Module–2(Manual Testing)

•  What is Exploratory Testing?

Exploratory testing is a concurrent process where test design, execution and logging happen simultaneously, make use of experience, heuristics and test patterns. It is structures and rigorous.

•  What is traceability matrix?

Test conditions should be able to be linked back to their sources in the test basis, this is known as traceability.

•  What is Boundary value testing?

Boundary value analysis is a methodology for designing test cases that concentrates software testing effort on cases near the limits of valid ranges. Boundary value analysis is a method which refines equivalence partitioning.

•  What is Equivalence partitioning testing?

Aim is to treat groups of inputs as equivalent and to select one representative input to test them all EP can be used for all Levels of Testing.

•  What is Integration testing?

Integration Testing performed to expose defects in the interfaces and in the interactions between integrated components or systems.

•  What determines the level of risk?

The level of risk determines Risks should be evaluated at the Business Level, Technological Level, Project Level and Testing Level

•  What is Alpha testing how much testing is enough.

Alpha Testing is definitely performed and carried out at the developing organization’s location with the involvement of developers. Sometimes it is also performed by Independent Testing Team.

•  What is beta testing?

Beta Testing is performed and carried out by users or you can say people at their own locations and site using customer data.

•  What is component testing?

Component is a minimal software item that can be tested in isolation. It means “A unit is the smallest testable part of software. Component Testing is the testing of individual software components.

•  What is functional system testing?

Test function of any product ext: mobile function is called functional testing.

•  What is Non-Functional Testing?

Non-functional testing is to test lord how many people is gone use.

•  What is GUI Testing?

Graphical User Interface (GUI) testing is the process of testing the system’s GUI of the System under Test. GUI testing involves checking the screens with the controls like menus, buttons, icons, and all types of bars – tool bar, menu bar, dialog boxes and windows etc.

•  What is Adhoc testing?

Adhoc testing is an informal testing type with an aim to break the system. Adhoc testing can be achieved with the testing technique called Error Guessing.

•  What is load testing?

load testing is carried out to check systems performance at different loads.

•  What is stress Testing?

check stress level to make sure user can used easily.

•  What is white box testing and list the types of white box testing?

Testing based on an analysis of the internal structure of the component or system is called white box testing. White box testing is also called glass testing or open box testing.

* Web Based Testing
* Desktop Based Testing
* Mobile Based Testing
* Game Based Testing

•  What is black box testing? What are the different black box testing techniques?

Testing either functional or non-functional, without reference to the internal structure of the component or system is called black box testing

Types of black box testing

1 equivalence partitioning

2 boundary value analysis

3 decision table

4 use case

•  Mention what are the categories of defects?

•  Mention what big bang testing is?

Big Bang integration testing all components or modules is integrated simultaneously, after which everything is tested as a whole.

•  What is the purpose of exit criteria?

Purpose of exit criteria is to define when we STOP testing either at the: End of all testing or End of phase of testing

•  When should "Regression Testing" be performed?

when we add new information then need to test old details.

•  What is 7 key principles? Explain in detail?

1. Testing shows presence of Defects

2. Exhaustive Testing is Impossible

3. Early Testing

4. Defect Clustering  
5. The Pesticide Paradox

6. Testing is Context Dependent

7. Absence of Errors Fallacy

1. Testing shows presence of Defects:

Testing can show that defects are present ,but cannot prove that there are no defects

2. Exhaustive Testing is Impossible

Testing everything including all combinations of inputs and preconditions is not possible.

3. Early Testing

Testing activities should start as early as possible in the software or system development life cycle, and should be focused on defined objectives. Testing activities should start as early as possible in the development life cycle

4. Defect Clustering

A small number of modules contain most of the defects discovered during pre-release testing, or are responsible for the most operational failures.  Defects are not evenly spread in a system.

5. The Pesticide Paradox

To overcome this “pesticide paradox”, the test cases need to be regularly reviewed and revised, and new and different tests need to be written to exercise different parts of the software or system to potentially find more defects.

•  Difference between QA v/s QC v/s Tester

|  |  |  |  |
| --- | --- | --- | --- |
| Sr no | QA | QC | TESTING |
| 01 | Activities which ensure the implementation of processes, procedures and standards in context to verification of developed software and intended requirements. | Activities which ensure the verification of developed software with respect to documented (or not in some cases) requirements. | Activities which ensure the identification of bugs/error/defects in the Software. |
| 02 | Focuses on processes and procedures rather than conducting actual testing on the system. | testing by executing Software with intend to identify bug/defect through implementation of procedures and process. | Focuses on actual testing. |
| 03 | Process oriented activities. | Product oriented activities. | Product oriented activities. |
| 04 | Preventive activities. | It is a corrective process. | It is a preventive process. |
| 05 | It is a subset of Software Test Life Cycle (STLC). | QC can be considered as the subset of Quality Assurance. | Testing is the subset of Quality Control. |

•  Difference between Smoke and Sanity?

The most common difference between smoke and sanity is smoke test will be done while initial build when the software is relatively u stable. While relatively stable build after multiple rounds of regression test done is sanity testing.

•  Difference between verification and Validation

The process of evaluating work-products of a development phase to determine whether they meet the specification requirements for that phase is called verification

The process of evaluating software during or at the end of the development process to determine whether it satisfies business requirements is called validation.

•  Explain types of Performance testing.

Two types of performance testing.

1. Functional testing-Functional testing is performed using the functional specification provided by the client and verifies the system against the functional requirement.
2. Non functional testing-Non functional testing checks the performance reliability, scalability and other non-functional aspects of the software system.

•  What is Error, Defect, Bug and failure?

* Failure: The inability of a system or component to perform its required functions with in specified performance requirements. See: bug, crash, exception, and fault.
* Bug :A fault in a program which causes the program to perform in an unintended or unanticipated manner. See: anomaly, defect, error, exception, and fault. Bug is terminology of Tester.
* Fault: An in correct step, process ,or data definition in a computer program which causes the program to perform in an unintended or unanticipated manner. See: bug, defect, error, exception.
* Defect :Commonly refers to several troubles with the software products, with its external behavior or with its internal features

•  Difference between Priority and Severity

1-Severity with which the bug affects the application – Very High, High, Medium, Low, Very Low 2—Priority means to fix the bug as per priority to fix the bug

•  What is Bug Life Cycle?

The duration or time span between the first-time defects is found and the time that it is closed successfully, rejected, postponed or deferred is called as ‘Defect Life Cycle’.

•  Explain the difference between Functional testing and NonFunctional testing

|  |  |
| --- | --- |
| Functional testing | Non functional testing |
| Functional testing is performed using the functional specification provided by the client and verifies the system against the functional requirements | Non functional Testing checks the Performance, reliability, scalability and other non-functional aspects of the software system. |
| Functional testing is executed first | Non functional testing should be performed after functional testing |
| Manual testing or automation tools can be used for functional testing | Using tools will be effective for this testing |
| Business requirements are the inputs to functional testing | Performance parameters like speed , scalability are inputs to non-functional testing. |
| Easy to do manual testing | Tough to do manual testing |

• What is the difference between the STLC (Software Testing Life Cycle) and SDLC (Software Development Life Cycle)?

* SDLC is a structure imposed on the development of software product that defines the process for planning, implementation, testing, documentation, deployment, and ongoing maintenance and support
* Software Testing Life Cycle (STLC) is a process used to test software and ensure that quality standards are met

•  What is the difference between test scenarios, test cases, and test script?

* Test Scenario is any functionality that can be tested. It is also called Test Condition, or Test Possibility.
* Test cases involve the set of steps, conditions and inputs which can be used while performing the testing tasks.
* A test script in software testing is a set of instructions that will be performed on the system under test to test that the system functions as expected.

•  Explain what Test Plan is? What is the information that should be covered.

A test plan is a document describing the scope, approach, resources and schedule of intended test activities.

•  What is priority?

Priority means to fix the bug as per priority to fix the bug

•  What is severity?

Severity with which the bug affects the application – Very High, High, Medium, Low, Very Low

•  Bug categories are...

Security, Database, Functionality (Critical/General), UI

•  Advantage of Bugzila .

Advanced search capabilities-mail Notifications, Modify/file Bugs by e-mail ,Time tracking ,Strong security ,Customization

•  What are the different Methodologies in Agile Development Model?

•  Explain the difference between Authorization and Authentication in Web testing. What are the common problems faced in Web testing?

Authorization:

1.Authorisation determines what resources a user can access.

2.Authorisation is not visible to or changeable by the user

3.Accessibility to pages through permission not given

Authentication:

1.Authentication verifies who the user is.

2.Authentication is visible to and partially changeable by the user.

3.accepting an invalid username and password.