**ASSIGMENT 2**

**1.What is software testing**

ANS: software testing is process used to identify the correctness, completeness and quality of devopled computer software

**2.What is exploratory testing?**

ANS: it is a exploarartory learning no script or least procedure is used

* It is simultaneous learning when design and executing over an application under test.
* Useful in agile approaches.

**3.What is tracebility matrix?**

Ans : to protect aginst changes you should be able to trace back from every system component to the original requirement tha casual is presence.

A software process should help you keeping the virtual table up-to –date **.** traceability matrix is a able which is used to tarce the requirement during the software development life cycle .it can be used for forwarded tracing .

**4.What is intergration testing?**

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

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

Ans: the likhood of an adviser event and the impact of the event.

**6. What is alpha testing?**

Ans: to define simply it is before releasing the product means it is something which happens on developer site.It is all other types of developer side testing means unit testing and integration testing etc.It can be any black box or white box depends on the requirements.

**7.What is beta testing ?**

Ans: beta testing is testing of a release of a software product conducted by customers.

**8.What is component testing?**

Ans: a component testing ( unit testing): The testing of individual software components.

-A minimal software item that can be tested in isolation .it means “a unit is the smallest testable part of software’’.

**9.What is functional testing ?**

Ans: testing based on an an anathe anlysis of specification of the functionality of a component or system .

**10 . What is non –functional testing?**

Ans: testing attributes of a component or system that do not relate of function ,reliability ,efficiency ,usability ,interoperability, maintainability and portability.

**11.What is adhoc testing ?**

Ans: testing performed without planning and documentation . the tester tries to ‘break’ the system by randomly trying the system’s functionality . it is performed by the testing teams.

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

Ans: **definitions:** testing technique based on the internal logic of an application’s code and include tests like coverage of code stalemates ,branches ,paths , conditions. it is performed by software developers.

**. List of types of white box testing** :

1. Statement coverage
2. Decision coverage
3. Condition coverage

**13. What is black box testing ? What are the different black box testing techniques?**

Ans: testing , either functional or non-functional , without reference to the internal structure of the component or system.

**Techniques of black box testing :**

1. Eqivlancence partitioning
2. Boundary value analysis
3. Decision tables
4. State transition testing
5. Use case testing
6. Other black box testing
7. Syntax or pattern testing

**14) What is GUI testing ?**

ans : the process of testing a product that users a graphical users interface ensure it meets its wriiten specifactions. This is normally done by the testing teams.

**15) What is 7 key principles ? explain in detail ?**

Ans : 1) testing shows presence of defects

2) exhaustive testing impossible

3) early testing

4) defect clustering

5) the pesticide paradox

6) testing is context dependent

7) abesance fallacy and error

**1) testing show presence of defects :** testing reduces the probability of undiscovered defect remaning in the software but. Even if no defect are found , it is not a proof of correctenes .

**2) exhaustive testing impossible :** testing everything includuing all combinations of inputs and preconditions it not possible.

**3) early testing :** testing activites should starts as early as possible in the developments life cycle.

**4) defect clusting :** A small number of modules contain most of the defect discovered during pre –release testing or , responsible for the most opernational failure .

**5) pesticide paradox :** test cases need to be regularly reviewed and rrevised and new and different test need to be written to exercise different parts of the software or system to potentically find more defects.different kind

**6) testing is context depend:** 1) testing is basically contetext dependent

2) testing is donre differently in different context

3) different kind of site are tested differently .

**7) absence of error fallacy** : if the system buits is unstable and does not fulfil user’s and expectations then finding and fixing .

It doesn’tb make it a good system.

**16) mention what are the categories of defect?**

**Ans : 1) Error of commission** : error commission means instruction or some kind of command given.

2) now the error in commission means the error in made in command or instruction.

**2) error omission:**  as name is already describing error of omission is some thing which happens accidently

Omission word means something l t out or exclude

**3**) **error clarity** : the most common error in the natural language

This error happens due to miss understanding between he developed and client.

**4)error of speed or capacity**: the name of the error is itself enough i think to tell about it this error

Your software is working fine but not working in the required time this is the error of speed

**17) menion what is bigbang testing is?**

**Ans:** in big bang integration testing all components or modulesis integrated simulataneously after which everything is tested

Here all component are integrated together at once and then tested

* Stub : is called by the module under test
* Driver:calls the module to be tested

**18) mention is the purposeof exit criteria?**

**Ans:** 1) successful testing of integration application

2) executed test case are documented

3) all high proirizationed bug fixed and closed

4)technical documrnts to be submitted followed by released notes.

**19) when should “regression testing” be performed ?**

* **Ans:** change in requirement and code is modified according to the requirement.
* New feature is added to the software
* Defect fixing
* Performance issue fix

**20) What is error , defect , bug , failure?**

**Ans : error :** a mistake in coding is called error

**Defect :** error found by tested is called defect

**Bug: defect** accpected by development team then it is called bug

**Failure :**build does not meet the requirements then it is failure

**21) explain types of performance testing ?**

Ans: load testing

Stress testing

Spirke testing

Volume testing

Endurance testing

Scalability testing

**22) What is bug life cycle ?**

**Ans:** the duration or time span between the first time defect is found and the time that it is closed successfully rejected postponed or deferred is called as defec life cycle **.**

**23) different between verification & validation**

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| **Verification** | **Validation** |
| 1)It come before coding (validation) | It comes after coding (verification) |
| 2)It does not involves evaluating the code | it always involves evaluating the code |
| 3)Verification is a static practice | Validation is dynamic practice |
| 4)It is human based decimation and files | It is computer based execution of program |
| 5)It include different development levels | It include different test level |
| 6)steps: user business, system , technical requirement , program specification | Steps: unit test , integration test , integration ,system test acceptance |

**24) diiference between somke and sanity**

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| **Smoke** | **Sanity** |
| 1)Smoke testing is performed the critical functionality of the program is working fine | Sanity testing is done to check the new functionality /bug have fixed |
| 2) smoke testing is usually documented orb scripted | Sanity testing is usually performed by tester |
| 3)Smoke testing is a subset regression testing | Sanity testing is a subset of acceptance testing |
| 4)smoke testing exercises the entire system from end to end | Sanity testing exercise only the particular component of the entire system |
| 5)smoke testing is like general health check up | Sanity testing is like specialized health check up |

**25) difference between function & non functional**

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| **Function testing** | **Non –functional testing** |
| 1)Functional testing is performed using the | Non functional testing checks the performance ,reliability ,scalability and other non –functional aspects |
| 2)Functional testing is executed first | Non functional testing should be performed after functional testing |
| 3)Manual testing or automation tools can be used for functional testing | Using tools will be effective for this testing |
| 4)functional testing describes what the product does | Non –functional testing describes how good the product works |
| 5)Easy to do manual testing | Tough to do manual testing |
| 6)Types of functional testing are : unit testing  Sanity testing  Smoke testing  Integration testing  White box testing  Black box testing  User acceptance testing  Regression testing | Types of non –functional testing :  Performance testing  Load testing  Volume testing  Stress testing  Security testing  Installation testing  Compatalibality testing  Migration testing |

**26) difference between priority and severity**

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| **Priority** | **Severity** |
| Severity means how severe defect is affecting the functionality | Prority means how fast defect has to be fixed |
| 2) severity is related to the quality standard. | Priority is related to scheduling to resolve the problem |
| 3)testing engineer decides the severity level of the defect. | Testing manager decided the priorities of defects. |
| 4)its value is objective. | Its value is subjective |
| 5)its value doesn’t change form time to time | Its value change form time to time |
| 6)severity of types: critical, major moderate ,minor and cosmetic. | Priority types :low, medium, high |

**27) Whatis the difference between stlc & sdlc ?**

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| **SDLC** | **STLC** |
| 1)STLC is mainly related to software development | STLC is mainly related to software testing |
| 2)Sdlc involves total six phase or steps | Stlc involves only five phase or steps |
| 3)In sdlc more number of members are required for the whole process . | In stlc less number of members 9 testers are needed |
| 4)Sdlc phase are completed before the stlc phases. | Stlc phase are performed after sdlc phases. |
| 5)Beside development other phases like testing is also include | It focuses only on testing the software. |
| 6)It helps in developing good quality software . | It helps in marking the softare defects free. |

**28) Explin what test plan is? What is the information that should be covered ?**

Ans : it is high level document in which perform testing is described .the plan document is usually prepared by the test lead or test manager and the focus of the document to describe test .

* **The information that should be covered**

1. Introduction to the test plan document
2. Assumption when testing and application
3. List of test cases included in testing the application
4. List of feature to be tested
5. List of delivered that need to be tested
6. The resource allocated for testing the application
7. A schedule of tasks and milestones as testing is started

**27) Explain the difference between authorization and autheication in web testing** ?

Ans :

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| AUTHEIATION | AUTHORIZATION |
| 1)Is the process of identifying a user to provide access to a system. | Is the process of giving of permission to access the resource . |
| 2)In this the users or client and server are verified | In this it is verified that if the user is allowed the defined policies and rules |
| 3)It is usually performed before the authorization . | It is usually done once the user is successfully authenticated |
| 4) Data is provided through the token lds. | Data is provided through the access token |
| 5) Entering login details is necessary for the employees to authenticate | After employees successfully authenticate certain function only as per their roles and profiles. |

**28) Whatare common problems faced in web testing ?**

Ans: user interface and user experience think a decade ago, the web was a completely different place .

Scalability is neither performance nor it’s about making good use of computing power and bandwidth

Performance

Knowledge of framework and platforms

Security