**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.”

NEW

ASSIGNED

OPEN DUPLICATE

FIXED REJECTED

PENDING RETEST DEFFERED

REOPENED RETEST NOT A BUG

VERIFIED

CLOSED

**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

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 **SCENARIO OF WHATS APP CHAT**

* Checking that user can update chat wallpaper
* checking that user can send message to other user
* checking that user can unsend the message for him and for everyone
* checking that user can insert emoji or stickers in chat
* checking by inserting video in chat
* checking by sending location to other person
* checking by keeping it blank and tapping enter
* checking wheater it shows single tick,double tick and blue tick(message seen status).

**Write a Scenario of Pen**

1. Pen’s point is rough so it would not be good to write from that pen
2. While writing..it leaks ink so it can make our hands dirty
3. Pens point is broken so we cannot use it to write anything nd also spread ink everywhere
4. Shape of pen is not proper so it may hurt us while writing
5. Refill of pen is empty so we cannot write anything using it
6. Checking that the pen’s ink is waterproof or not
7. Pens body material quality should be good
8. Pen must not spread while writing
9. Checking by removing old refill and inserting new refill.
10. The content written by pen should be bright and readable by anyone.

**Write a Scenario of Pen Stand**

1. Checking the size and quality of the pen stand
2. Checking by putting multiple pens in the pen stand
3. Checking the capacity of the pen stand
4. Checking whether the pen stand is unbreakable or not
5. Checking the weight of the pen stand
6. Checking the shape of pen stand to see,it can hold pens or not.
7. Checking the material of the pen stand
8. Checking durability by doing toughness test
9. Checking the space consumption of the pen stand
10. Checking wheather the pen stand is usable or not.

**Write a Scenario of Door**

* Checking the color off the door
* Checking the quality of door
* Checking from where the door opens like,open inside,outside or both.
* Checking wheather door having lock or not
* checking the type of lock in door
* checking the durability of door
* checking wheather the door is smart door or normal door
* checking wheather the door is water proof or not
* checking wheather the door makes noice opening and closing

**Write a Scenario of ATM**

* MACHINE MUST BE IN WORKING CONDITION
* TOUCH OF ATM MUST BE RESSPONSIVE
* BUTTON MUST BE IN WORKING CONDITION
* PIN MUST NOT BE VISIBLE WHILE TYPING
* Cash must be coming out from atm
* ATM’s Internal software must not be visible to user

**When to used Usablity Testing?**

\*Aesthetics and design are important,How well a product look usually determine how well it works.

\*Usability testing identifies usability error in the system early in development,This can save product from failure.

**What is the procedure for GUI Testing?**

It is the process of checking graphical user interface of the system under test. There are three approaches of gui testing

* Recored and play
* Manual based
* Model based

**Write a scenario of Microwave Owen**

* checking that the produt powers on and is in working condition
* checking whether the food heats at ideal temperature
* verifying that the microwave support battery or not
* verifying that the display working as expected
* checking that the door of microwave opens and close without making any noice
* checking that timer onn microwave is working properly
* checking the working of all buttons are as expected or not
* checking by inserting different food items
* verifying touch panel wheater it is touchable or not
* checking by ssetting different settings

**Write a scenario of Coffee vending Machine**

* verifying that the product powers on and is in working condition
* checking the quality of the product
* checking the minimnum power requirements to run the device
* checking buttons of the product
* checking touch paell of the product
* checking wheater it is working as expected
* checking that powe button iss working or not
* checking the operating temperature of product
* checking ingrediants which is needed to make coffee

**Write a scenario of chair**

* Chair must not cause any back pain when sitting for long time.
* Chair must be of high quality
* Checking the height and weight of chair
* Checking that the chair is waterproof or not
* Checking the stability of chair
* Checking wheather the chair is foldable or not

**To Create Scenario (Positive & Negative)**

**facebook Chat on Mobile**

Positive

* User can able to write message.
* Message Send button working properly
* Message is being delivered to other person
* Cannot modify other’s message
* Can delete our chat

NEGATIVE

* Showing message sent but not delivered to other user
* No proper ui in random screen size
* Unable to send message due to network issue
* Internal sever problem so,user cannot send or receive messages

**POSITIVE AND NEGATIVE OF GMAIL RECEIVING MAIL**

* POSITIVE
* Getting new mails
* New message and unread msg would be highlighted
* After reading message,it would b seen inn normal form
* NEGATIVES
* Not getting new mails
* Not able to open mails
* Message is still highlighted after opening

**POSITIVE AND NEGATIVE OF FLIPKART**

* POSITIVE
* The cost and name of product is perfectly writtened
* Checking the discount for the product
* Verifying offers
* User is able to write pincode
* Product is able to moved to cart
* Product can be bought directly from buy now
* NEGATIVES
* Not showing any offers
* Not able to write pincode
* Add to cart nott working
* Buy now not working

**Write a Scenario of Wrist Watch**

* Watch must be in working condition
* Watch strap quality must be upto mark
* Checking ruggedness of the watch
* Checking wheater watch having any ip rating
* Glass must be of high quality

**Write a Scenario of Lift(Elevator)**

1. When pressing on button,The button is not responding.so due to this,the lift is not usable.
2. Lift calling button is not working,so we cannot call lift and makes it unusable.
3. Lift’s light is not working so it is hard to use lift in dark.
4. Lift door is opening and closing as expected
5. There’s always need current floor indicator inside the lift to know the status of current floor
6. Lift material quality is must b as expected
7. must be able to visit all floors which is mentioned inside lift
8. The lift must visit the particular floor from where it get called.
9. When tapped on lift button from multiple floor..it must check the nearest floor to visit
10. Lift must be in working condition

**Write a Scenario of whatsapp Group (generate group)**

* New group option must be clickable
* It must show the list of contacts,which is on whats app
* Contact must be selected by user
* There need a search bar to search the contacts
* Enter button must be in working condition

**Write a Scenario of instagram ( video call with chat )**

* Vc option must be clickable
* User must be connected to the internet
* There must be option to switch from front cam to main cam
* There’s must need a option to end vc
* There must need timer which track the time of vc

**Write a Scenario of Whatsapp payment**

* Payment option must be clickable
* Active network connection required
* It must redirect user to bank portal page
* User must be able to input digit
* There’s must need indication to see the status of money