains definnation element and child element which again contain  
 >type(datatype)  
 >porttype()  
 >message(input)  
 >binding(bind all data together)
- UDDI-The Universal Description, Discovery and Integration (UDDI) specifications define a registry service for Web services and for other electronic and non-electronic services. A UDDI registry service is a Web service that manages information about service providers, service implementations, and service metadata.  
 >it contain multiple wsdl file
- Soap web service  
 >the soap msg consist of 1)envelop 2)header 3)body 4)fault.

Q.6)What is REST

Q.7) Differences between APIs and Web Services

1. APIs can be hosted within an app or IIS (Internet Information Services), but a web service can only be hosted on IIS.
2. Web services are not an open source and are used to understand JSON (JavaScript Object Notation) or XML, whereas APIs are an open source and only used for XML.
3. API is a light-weight architecture (best for limited bandwidth devices (e.g. smartphone). Web services are not lightweight architectures since they require SOAP to send and receive network data.
4. APIs can use any form of communication, but a Web service only uses SOAP, REST, and XML-RPC.
5. APIs support URL, request/response headers, caching, versioning, content formats. Web services only support HTTP.

Q.8) What is idempotent?

Idem potency means that multiple identical requests will have the same outcome. So it does not matter if a request is sent once or multiple times. The following HTTP methods are idempotent: GET, HEAD, OPTIONS, TRACE, PUT and DELETE

Questions-

1. How much experience you have in web service testing/API?
2. What is difference between SOAP & REST service?
3. How you have tested web service/API ? Tell the Process?
4. What are different status code & meaning?
5. What are different type of method as GET, POST, PUT, PATCH, DELETE

6. What is procedure for testing web services in POSTMAN Tool.
7. What is difference between URI & URL
8. What is difference between Authorization& authentication
9. What is RestAssured?-

Ans - API service then I will use RestAssured library for doing Automation.

1. What are the Problems you facing in API Testing?
  - A. Understanding the functionality of API
  - B. Status Code is not Standard (becoz developers are putting random status codes)
  - C. Expected result should know as a Tester
1. What is Collection? How to run Collection?
2. In Collection if one requests you want to skip .So how will you do it?
3. What is difference between WebService& API?
4. How to Access response from one method into another Method?
5. Difference between HTTP and HTTPS?
6. What is Collection? How to run Collection?
  - Success codes
  - Use of GET, PUT, POST, PATCH, DELETE
  - Difference between Put and Patch
  - Difference between Put and Post
  - How to handle authentication
  - Difference between webserver and API
  - Json/xml structure format
  - How to validate json response
  - Use of JsonPath
  - How to construct json body for Put, Post, and Patch request.
  - Use of JsonObject.
  - What's is URI
  - What's a resource
  - What are the common headers used.
  - Common content types

Q.)what is swagger