**Module–2(Manual Testing)**

**What is Exploratory Testing?**

* Though the current trend in testing is to push for automation,

exploratory testing is a new way of thinking. Automation has its limits.

**What is traceability matrix?**

* To protect against changes you should be able to trace back from every systemcomponentto the original requirement that caused its presence.

** 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.

** What is Equivalence partitioning testing?**

* The numbers fall into a partition where each would have the same, or equivalent, result i.e. an Equivalence Partition (EP) or Equivalence Class.

**What is Integration testing?**

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

**What determines the level of risk?**

* A factor that could result in future negative consequences; usually expressed as impact and likelihood

**What is Alpha testing?**

* Alpha Testing is always performed at the time of Acceptance Testing when developers test the product and project to check whether it meets the user requirements or not.

**What is beta testing?**

* Beta Testing (field 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?**

* A minimal software item that can be tested in isolation. It means “A unit is the smallest testable part of software.”

**What is functional system testing?**

* Testing based on an analysis of the specification of the functionality of a component or system.

**What is Non-Functional Testing?**

* Testing the attributes of a component or system that do not relate to functionality, e.g. reliability,efficiency, usability, interoperability, maintainability and portability

**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?**

* The Error guessing is a technique where the experienced and

good testers are encouraged to think of situations in which the software may not be able to cope.

**What is load testing?**

* Its a performance testing to check system behavior under load.

Testing an application under heavy loads, such as testing of a web site under a range of loads to determine at what point the system’s response time degrades or fails.

**What is stress Testing?**

* It even tests beyond the normal operating point and evaluates

how the system works under those extreme conditions.

**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.

**What is black box testing? What are the different black box testing techniques?**

* The technique of testing without having any knowledge of the

interior workings of the application is Black Box testing.

* Equivalence partitioning
* Boundary value analysis
* Decision tables
* State transition testing
* Use-case Testing\
* Other Black Box Testing

**Mention what are the categories of defects?**

* Commonly refers to several troubles with the software

products, with its external behavior or with its internal features.

**Mention what bigbang testing is?**

* In 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?**

* Technical documents to be submitted followed by release Notes.

**When should "Regression Testing" be performed?**

* Testing of a previously tested program following modification to ensure that defects have not been introduced or uncovered in unchanged areas of the software, as a result of the changes made. It is performed when the software or its environment is changed.

**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

**Difference between QA v/s QC v/s Tester**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Quality assurance** | **Quality control** | **Testing** |
| **1** | 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 theSoftware |
| **2** | Focuses on processes and  procedures rather than conducting actual testing on the system. | Focuses on actual testing by executing Software with intend  to identify bug/defect through implementation of procedures and process. | Focuses on actual testing. |
| **3** | Process oriented activities. | Product oriented activities. | Product oriented  activities. |
| **4** | Preventive activities. | It is a corrective process. | It is a preventive process. |
| **5** | 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?**

* **Smoke testing**: Smoke Testing is performed after software build to ascertain that the critical functionalities of the program is working fine.
* **Sanity testing**: After receiving a software build, with minor changes in code, or functionality, Sanity testing is performed to ascertain that the bugs have been fixed and no further issues are introduced due to these changes.

**Difference between verification and Validation**

* **Verification:** The process of evaluating

work-products (not the actual final product) of a development phase to determine whether they meet the specified requirements for that phase.

* **Validation:** The process of evaluating software during

or at the end of the development process to determine whether it satisfies specified business requirements.

**Explain types of Performance testing.**

* Load testing
* Stress testing
* Endurance testing
* Spike testing
* Volume testing
* Scalability testing

**What is Error, Defect, Bug and failure?**

* “A mistake in coding is called error, error found by tester is called defect, defect accepted by development team then it is called bug, build does not meet the requirements then it is failure”

**Difference between Priority and Severity**

* **Priority:** Priority defines the order in

which we should resolve a defect. Should we fix it now, or can it wait? This priority status is set by the tester to the developer mentioning the time frame to fix the defect. If high priority is mentioned then the developer has to fix it at the earliest. The priority status is set based on the customer requirements.

**Severity:** It is the extent to which the defect can affect the software. In other words it defines the impact that a given defect has on the system.

**What is Bug Life Cycle?**

* “A computer bug is an error, flaw, mistake, failure, or fault in a

computer program that prevents it from working correctly or

produces an incorrect result. Bugs arise from mistakes and

errors, made by people, in either a program’s source code or its

design.”

**Explain the difference between Functional testing and NonFunctional testing ?**

* **Functional Testing**: Testing based on an analysis of the

specification of the functionality of a component or system.

* **Non-Functional Testing**: Testing the attributes of a component or system that do not relate to functionality, e.g. reliability, efficiency, usability, interoperability, maintainability and portability

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

**SDLC :**

* SDLC is a structure imposed on the development of a software product that defines the process for planning, implementation, testing, documentation, deployment, and ongoing maintenance and support. There are a number of different development models.

**STLC :**

* In an Ideal world, you will not enter the next stage until the exit criteria for the previous stage is met. But practically this is not always possible

**What is the difference between test scenarios, test cases, and test script?**

**TEST SCENARIO:**

A Scenario is any functionality that can be tested. It is also called

Test Condition, or Test Possibility.

**TEST CASE:**

Test cases involve the set of steps, conditions and inputs which

can be used while performing the testing tasks.

**TEST SCRIPT:**

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.**

* Test Planning in STLC is a phase in which a Senior QA manager determines the test plan strategy along with efforts and cost estimates for the project.

**What is priority?**

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**What is severity?**

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**Bug categories are…**

* Performance bugs
* Gui bugs
* Usability bugs
* Compatibility bugs
* Security bugs
* Functional bugs

**What are the different Methodologies in Agile Development Model?**

* Agile is the combination of iterative nd incremental model with the focus on process adaptability nd customer satisfaction by rapid delivery of working software product.
* Agile break product into small increment build.
* These build are provided in iterations
* Every iteration involves cross functional teams working simultaneously on various area like requirement analysis,planning,unit testing design,coding and uat.

At the end of the iteration a working product is displayed to the customer and important stakeholders