MODULE-2

(1)What is software testing?

ANS. Software testing is a process used to identify the correctness, completeness and quality of developed computer software.

(2) What is 7key principles? Explain in details

ANS. 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

(3) Exhaustive testing is impossible:

ANS. Testing everything including all combination

Of inputs and precondition is not possible.

So, instead of doing the exhaustive testing

We can use risk and priorities to focus

Testing efforts.

(4) Early testing:

ANS. Testing activities should start as early as possible in the software system or software development lifecycle and should be focused on defined objectives.

(5) Defect clustering:

ANS. A small number of module contain most of the defects discovered during pre-release testing, or are responsible for the most operational failures.

(6) Pesticide Paradox:

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

(7) Testing is context dependent:

ANS. Testing is basically context dependent. It is done differently in different contexts.

(8) Absence of errors fallacy:

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

(9) What is error, defects, bug and failure?

ANS. A mistake in coding is called error, error found by tester is called defect, defect accepted by development team is called bug, build does not meet the requirement then it is called failure.

(10) What is traceability matrix?

ANS. Traceability matrix is a table which can be used to trace the requirements during the software development life cycle.

(11) What is the purpose of exit criteria?

ANS. End of all testing i.e. product go live.

End of the phase of testing i.e. hand over

From system testing UAT.

(12) Difference between QA VS QC VS TESTER.

QA

1. Activities which ensure the implementation of processes, procedures and standards in context to verification of developed software and intended requirements.
2. Focuses on processes and procedures rather than conducting actual testing on the system.
3. Process oriented activities.
4. It is subset of SDLC
5. Preventive activity

QC

1. Activities which ensure the verification of developed software with respect to documented requirements.
2. Focuses on actual testing by executing software with intend to identify bugs/errors/defect through implementation of processes and procedures
3. Product oriented activities
4. It is a subset of QA
5. Corrective process

TESTING

1. Activities which ensure the identification 0f errors/bugs/defects in the software.
2. Focuses on actual testing.
3. Product oriented activities.
4. It is a subset of QC.
5. Preventive process.

(13) What is integration testing?

ANS. Testing performed to expose defects in the interfaces and interactions between the integration components and system.

(14) What is component testing?

ANS. The testing of individual software components.

(15)What is functional system testing?

ANS. A requirement that specifies a function that a system component or system must perform.

(16) What is non-functional system testing?

ANS. Testing Of those requirements that do no relate to functionality

(17)Mention what big bang testing is?

ANS. In big bang testing all components and modules are integrated simultaneously, after which everything is tested as a whole.

(18)Difference between Verification and

Validation.

ANS. VERIFICATION

1. It is done before coding.
2. It is called development level.
3. It is also known as static testing.
4. It is done without execution.
5. It has different phases such as users/business, system requirement, technical specification, program specification.

VALIDATION

1. It is done after coding
2. Called testing it is level.
3. It is also known as dynamitic testing.
4. It is done with execution.
5. It has different phases such as unit testing, integration testing, system testing and acceptance testing.

(19)What determines the level of risk?

ANS. The likelihood of an adverse event and the impact of the event determines the level of risk

(20) What is the difference between test scenarios, test cases and test script?

ANS. TEST SCENARIO

Test scenario is any functionality that can be

Tested. It is also called test possibility or test

Conditions.

TEST CASES

Test cases involves set of steps, conditions

And inputs which can be used in performing

The testing tasks.

TEST SCRIPT

Test script is a set of sequential instructions

That detail how to execute a core business

Function.

(21) What test plan is?

What is the information that should be

Covered?

ANS. Test plan is a high level document describing how the testing is to be performed. IT includes information such as product description, objectives, strategies, scope, schedule, procedures, resources and deliverables.

(22) What is exploratory testing?

ANS. Exploratory testing is a concurrent process.

(23) What is boundary value testing?

ANS. Boundary value testing is a methodology for designing test cases that concentrates software testing effort on cases near the limits of valid ranges.

(24) What is equivalence partitioning testing?

ANS. Aim is to treat groups of inputs as equivalent and to select one representative input to test them all.

(25) What is alpha testing?

ANS. 1. It is always performed by the developers

At software.

2. It is performed by independent testing

Team.

3. It is not open to the public and market.

4. It is conducted for the software

Application or project.

5. It is always performed in virtual

Environment.

6. It is always performed within the

Organization.

7. It is the form of acceptance testing.

8. It comes under the category of white box

Testing.

(26) What is beta testing?

ANS. 1.It is always performed by the customers

At their own site.

2. It is not performed by independent testing

Team.

3. It is always open to the market and public.

4. It is usually conducted for the software

Product.

5. It is performed in real time environment.

6. It is always performed outside the

Organization.

7. It is also the form of acceptance testing.

8. It is only a kind of black box testing.

(27) What is GUI testing?

ANS. Graphical User Interface testing is the process of testing the system is GUI of the system under test.

(28) What is AD hoc testing?

ANS. AD hoc testing is an informal testing type with an aim to break the system

(29) What is white box testing and list the types of white box testing?

ANS. White box testing is a testing based on an analysis of the internal structure of the component or system.

The types of white box testing are statement/segment coverage, decision/branch/all edges coverage and condition coverage.

(30)What is black box testing? What are the different black box testing techniques?

ANS. Black box testing is testing either functional or non-functional, without reference to the internal structure of the component or system.

The different black box testing techniques are equivalence partitioning, boundary value analysis, decision tables, state transition testing and use-case testing.

(31) Mention what are the categories of defect?

ANS. 1.Database defect

2. Critical functionality defect

3. Defect functionality defect

4. User interface defect

(32)Difference between functional testing and non-functional testing.

ANS. Functional testing:

1. Functional testing is performed using the

Functional specification provided by the

Client and verifies the system against

Functional testing.

2. Functional testing is executed first.

3. Manual testing or automation tools can be

Used for functional testing.

4. Easy to do manual testing.

5. Types of functional testing are unit testing,

Smoke testing, sanity testing, integration

Testing, white box testing, black box testing,

User acceptance testing and regression

Testing.

NON-FUNCTIONAL TESTING

1. Non-functional testing checks the per

Performance, reliability, scalability and

Other non-functional aspects of the

Software system.

2. Non-functional testing should be

Performed after the functional testing.

3. Using tools will be effective for this

Testing.

4. Though to do manual testing.

5. Types of non-functional testing are

Performance testing, load testing,

Volume testing, stress testing, security

Testing, installation testing, penetration

Testing, compatibility testing and

Migration testing.

(33) What are the different methodologies in agile development model?

ANS. The different methodologies in agile development model are scrum, extreme programming, dynamic system development model, test driven development, feature driven development, xbreed and crystal.

(34) Difference between priority and severity?

ANS. PRIORITY

1. Defect priority has defined the order in

Which the developer should resolve a

Defect.

2. Priority is categorized in to three types:

Low, medium and high.

3. Priority is associated with scheduling.

4. Priority indicates how soon the bug

Should be fixed.

5. Priority is business focused.

6. Priority is relative.

SEVERITY

1. Defect severity is defined as the degree

Of impact that a defect has on the

Operation of the product.

2. Severity is categorized into five types:

Critical, major (high), moderate

(Medium), minor (low) and cosmetic.

3. Severity is associated with functionality

Or standards.

4. Severity indicates the seriousness of the

Defect on the product functionality.

5. Severity is customer focused.

6. Severity is absolute.

(35) 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 ‘defect/bug lifecycle’.

(36) What is the difference between the STLC

(Software testing life cycle) and SDLC (software development life cycle)?

SDLC

1. SDLC defines all the standard phases which are

Involved during the software development

Process

2. SDLC is a development lifecycle.

3. In SDLC the development team creates the high

And low-level design plans.

4. In SDLC real code is development and actual

Work takes place as per the design documents.

5. The SDLC helps a team to complete successful

Development if the software.

6. SDLC phases are requirement, analysis, design,

Implementation, testing and maintenance.

STLC

1. STLC process defines various activities to

Improve the quality of the product.

2. STLC is a testing life cycle.

3. In STLC the test analyst creates the system

Integration test plan.

4. In STLC testing team prepares the test

Environment and execute test cases.

5. STLC phases only cover software testing.

6. STLC phases are planning and control,

Analysis and design, implementation and

Execution, exit criteria and reporting and

Closure activities.

(37) Explain the difference between Authorizations

And Authentication in web testing?

AUTHORIZATIONS

1. Authorizations determines whether you are

Authorized to access the resources.

2. It is the process of verifying whether access is

Allowed or not.

3. It determines what user can and cannot access.

4. Authentication factors required for

Authorization may vary depending on the

Security level.

5. Authorization is done after successful

Authentication.

AUTHENTICATION

1. Authentication confirms your identity to grant

Access to the system.

2. It is process of validating user credentials to gain

User access.

3. It determines whether user is what he claims to

Be.

4. Authentication usually requires a username and

A password.

5. Authentication is the first step of authorization

So always come first.

(38) What are the common problems faced in web testing?

ANS. Security, performance, usability, ETC are the common problems faced in web testing.