**Module 2 assignment**

1. What is Exploratory Testing?

Exploratory testing is a concurrent process where test design execution and logging happen simultaneously

2. What is traceability matrix?

To protect against changes, you should be able to trace back from every system component to their original requirement that caused it presence

. It is also known as Requirement traceability matrix and cross reference matrix.

3. What is Boundary value testing?

BVA is a black box testing technique that use to check the errors at the boundaries or extreme ends of a give input domain.

4. What is a Equivalence partitioning testing? It is a black box technique that divides input domain into classes of data and test cases can be derived.

5. What is integration testing?

Integration testing is a level of the software testing process where individual units are combined and tested as a group.

6. What determines the level of risk

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

7. What is alpha testing?

Alpha testing is the first end –to –end testing to ensure that it meets the business requirement and function correctly.

8. What is beta testing?

It is an opportunity for real users to use a product in production environment to uncover any bugs or issues before a general release.

9. What is component testing?

The testing of individual software components.

10. What is non-functional testing?

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

11. What is GUI Testing?

GUI testing is the process of testing the system’s GUI of the system under test.

GUI testing involves checking the screens with controls like menus, buttons , icons and all types of bars – tool bar, menu bar dialog boxes and windows etc.

12. What is Adhoc testing?

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

13. What is load testing?

Its a performance testing to check system behavior under load

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

14. What is stress testing?

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

15. What is white box testing and list the types of white box testing.

Testing based on an analysis of the internal structure of a component or system.

Types of white box testing:

Unit testing

Static and dynamic analysis

Statement, path, branch coverage

Security testing

Loop testing

16. What is black box testing? What are the different black box testing techniques?

Black box testing is a form of testing that is performed with no knowledge of internal structure of system component or system.

Boundary value analysis

Equivalence partitioning

Decision tables

State transition testing

Use- Case Testing

17. Mention what are the categories of defects?

Data quality/database Defects

Functionality Defect

Critical Functionality Defects

Security Defects

UI Defects

18..Mention what big bang testing is?

IN big bang integration testing all components or modules is integration simultaneously, after which everything is tested as a whole.

19.What is the purpose of exit criteria?

The set of generic and specific conditions, agreed upon with the stakeholders , for permitting a process to be officially completed.

20.When should "Regression Testing" be performed?

Regression testing in necessary after any feature or application enhancement, bug fix or configuration changes.

For example, when developers add a new widget to an application.

It is performed due to defect fixing and also performance issue fix.

21.What is 7 key principles? Explain in detail?

.Testing shows presence of Defects:

Testing can show that defects are present, but cannot prove that there are no defects. We test to find Faults

Exhaustive Testing is Impossible:

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

Early Testing:

Testing activities should start as early as possible in the development life cycle.

Remember from our Definition of testing that Testing does not start once the code has been written.

.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.

.The Pesticide Paradox:

If the same tests are repeated over and over again, eventually the same set of test cases will no longer find any new defects.

.Testing is Context Dependent:

Testing is basically context dependent.

Testing is done differently in different contexts.

Different kinds of sites are tested differently.

. Absence of Errors Fallacy:

If the system built is unusable and does not fulfill the user’s needs and expectations then finding and fixing defects does not help

22.Difference between QA v/s QC v/s Tester?

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| --- | --- | --- |
| QA | QC | Tester |
| Process oriented activities. | Product oriented activities. | Product oriented activities. |
| Preventive activities | It is a corrective process | It is a preventive process |
| It is a subset of software test lifecycle | Qc is subset of QA. | It is a subset of QC |
| Verifies the quality | Validates the quality | Validates the quality |

1. Difference between Smoke and Sanity?

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| Smoke Testing | Sanity testing |
| * It is a performed after software build to as certain that the critical functionalities of the program is working fine. | * It is performed to ascertain that the bugs have been fixed and no further issues are introduced do to this changes. |
| * It is performed by the developers or tester | * It is usually performed by the tester |
| * It is a documented | * It is not documented |
| * It is subset of regression testing | * It is subset of acceptance testing. |

24.Difference between verification and Validation.

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| --- | --- |
| Verification | Validation |
| * It includes checking documents, design, codes and programs | * It includes testing and validating the actual products. |
| * It is a static testing | * It is a dynamic testing |
| * It does not include the execution of code. | * It include the execution of code. |
| * Done by developers | * Done by Testers |

25.Explain types of Performance testing.

Types of performance testing:

load Testing: it’s 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 determines at what point the system’s response time degrades or fails.

Stress testing: it is done to make sure that the system would not crash under crunch situation it is also known as endurance testing.

26. What is error, defect ,bug and failure? a mistake in coding is called as error found by a tester is called as a defect. Defect accepted by development team then it’s called as bug. Built does not meet the requirement then it’s called as failure

27.Different between priority and severity.

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| Severity | Priority |
| It’s based on the technical aspect of the product | It’s based on the customer requirements. |
| It indicates the seriousness of the bug in the product functionality | It means how soon as bug should be fixed. |
| Its value is objective | Its value is subjective |
| It is the extent to which the defect can effect the software | It is define the order in which we should resolve a defect |

28.What is bug life cycle? Bug life cycle in testing refers to a cycle of defects in which it goes throughout it’s life.The life begins with a new defect discovered by a tester while testing an application.

29.Explain the difference between functional and non-functional testing?

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| Functional testing | Non – functional testing |  |
| It is executed first. | It is performed after functional testing. |  |
| Easy to do manual testing | Tough to do manual testing |  |
| It is describes what the product does | It is describes how good the product works |  |
| Types:  Unit testing, smoke testing, sanity testing ,white box testing | Types:  Load testing, stress testing, performance testing, security testing |  |

30. To create a HLR and TEST case of

* {Instagram, Facebook}only first page only first page

HLR :

table - sheet1 :HLR

test Case: Assignment instamobile sheet 2 :test case

2) Facebook login page:

HLR:

Assignment - facebook sheet 1

:HLR test Case: Assignment facebook sheet 2 : test case

1. What is different STLC and SDLC?

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| STLC | SDLC |
| STLC is mainly related to software testing. | SDLC is mainly related to software development |
| Goal of STLC is to complete successful testing software | Goal of SDLC is to complete successful development of software. |
| In STLC less number of testers are needed | In SDLC more number of developers are required for the whole process |
| STLC fewer people are involved | SDLC a more people involved in all process |
|  |  |

1. What is different between test scenario, test case and test script?

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| Test scenario | Test Case | Test script |
| Is any functionality that can be tested | It is a set of sequential instruction that detail how to execute a core business function | It is involve the set of steps ,condition and inputs which can be used while performing the  testing tasks. |
| Is more focused on what to test. | Is focused on what to test and how to test | Is focused on the expected result |
| Helps test the end to end functionality is an agile way | Help in exhaustive testing of an app | Helps to test specific things repeatedly |
| Takes less time and fewer resources to create | Takes to much time and require more resources | Requires less time for testing. |

1. Explain what test plan is? What is the information that should be covered?

A document describe scope, approach, resource and schedule of intended test activities. The test pan covered how to test will be performed. This include defining test objectives, test approach, test tools, test environment, test schedules and composition.

34.What is priority?

Priority defines the order in which we should resolve a defect.

This priority status is set by the tester to the developer mentioning the time frame tom fix the defect.

35.What is severity?

Severity is absolute and customer focused.it is the extend to which the defect can affect the software

It define the impact that a given defect has on the system.

36. Bug Categories are…..

Bugs can be classified into multiple categories based on their nature and impact

Categories are:

FUNCTIONAL bugs

Logical bugs

Workflow bugs

Unit level bugs

Security bugs

37. Advantage of Bugzilla?

It improve the quality of the product.

It is quite flexible.

It has the capability to adapt to multiple situations.

38.Different between priority and severity.

|  |  |
| --- | --- |
| Severity | Priority |
| It’s driven by functionality. | It’s driven by business value. |
| It means the seriousness of the defect in the product functionality | It means how soon as bug should be fixed |
| How bad the defect is. | How soon we need to fix. |
| It is the extent to which the defect can effect the software | It is define the order in which we should resolve a defect |

39.What are the different methodologies in agile development model?

Scrum

Extreme programming(XP)

Adaptive software development

Kanban..

FDD

DSDM

Behavior driven development(BDD)

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

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| --- | --- |
| Authentication | Authorization |
| It verifies who the user is | It determines what resources a user can access. |
| It is the first step of a good identity and access management process | It always takes place after authentication |
| Data generally moves through ID tokens | Data generally moves through access tokens |
| User can change their authentication  Credentials | Users can’t change their access level |

One of the common challenges of web testing is ensure that your web app works well across different browsers, devices and operating systems.

41.To create HLR & test case of web based(WhatsApp web , Instagram.

1. WhatsApp Web:

HLR: Assignment 2 WhatsApp web sheet 1 : HLR

Test case: Assignment Whatsapwebsheet 2: test case

2 Instagram Web:

HLR: Assignment -insta sheet 1:HLR

Test case: Assignment -insta sheet

test case

1. To create HLR and testcase on this link:

HLR: Assignment 2 art of testing sheet 1:HLR

Test case: Assignment 2art of testing sheet 2:test case

1. When to used usability testing?

Identify specific areas where testing and validation can enhance your concept.

After you get the results from your initial test ,share them with your team, then continue testing users as you bulid a prototype.

44.What is the procedure for GUI testing?

manual testing: This approach involves human tester , where each screen is manually checked to validate each functionality by creating and exciting test case:

record and replay: this tools are used to test the user interface of apps.

model based testing.

1. Write a scenario of microwave own?

Assignment -test scenario-Sheet 1-microwave ovan

1. Write a scenario of coffee vending machine?

Assignment – test scenario-Sheet 2-Coffee vending Machine.

1. Write a scenario of chair?

Assignment - test scenario Sheet 3 Chair.

1. To create scenario (positive & negative)

1. Gmail:

Assignment - Gmail test - sheet:4 Gmail

2.online shopping to buy product. 5(Flipkart ):

Assignment -Flipkart’s- sheet 5:filpkart

1. Write a scenario of wrist watch.

Assignment – test scenario -Sheet 6Wrist watch.

1. Write a scenario of elevator.

Assignment – testscenario- Sheet 9-7lift.

1. Write a scenario of whatsapp group?

Assignment -whatasap test scenario -sheet8:Group