**Why testing is required?**

It is required to test new software’s

To find the defects

To meet the expectations of the customer or client

For effective performance

To ensure the quality of the software

No failures in the product

To be in the business

**What types of application we test**

Windows applications

Web applications

Mobile applications

**what is SDLC and different phases in SDLC?**

Ans: Software development life cycle (SDLC) is a process to develop the application

**Different phases like:**

**Requirement Analysis and planning :** Senior team members analyze the requirements/input given by customers/business users. They will check whether the requirement is feasible or not (can be done or not). They also identify the risks associated with project.

Note: this high level requirements will be written in BRD (Business Requirement document) by Business Analyst

**Define/Design** : in the define stage Business Analyst define more details about requirements (which are in BRD) in the form of SRS (software requirement specification) or Use Case diagram.

As part of design,

Senior Developers write High Level Design Document (HLD)

Developers write Low Level Design Document (LLD)

Seniors Tester write Test Planning document

**Implementation/Development**: Developers write the code for the requirements

Testers write test cases as per SRS

**Testing** : Execute the test cases what we prepared in previous stage

**Deployment** : Release the tested code to production

**Maintenance** : Support team monitoring the system that is running in production

**what is waterfal in SDLC?**

It’s a sequential design process in software development. It has different phases and goes through requirement, analysis, design, implementation, testing, deployment and maintainence.

**what is the process in agile model**

It is the combination of iterative and incremental process models. It breaks the project into small incremental builds.

**what is scrum methodology**

Scrum is an agile way to manage a project, usually software development. Agile software development with Scrum is often perceived as a methodology; but rather than viewing Scrum as methodology, think of it as a framework for managing a process.

**what is daily standup meeting and what we discuss**

It’s a team meeting in the morning hours to discuss about the project work in short.

**what is user story and tasks in user story**

A user story is a tool used in [Agile software development](http://searchsoftwarequality.techtarget.com/definition/agile-software-development) to capture a description of a software feature from an end-user perspective. The user story describes the type of user, what they want and why. A user story helps to create a simplified description of a requirement.

**what is sprint planning and spring retro**

In [Scrum](https://www.mountaingoatsoftware.com/agile/scrum), the sprint planning meeting is attended by the product owner, ScrumMaster and the entire Scrum team. Outside stakeholders may attend by invitation of the team, although this is rare in most companies.

**what is burndown chart and velocity**

It’s a graphical representation of work left in the project versus time. It is useful in predicting when the work will finish.

**what is product backlog item and sprint backlog items**

It’s a unit of small work which is to be completed by team in one sprint iteration.

The sprint backlog is a list of tasks identified by the Scrum team to be completed during the Scrum sprint

**what is user acceptance criteria test cases**

Acceptance Criteria are the conditions that a software product must satisfy to be accepted by a user, customer, or in the case of system level functionality, the consuming system. Acceptance Criteria are a set of statements, each with a clear pass/fail result, that specify both functional and non-functional requirement.

**what is v model?**

It’s a SDLC model where execution of the process happens in sequential manner in V shape. That is verification and validation

**what is STLC?**

Software testing life cycle is the process to test the application.

**what is defect?**

Defect is nothing but error in an application which is developed by programmers. There may be some errors in the coding done by programmers which does not allow the application to work.

**how to arise a defect and what we specify while logging defect?**

We need to raise the defect in defect management tools like QC. We must specify Bug ID, test case ID, summary, Priority, severity.

**defect lifecycle**

It is nothing but the bug life cycle. It starts when a new defect is found and ends when the defect is closed.

**Different types of testing?**

Black box testing

White box testing

**when do we use regression testing?**

It is used to retest the unchanged parts of the application. Test cases are re-executed in order to check whether previous functionality of application is working fine and new changes have not introduced any new bugs. This test can be performed on a new build when there is significant change in original functionality or even a single bug fix

**when do we use integration testing?**

We use integration testing after we finish unit testing we combine all the unit tested part and then we perform integration testing.

**when do we use smoke testing and sanity testing?**

Smoke testing is done by developers before the build is released to testers and then it is performed by testing team whether to accept the build for further testing.

Sanity testing is performed where small section of the application is still working after a minor change.

**what is unit testing?**

**Unit Testing** is a [level of software testing](http://softwaretestingfundamentals.com/software-testing-levels/) where individual units/ components of a software are tested. The purpose is to validate that each unit of the software performs as designed.

**what is UAT?**

User acceptance testing (UAT) is the last phase of the software testing process. During UAT, actual software users test the software to make sure it can handle required tasks in real-world scenarios, according to specifications.  It is also known as beta testing.

**what is alpha and beta testing?**

This is a form of internal acceptance testing performed mainly by in-house software QA and testing teams. Alpha testing is the last testing done by test teams at development site after the acceptance testing and before releasing the software for beta test.

This is the final testing phase where companies release the software for few external user groups outside the company test teams or employees. This initial software version is called as beta version.

**when do we use white box testing and block box testing?**

**what we will do if we don’t have a time to test all stories?**

**what we will do if come across any severity issue before release day?**

**when do we use automation testing?**

Test cases with frequent use, changes, and past errors; as well as test cases with low to moderate effort in setting up the test environment and developing the automation project are best suited for automation.

**what tester will do in each phase of SDLC?**

In this phase tester prepares the test cases and test scenarios based on srs. Once the build is released the tester runs the testcases.

**difference between load and performance testing?**

Performance testing is the process of determining the speed or effectiveness of a computer, network, software program or device***.***

Load testing is the process of putting demand on a system or device and measuring its response.

**different types of non-functional testing types?**

**what is test case?**

A test case is a document, which has a set of test data, preconditions, expected results and postconditions, developed for a particular test scenario in order to verify against a specific requirement.

**what is test plan/test strategy document**

Ans: Test plan document contains different section like

       Types of testing :

       Exit and Entry criteria :

**what is TDD and BDD (cucumber framework)**

Its also called test-driven design, is a method of software development in which unit testing is repeatedly done on source code. Write your tests watch it fails and then refactor it.

Behavior-driven development combines the general techniques and principles of TDD with ideas from domain-driven design

**what is priority and severity in defect?**

Defects that leave the software system unusable are given higher priority over defects that cause a small functionality of the software to fail.

Defect severity can be defined as the degree of impact a defect has on the development or operation of a component application being tested.

**how to estimate test cases?**

**what is most challenge defect u came across?**

**how to deal the production defects?**

normally end user will report this issue.

we need to talk to them and reproduce the issue with test logins

Create defect in defect tool under the production release version

developers will fix the issue

we (QA) test the issue on production version code and release the fix to proudction after we verify

we have to create a defect on current sprint/release so that developer will add this code to the current sprint/release

**test design review steps**

**if we dont have time to test call test cases what we will do**

**how we learn the functionality of system?**

**what are the tools to manage defects/stories?**

JIRA, HP ALM

**who will assign the work?**

**types of test metrics we use normally**

Process metrics, Project metrics, Product metrices.

Manual test metrics are classified into two classes:

Base metrics: These are derived from the data gathered by test analyst during the test case development.

Calculated metrics: these are derived from the data gathered in Base Metrics. These Metrics are generally tracked by the test lead/manager for Test Reporting purpose.

**what is traceability matrix?**

A traceability matrix is a document that co-relates any two-baseline documents that require a many-to-many relationship to check the completeness of the relationship. It is used to track the requirements and to check the current project requirements are met.

**what are typical environments we have in projects**

**what is development environment**

A development environment is a collection of procedures and tools for developing, testing and debugging an application or program.

**what is QA environment**

This is the stage where unit testing, interface testing is performed. Quality analysis team make sure that the new code will not have any impact on the existing functionality and they test major functionalities of the system once after deploying the new code in their respective environment

**what is production environment**

A production environment is where the real-time staging of programs that run an organization are executed, and includes the personnel, processes, data, hardware, and software needed to perform day-to-day operations.

**what are different defect metrics and measurements we prepare**

**what are weakness and strong points**

**What is staging environment**

The staging phase of the software life-cycle is often tested in an environment (hardware and software) that mirrors that of the production environment. The staging site is often different from the development site, and provides a QA zone that is separate from the development and production environments.