Siddhartha

Day 01:

1) SDLC: Process followed for Software building within a Software organisation.
In the Software development Life cycle it defines a method for implementing/improving the quality of Software

SDLC Consits of 6 phases:
1) Requirement Analysis
2) Software design
3) Software build
4) Testing
5) Deployment
6) Maintenance

1) We gather guidelines and objectives/scope of project from Stakeholders and document the requirement
2) Design a document to outline how the Software should be structured and met the requirements
3) We write the actual Code based on design documents
4) Evaluate the Software to ensure that it meets the requirements and free of defects.
5) Release the product/Application to users
6) Addressing any issues the arise and handling updates

2) STLC:
process focussed on the testing phase of SDLC. which means Verifying and Validating the Software that meets requirement.

The key phases of STLC are

→ Requirement analysis: Understand the testing requirements based on Software requirements and Create a test plan

→ Test planning/designing: process that defines how to test a application i.e., Creating detailed Test Cases, test scripts, test data based on requirem which Contains Test Case ID, description, preCondition, Test steps, Actual result, expected result.

→ Test execution: Executing the test Cases and Scripts and recording the results and reporting the defects.

→ Test Environment: Set up the required Software and hardware environments to execute the tests.

→ Test closure: finalizing testing activities based on requirements by preparing test Summary reports, analyzing test Coverage and ensure all the test Cases are executed and passed.

3) Functional testing :
Testing that ensures the requirements are Satisfied by the application where testers check/verify the app ~~the~~ features of the app/product are working as expected.

Example: User Login
Testers checks that we User was giving the valid Login details and after submitting, whether It redirects to the Home page or not.
. Unit testing, integration testing, regression testing Comes under Functional testing.

4) Non-functional testing : Type of Software testing performed to verify Non-functional requirements of Application.

Examples: performance testing.
Verifying the application under a Specific workload such as Speed, Stability, response. volume testing, Load testing, Scalability testing etc Comes under Non-functionality testing.

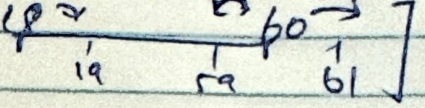
5) RTM : (Requirement traceability Matrix) :
Document that maps and traces all requirements proposed by client. Purpose of RTM is to see all test cases are covered and no ~~functiti~~ functionality are missing while testing the software and it results in 100% test coverage.

6) Boundary Value analysis and Equivalence class partioning are the test design techniques to design better test cases.

Boundary Value analysis (BVA): Testing at the boundaries between partition.

Example: Age should be b/w 18-60

checking ages 17, 18, 19, 59, 60, 61



Equivalence class partioning: reduce the No. of test cases by dividing into partitions that are treated similarly

Example: Age should be b/w 18-60

1 group - 18 to 60

2 group - 0 to 18

3 group - 60 to 100.

7) Difference b/w test case and test Scenario?

- Test Case: Specific instructions that are used to test a particular fuction of a application [contains I/P conditions e
- Test Scenario: are description of how a Specific function of a application should work

Example: c

Test Scenario: Checking functionality of Login button.

Test Case: (TC1): click the button without details

(TC2): click the button with false info