Manual Testing Assignment.

Module -2

1. **What is Exploratory Testing ?**

**Ans.** Exploratory testing is a concurrent process where

* **Testing design, execution and logging happen simultaneously.**
* **Testing is often not recorded.**
* **Is carried out in time boxed intervals.**

**• Testing is based on a test charter that may include**

**• Scope of the testing (in and out)**

**• The focus of exploratory testing is more on testing as a “thinking” activity.**

**• A brief description of how tests will be performed**

**• Expected problems.**

1. **What is traceability matrix?**

**Ans.**

* **Traceability matrix is a table which is used to trace requirement during the software development life cycle. A software process should help you to keeping the virtual table up-to-date. It can be used to for forward tracing or backward. Simple techniques may be quite valuable.**
* **It is prepared before the test execution process to make sure that every requirement is covered in the form of a Test case so that we don't miss out any testing.**

1. **What is Boundary value testing?**

* **Ans. Boundary value testing is a Black-box testing techniques that software developer often use to check error at the boundaries or extreme end of a given input domain. This is used mainly to analyze the testing at the partition boundaries and also to detect anomalies that may occur during testing cases.**
* **The black box testing techniques are helpful for detecting any errors or threats that happened at the boundary values of valid or invalid partitions rather than focusing on the centre of the input data.**

1. **What is Equivalence partitioning testing?**

**Ans. Equivalence Partitioning Method is also known as Equivalence class partitioning (ECP).**

* **It is a**[**software testing**](https://www.geeksforgeeks.org/software-testing-basics/)**technique or**[**black-box testing**](https://www.geeksforgeeks.org/software-engineering-black-box-testing/)**that divides input domain into classes of data, and with the help of these classes of data, test cases can be derived.**
* **An ideal test case identifies class of error that might require many arbitrary test cases to be executed before general error is observed.**

1. **What is Integration testing?**

**Ans. Integration Testing is a level of the software testing process where individual units are combined and tested as a group. • Integration testing is done by a specific integration tester or test team.**

**There are 2 levels of Integration Testing**

**• Component Integration Testing**

**• System Integration Testing.**

1. **What determines the level of risk?**

**ans.  The risk level is determined by two dimensions:**

**♣ A risk is a factor that could result in future negative consequences. ♣ Risks are of two types:**

**Project Risks**

**Product Risk**

* **Example of Project risk is Senior Team Member leaving the project abruptly. Every risk is assigned a likelihood i.e. chance of it occurring, typically on a scale of 1 to 10**
* **Example of product risks would be Flight Reservation system not installing in test environment.**

1. **What is Alpha testing ?**

**Ans. Alpha Testing :-**

* **It is always performed by the developers at the software development site.**
* **It always perform in Virtual environment.**
* **Alpha testing is always perform at the time of Acceptance testing when developers test the product and project to check whether it meets the user’s requirement or not.**
* **It always perform within the organization.**
* **It comes under the category of both white box testing and Black box testing.**
* **It is consider as User Acceptance Testing (UAT) which done at the developer site.**
* **Unit Testing , Integration testing, System testing when combine are known as Alpha testing.**

1. **What is beta testing ?**

**Ans. Beta Testing :-**

* **It always perform by the customer at their own site.**
* **It is not perform by Independent testing team.**
* **It is perform in Real Time Environment.**
* **It always outside the organization.**
* **Beta Testing is performed and carried out by user or you can say people at their own location and site using customer data.**
* **It is only Kind of Black Box Testing.**
* **It is also considered as the User Acceptance Testing (UAT) which is done at customers or users area.**

1. **What is component testing?**

**Ans.**

* **A minimal software item that can be tested in isolation.it means Aunit is the smallest testable part of sotware.**
* **Unit testing is a level of software testing process where individual units are tested. It is the first level of testing and perform prior to integration .**
* **The goal of unit testing is to isolate each part of the program and show that the individual parts are correct. Unit testing is performed by using the White Box Testing method.**

1. **What is functional system testing ?**

**Ans.**

* **Functional Testing is a type of Software Testing in which the system is tested against the functional requirements and specifications.**
* **This testing mainly involves black box testing .**
* **Each & every functionality of system is tested by providing appropriate input, verifying the output.**
* **It compare the actual results with the expected results.**
* **The testing can be done either manually or using automation.**

1. **What is Non-Functional Testing?**

**Ans.**

* **Non-Functional testing the attributes of component or system that do not relate to functionality.**
* **Non-Functional testing should perform after functional testing.**
* **Non-functional testing describes how good the product work.**
* **• Measuring the characteristics of the system/software that can be quantified on a varying scale- e.g. performance test scaling.**

1. **What is GUI Testing?**

**Ans. GUI stand for Graphical User Interface .it 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**

**Three types of GUI Testing :**

**• MANUAL BASED TESTING**

**• RECORD AND REPLAY**

**• MODEL BASED TESTING**

1. **What is Adhoc testing ?**

**Ans.** Adhoc testing is an informal testing type with an aim to break the system.

* **It does not follow any test design techniques to create test cases.**
* **In fact, it does not create test cases altogether.**
* **This testing is primarily performed if knowledge of tester in the system under test is very high.**
* **Main aim of this testing is to find defects by random checking.**
* **Adhoc testing can be achieved with the testing technique called Error Guessing.**
* **Using experience to postulate errors.**

**There are three types of Adhoc Testing :-**

1. **Buddy Testing.**
2. **Pair Testing.**
3. **Monkey Testing.**
4. **What is load testing?**

**Ans. 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.**

**Load testing is a kind of performance testing which determines a system’s performance under real-life load conditions**

**• It is a type of non-functional testing. Load testing is commonly used for the Client/Server, Web based applications – both Intranet and Internet.**

1. **What is stress Testing?**

**Ans. System is stressed beyond its specifications to check how and when it fails**

**• It even tests beyond the normal operating point and evaluates how the system works under those extreme conditions.**

**Stress testing is also known as endurance testing.**

**Stress Testing is done to make sure that the system would not crash under crunch situations.**

**Eg. During festival time, an online shopping site may witness a spike in traffic, or when it announces a sale.**

1. **What is white box testing and list the types of white box testing ?**

**Ans. White Box Testing: Testing based on an analysis of the internal structure of the component or system.**

**here the testers require knowledge of how the software is implemented, how it works.**

**White box testing is the detailed investigation of internal logic and structure of the code.**

**White box testing is also called glass testing or open box testing.**

**The tester needs to have a look inside the source code and find out which unit/chunk of the code is behaving inappropriately.**

1. **What is black box testing?**

**Ans. The testers have no knowledge of how the system or component is structured inside the box.**

**• The technique of testing without having any knowledge of the interior workings of the application is Black Box testing.**

**The tester is oblivious to the system architecture and does not have access to the source code.**

**• Specification-based testing technique is also known as ‘black-box’ or input/output driven testing techniques because they view the software as a black-box with inputs and outputs**

1. **What are the different black box testing techniques?**

**Ans.** • **There are four specification-based or black-box technique:**

**• Equivalence partitioning**

**• Boundary value analysis**

**• Decision tables**

**• State transition testing**

1. **Mention what big bang testing is ?**

**Ans.**

* **Here, all component are integrated together at once, and then tested.**
* **In Big Bang integration testing all component or modules is integrated after which everything is tested as a whole.**
* **Big Bang testing has advantage that everything is finished before integration testing start.**

1. **What is the purpose of exit criteria ?**

**Ans. There are Exit criteria of Integration testing.**

**• Exit Criteria:**

**• Successful Testing of Integrated Application.**

**• Executed Test Cases are documented**

**• All High prioritized bugs fixed and closed**

**• Technical documents to be submitted followed by release Notes.**

1. **When should "Regression Testing" be performed?**

**Ans. Regression testing should be carried out:**

**• when the system is stable and the system or the environment changes**

**• when testing bug-fix releases as part of the maintenance phase**

**• It should be applied at all Test Levels**

**• It should be considered complete when agreed completion criteria for regression testing have been met**

**• Regression test suites evolve over time and given that they are run frequently are ideal candidates for automation**

* New feature is added to the software
* Defect fixing
* Performance issue fix

1. **What is 7 key principles? Explain in detail?**

**Ans.** There are 7 key principle :-

1. Testing show presence of defect.

* We cannot say that software is fully tested. We cannot prove that there is no defect in software.
  + - * Testing reduce the probability of undiscovered defect. But even if we do not find any defect ,it is not the proof of correctness.
      * We test to find defect.

1. Exhausted testing is impossible.
   * + - We have learned that we cannot test everything
       - Instead of doing exhausted testing we focus on risk.
       - It requires enormous resources.
       - It is too expensive and take too much time.
2. Early stage testing.
   * + - Testing process should start as early as possible.
       - Testing activity should be focus on defined objectives.
3. Pesticides paradox.
   * + - If the same test are repeated over and over again defect may not found after some time.
       - Same test case will no longer found defect.\
       - To overcome the pesticides paradox we should applied different test to find more defect.
4. Cluster defect
   * + - Defects are not evenly spread in system. They are “clustered”.
       - More defect are found in small number of module.
       - Most of software failure because of small modules.
5. Testing Is Context Dependent.
   * + - Testing is done differently on different context.
       - Different industries impose different testing method.
6. Absence of Error fallacy.
   * + - If 99% of testing done, then also user is not satisfy ,the requirement of user is not fulfil then finding defect does not help .
7. **Difference between QA v/s QC v/s Tester.**

**Ans.**

1. **Difference between Smoke and Sanity?**

**Ans.**

1. **Difference between verification and Validation .**

**Ans.**

1. **What is Error, Defect, Bug and failure?**

**Ans. Error :- The mistake in Coding is called Error.**

**Defect :- Error caught by tester is called Defect.**

**Bug :- Defect accept by development team is called Bug.**

**Failure :- Software does not meet the requirement then it is failure.**

1. **Explain the difference between Functional testing and NonFunctional testing?**

**Ans.**

1. **To create HLR & TestCase of** 
   1. **Instagram(First Page) .**

|  |  |
| --- | --- |
| * **HLR for Instagram** | * [**Click Here**](../Instagram.xlsx) |
| * **Test Case For Instagram** | * [**Click Here**](../Instagram.xlsx) |

* 1. **FaceBook(First Page).**

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| --- | --- |
| * **HLR For Facebook** | * [**Click Here**](../FaceBook.xlsx) |
| * **Test Case for Facebook** | * [**Click Here**](../FaceBook.xlsx) |

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

**Ans.**

1. **What is the difference between test scenarios, test cases, and test script.**

**Ans.**

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

Ans**. A**[**test plan**](https://www.geeksforgeeks.org/software-testing-test-plan-estimates-and-strategy/)**is a document that consists of all future testing-related activities. It is prepared at the project level and in general, it defines work products to be tested, how they will be tested, and test type distribution among the testers.**

1. **What are the different Methodologies in Agile Development Model?**

Ans. **Agile Model is a combination of iterative and incremental process models focus on process of adaptability, customer satisfaction, rapid delivery of a working software.**

**Agile model works on principle.**

**It has 4 Principle :-**

1. **Individual interaction with customer.**
2. **Working software.**
3. **Customer Collaboration.**
4. **Accept the change.**
5. **Explain the difference between Authorization and Authentication in Web testing.What are the common problems faced in Web testing? Ans.**
6. **To create HLR & TestCase of**

1) WhatsApp Web : <https://web.whatsapp.com/>

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| * **HLR for Whatsapp Web** | * [**Click Here**](../WhatsApp.xlsx) |
| * **Test Case For Whatsapp** | * [**Click Here**](../WhatsApp.xlsx) |

1. Instagram : <http://www.instagram.com/>

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| * **HLR for Instagram** | * [**Click Here**](../Instagram.xlsx) |
| * **Test Case For Instagram** | * [**Click Here**](../Instagram.xlsx) |

1. To create HLR and TestCase on this Link. <https://artoftesting.com/>

|  |  |
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| * **HLR forArt Of Testing** | * [**Click Here**](../TEST_CASE_ARTOFTESTING_CONTACTUS.xlsx) |
| * **Test Case For Art Of Testing** | * [**Click Here**](../TEST_CASE_ARTOFTESTING_CONTACTUS.xlsx) |

1. Write a scenario of only Whatsapp chat messages.

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| * Test Scenario for Whatsapp Chat | * [**Click HERE**](../TEST_SCENARIO_WHATSAPP_CHAT.xlsx) |

1. Write a Scenario of Pen.

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| * Test Scenario for Pen Chat | * [**Click HERE**](../TEST_SCENARIOS_REALTHINGS%20(Objects).xlsx) |

1. Write a Scenario of Pen Stand.

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| * Test Scenario for Pen Stand | * [**Click HERE**](../TEST_SCENARIOS_REALTHINGS%20(Objects).xlsx) |

1. Write a Scenario of Door.

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| * Test Scenario for Door | * [**Click HERE**](../TEST_SCENARIOS_REALTHINGS%20(Objects).xlsx) |

1. Write a Scenario of ATM.

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| * Test Scenario for ATM | * [**Click HERE**](../TEST_SCENARIOS_REALTHINGS%20(Objects).xlsx) |

1. Write a Scenario of Microwave Oven.

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| * Test Scenario for Microwave Oven | * [**Click HERE**](../TEST_SCENARIOS_REALTHINGS%20(Objects).xlsx) |

1. Write a Scenario of Coffee Vending Machine.

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| * Test Scenario for Coffee Vending Machine | * [**Click HERE**](../TEST_SCENARIOS_REALTHINGS%20(Objects).xlsx) |

1. Write a Scenario of Chair.

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| * Test Scenario for Chair | * [**Click HERE**](../TEST_SCENARIOS_REALTHINGS%20(Objects).xlsx) |

1. Write a Scenario of Gmail.

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| * Test Scenario for Gmail | * [**Click HERE**](../TEST_SCENARIOS_REALTHINGS%20(Objects).xlsx) |

1. Write a Scenario of Flipcart .

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| * Test Scenario for Flipcart | * [**Click HERE**](../TEST_SCENARIO_FLIPKART_PURCHASE.xlsx) |

1. Write a Scenario of Wrist Watch.

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| * Test Scenario for Wrist Watch | * [**Click HERE**](../TEST_SCENARIOS_REALTHINGS%20(Objects).xlsx) |

1. Write a Scenario of Elevetor (Lift).

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| * Test Scenario for Elevetor (Lift) | * [**Click HERE**](../TEST_SCENARIOS_REALTHINGS%20(Objects).xlsx) |

1. Write a Scenario of Whatsapp Group.

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| --- | --- |
| * Test Scenario for Whatsapp Group | * [**Click HERE**](../TEST_SCENARIO_WHATSAPP_GROUP.xlsx) |